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STRIVING FOR EXCELLENCE

Annual Report 2018

LUFTHANSA GROUP

The Lufthansa Group

The Lufthansa Group is an aviation group with operations worldwide. It is composed of the segments Network Airlines, Eurowings and Aviation Services.

T001 KEY FIGURES LUFTHANSA GROUP[1]		2018	2017	Change in %
Revenue and result				
Total revenue	€m	35,844	35,579	1[2]
of which traffic revenue	€m	28,103	28,399	-1[3]
Operating expenses	€m	35,466	35,355	0[4]
Adjusted EBITDA	€m	5,016	5,009	0
Adjusted EBIT	€m	2,836	2,969	-4
EBIT	€m	2,974	3,297	-10
Net profit/loss	€m	2,163	2,340	-8
Key balance sheet and cash flow statement figures				
Total assets	€m	38,213	35,778	7
Equity ratio	%	25.1	25.5	-0.4 pts
Net indebtedness	€m	3,489	2,884	21
Pension provisions	€m	5,865	5,116	15
Cash flow from operating activities	€m	4,109	5,368	-23
Capital expenditure (gross)[5]	€m	3,757	3,474	8
Free cash flow	€m	250	2,117	-88
Key profitability and value creation figures				
Adjusted EBITDA margin	%	14.0	14.1	-0.1 pts
Adjusted EBIT margin	%	7.9	8.3	-0.4 pts
EBIT margin	%	8.3	9.3	-1.0 pts
ROCE	%	11.1	13.2	-2.1 pts
Adjusted ROCE	%	10.6	11.9	-1.3 pts
Lufthansa share				
Share price at year-end	€	19.70	30.72	-36
Earnings per share	€	4.58	4.98	-8
Proposed dividend per share	€	0.80	0.80	0
Traffic figures[6]				
Flights	number	1,228,920	1,128,745	9
Passengers	thousands	142,335	129,345	10
Available seat-kilometres	millions	349,489	322,875	8
Revenue seat-kilometres	millions	284,561	261,149	9
Passenger load factor	%	81.4	80.9	0.5 pts
Available cargo tonne-kilometres	millions	16,431	15,754	4
Revenue cargo tonne-kilometres	millions	10,907	10,819	1
Cargo load factor	%	66.4	68.7	-2.3 pts
Employees				
Employees as of 31.12.	number	135,534	129,424	5
Average number of employees	number	134,330	128,856	4

[1] The figures for 2017 and 2018 shown here and elsewhere in the report include effects from the first-time application of new accounting standards and other accounting changes. Detailed explanations are provided on ↗ **p. 29f.** of this Annual Report. The chapter “Earnings, assets and financial position” (↗ **p. 29ff.**) also shows figures and their development without these effects, to facilitate comparison with the previous year’s financial reporting.
[2] Without IFRS 15 effect: 6%.
[3] Without IFRS 15 effect: 7%.
[4] Without IFRS 15 effect: 7%.
[5] Without acquisition of equity investments.
[6] Previous year’s figures have been adjusted.

Date of publication: 14 March 2019.

Business segments

NETWORK AIRLINES

The Network Airlines segment comprises Lufthansa German Airlines, SWISS and Austrian Airlines. With their multi-hub strategy, the Network Airlines offer their passengers a premium product and a comprehensive route network combined with the highest level of travel flexibility.

T002 NETWORK AIRLINES

		2018	Change in %
Revenue	€m	22,719	5 [1]
of which traffic revenue	€m	20,877	5 [1]
Adjusted EBIT	€m	2,429	6
Adjusted EBIT margin	%	10.7	0.9 pts
Adjusted ROCE	%	19.4	1.1 pts
Segment capital expenditure	€m	2,573	25
Employees as of 31.12.	number	51,778	3

[1] Without IFRS 15 effect.

EUROWINGS

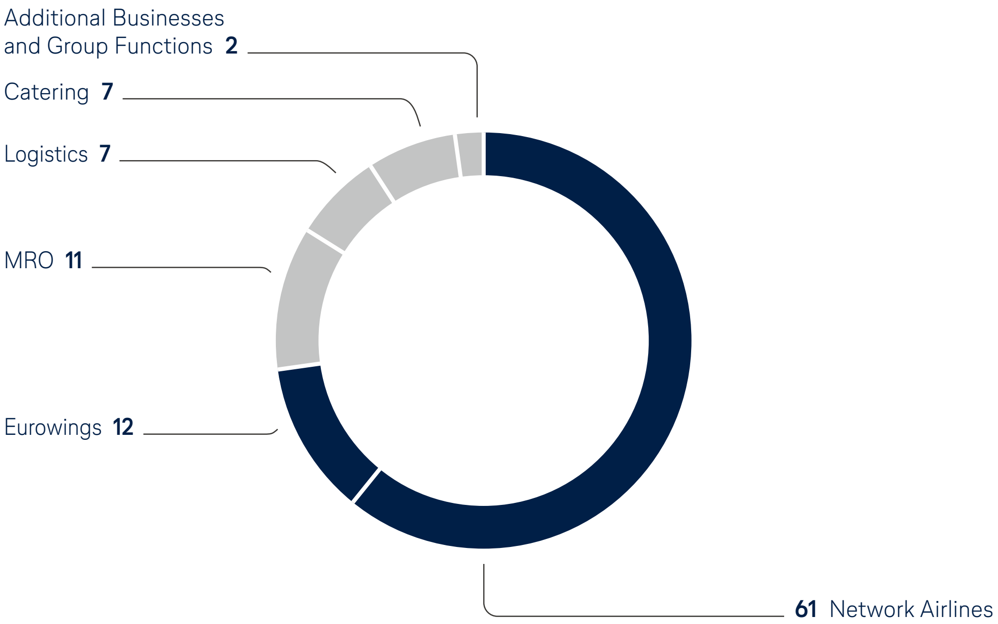
The Eurowings segment comprises the airlines Eurowings, Germanwings, Eurowings Europe and Brussels Airlines. The equity investment in SunExpress is also part of this segment.

T003 EUROWINGS

		2018	Change in %
Revenue	€m	4,230	19 [1]
of which traffic revenue	€m	4,118	20 [1]
Adjusted EBIT	€m	– 231	
Adjusted EBIT margin	%	– 5.5	– 7.0 pts
Adjusted ROCE	%	– 8.2	– 11.0 pts
Segment capital expenditure	€m	515	– 47
Employees as of 31.12.	number	9,255	23

[1] Without IFRS 15 effect.

C01 Business segments' share of Group external revenue in %



2018 figures

LOGISTICS

Lufthansa Cargo is the logistics specialist within the Lufthansa Group. The freighter fleet consisted of five Boeing 777F and twelve Boeing MD-11F aircraft as of the end of the financial year. Lufthansa Cargo markets capacities on its own freighters and chartered cargo aircraft, along with belly capacities on passenger aircraft operated by Lufthansa German Airlines, Austrian Airlines, Brussels Airlines, SunExpress and on Eurowings long-haul flights.

T004 LOGISTICS

		2018	Change in %
Revenue	€m	2,713	7
of which traffic revenue	€m	2,550	7
Adjusted EBIT	€m	268	2
Adjusted EBIT margin	%	9.9	-0.5 pts
Adjusted ROCE	%	14.6	-1.6 pts
Segment capital expenditure	€m	374	373
Employees as of 31.12.	number	4,505	0

MRO

Lufthansa Technik is the world's leading independent provider of maintenance, repair and overhaul services (MRO) for civilian commercial aircraft. Lufthansa Technik AG serves more than 850 customers worldwide, including OEMs, aircraft leasing companies and operators of VIP jets, as well as airlines.

T005 MRO

		2018	Change in %
Revenue	€m	5,918	10
of which external revenue	€m	3,812	7
Adjusted EBIT	€m	425	2
Adjusted EBIT margin	%	7.2	-0.5 pts
Adjusted ROCE	%	7.1	-0.6 pts
Segment capital expenditure	€m	241	3
Employees as of 31.12.	number	23,219	8

CATERING

The LSG group offers a complete portfolio of products and services related to in-flight service. It has strong independent expert brands. LSG Sky Chefs provides catering for airlines and rail operators as well as lounge management. It is present at 205 airports around the world for more than 300 airlines and a growing number of European rail operators.

T006 CATERING

		2018	Change in %
Revenue	€m	3,217	0
of which external revenue	€m	2,499	-2
Adjusted EBIT	€m	115	74
Adjusted EBIT margin	%	3.6	1.5 pts
Adjusted ROCE	%	6.9	3.0 pts
Segment capital expenditure	€m	79	-6
Employees as of 31.12.	number	35,512	3

35,844
Revenue in EUR m

2,836
Adjusted EBIT in EUR m

3,757
Capital expenditure in EUR m

250
Free cash flow in EUR m

10.6
Adjusted ROCE in %

←
Key figures
Lufthansa Group
overview

CONTENTS

The Executive Board
Deutsche Lufthansa AG

Harry Hohmeister
Member of the Executive Board
Chief Commercial Officer
Network Airlines

Born in 1964, diploma in commercial air transport, Executive Board member since 2013, with the Lufthansa Group since 1985

Ulrik Svensson
Member of the Executive Board
Chief Financial Officer

Born in 1961, B.Sc. in Economics, Executive Board member since 2017, with the Lufthansa Group since 2017

Carsten Spohr
Chairman of the Executive Board and CEO

Born in 1966, industrial engineer, Chairman of the Executive Board and CEO since 1 May 2014, Executive Board member since 2011, with the Lufthansa Group since 1994

Bettina Volkens
Member of the Executive Board
Corporate Human Resources and Legal Affairs

Born in 1963, lawyer, Executive Board member since 2013, with the Lufthansa Group since 2012

Detlef Kayser
Member of the Executive Board
Airline Resources & Operations Standards

Born in 1965, Aerospace engineer, Executive Board member since 2019, with the Lufthansa Group since 2016

Thorsten Dirks
Member of the Executive Board
Eurowings

Born in 1963, chartered engineer, member of the Executive Board since 2017, at the Lufthansa Group since 2017

Ladies and gentlemen,

Last year at this time we talked about the 100th anniversary of our brand symbol, the crane, which coincided with the most successful year in our Company's history.

By refreshing our brand image, we have begun a new chapter in the history of the Lufthansa Group. The modern design embodies our combination of tradition and innovation and underlines our aim of setting standards in our industry.

In 2018, our financial results fulfilled this aim: The Lufthansa Group was one of the few companies in the sector to have achieved the targets set at the start of the year. Despite numerous challenges, the result was almost on par with the previous year. Integration costs at Eurowings in connection with the takeover of significant parts of Air Berlin, irregularities in flight operations and much higher fuel costs added up to a massive financial burden. Profitable growth and efficiency gains nevertheless enabled us to compensate for most of these adverse effects.

Network Airlines performed particularly well in this difficult environment. The results of Lufthansa German Airlines and SWISS broke new records. The Logistics, MRO and Catering segments all beat their previous year's results too.

Our appreciation of these good figures is clouded, however, because 2018 was an ambivalent year. We did not always live up to our premium promise to our customers, and disappointed many of our passengers with delays and flight cancellations. The entire air transport industry – from the airlines to airports and air traffic control – revealed operating weaknesses last year as a result of disproportionate growth in air traffic. We reacted promptly and are working with our partners to find good, fast solutions for our customers.

Our contribution consists of a whole bundle of measures: We are drastically increasing the number of reserve aircraft and recruiting more than 600 additional employees to ensure stable processes. We are building more slack into flight timetables and extending ground times to prevent delays from rippling across the whole day. And above all we are paying great attention to improving communications with our customers, in order to give them full and timely information when their flight does not go as planned. Altogether we have defined more than 400 individual measures, which are the responsibility of the specially introduced Executive Board function for Airline Resources & Operations Standards.

All this is intended to encourage our customers to refocus on what sets us apart from our competitors: our high-quality product, which in Europe at least has no equal. In future, we want to give our passengers even more individual service in order to represent their personal needs even better. It starts with little things that betoken a premium experience in a given situation, but also includes innovations that will set new standards in our market segment.

This includes the newly developed Business Class that we will be installing in the new Boeing 777-9s in the coming year, for which we are the launch customer. It will be the most spacious and individual Business Class that we have ever had on our long-haul routes. The renewal of the fleet is having a positive impact on the Lufthansa Group in many other ways too. A 20% cut in fuel consumption enables us to sustainably reduce CO_2 emissions and costs.

In direct traffic, we want to make Eurowings what we already are with our Network Airlines: the leading European airline in its segment. 2018 was an extremely difficult year for Eurowings, because it had to deal with an unprecedented growth spurt in a very short period of time. Now that the integration is complete, flight operations have to become more reliable and more stable again in order to improve customer satisfaction. This should also increase profitability at Eurowings, because we are simplifying structures and processes that in some cases became extremely complex in the course of the takeover.

Ladies and gentlemen, our airlines are leaders in Europe's strongest markets. This has also put us in a strategic position for future profitable growth. Brexit, trade conflicts and the impending downturn in the global economy mean that the outlook for us and our industry is subject to some uncertainties. But the long-term demand for air travel will continue to rise, regardless of the ups and downs of the global economic cycle. This growth is increasingly coming up against the limits of existing infrastructure, as we experienced painfully last summer. Smaller airlines and new entrants to the market will find it more and more difficult to compete under the current circumstances. As the market leader, we will benefit from this consolidation. We are therefore confident that we will be able to continue increasing the value of our company going forward. The title of this year's annual report, "Striving for excellence", puts it very well: We want to set standards in our industry – for the good of our shareholders and all our stakeholders.

We would be pleased if you would continue to accompany us on this journey.

Frankfurt, March 2019

Carsten Spohr
Chairman of the Executive Board and CEO of Deutsche Lufthansa AG

To our shareholders
Report of the Supervisory Board

Karl-Ludwig Kley,
Chairman of the Supervisory Board

Ladies and gentlemen,

In the financial year 2018, the Supervisory Board again carried out the duties conferred on it by statute, the Company's Articles of Association and its internal regulations. We supervised the work of the Executive Board members and advised them.

The Executive Board provided us with full, timely information on the competitive environment, the course of business, planned Company policy and all significant strategic and operating decisions. Larger items of projected capital expenditure and equity investments as well as planned Group financing activities were coordinated with us. As Chairman of the Supervisory Board, I read the minutes of the Executive Board meetings and discussed the current course of business with the Chairman of the Executive Board and CEO on an ongoing basis.

In 2018, the Supervisory Board held a total of five meetings. In the meeting in December, we carried out a review of the efficiency of our working practices and, with the Executive Board, issued an updated declaration of compliance with the German Corporate Governance Code. **www.lufthansagroup.com/en/corporate_governance_declaration.**

No conflicts of interest were disclosed in the financial year 2018.

Our meetings focused on the economic development of Deutsche Lufthansa AG and its associated companies. At the meeting convened in September, we held in-depth discussions with the Executive Board on the further strategic development of the Group and approved the Company strategy as proposed. The Supervisory Board approved the purchase of up to 43 aircraft of various models by companies in the Lufthansa Group. In addition, we approved the establishment of an engine component repair subsidiary at Lufthansa Technik AG.

In its meetings in March and May, the Supervisory Board voted for changes to the internal regulations for the Supervisory Board and for the Executive Board.

In December, the Supervisory Board voluntarily adopted a new remuneration structure for members of the Executive Board. It applies to new appointments and contract renewals as of 1 January 2019. The system introduced in 2010 was further adapted to standard market practice. In particular, a market-standard model for target bonuses was introduced and the long-term variable remuneration was established on the basis of a performance cash plan. The members of the Executive Board are now also obliged to invest 15% of the gross amount of their annual bonus and performance cash plan in Lufthansa shares, until they hold shares purchased at a cost of 100% (for an ordinary Executive Board member) or 200% (for the CEO) of annual basic salary. The standard employment contract for Executive Board members was also revised in the course of restructuring the remuneration system. The new system will be put to the 2019 Annual General Meeting for approval. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compensation.html.**

Also, at the meeting in December, the Supervisory Board decided to set up a new Executive Board area of responsibility, Airline Resources & Operations Standards, and redistributed responsibilities within the Executive Board accordingly. The new division pools vital functions such as fleet management, flight and ground operations standards, infrastructure, system partners and Group safety at the Executive Board level. This should improve the quality of operations and the cooperation with system partners to meet the high standards of the customers. Another aim of the reorganisation is to make the structure and division of Executive Board responsibilities clearer overall and bring them into line with the commercial logic of the airlines.

Overall, Supervisory Board members had an attendance rate of 95%. Mr Behrens only attended half the meetings of the Supervisory Board and the Supervisory Board committees of which he is a member for health reasons. An overview of attendance at individual meetings can be found at **https://investor-relations.lufthansagroup.com/en/corporate-governance/supervisoryboard.html.**

The Executive Board informed us regularly of changes in the shareholder structure, the performance of the Lufthansa share, transactions with derivative financial instruments and allocations to and returns from the Lufthansa pension fund. The disclosures required by takeover law made in the combined management report by the Executive Board in accordance with Sections 289a Paragraph 1 and Section 315a Paragraph 1 of the German Commercial Code require no further comment.

In its meeting in March, the Supervisory Board extended the appointment of Carsten Spohr as Chairman of the Executive Board and CEO of Deutsche Lufthansa AG for the period of 1 January 2019 to 31 December 2023.

Furthermore, in December the Supervisory Board appointed Detlef Kayser as a member of the Executive Board for three years from 1 January 2019 to 31 December 2021. As of this date, Detlef Kayser is the new Chief Officer Airline Resources & Operations Standards.

The Supervisory Board has confirmed the basic target of 30% for the proportion of women on the Executive Board and has set 31 December 2021 as a deadline for meeting this target. As of 31 December 2018, women account for 20% of the Executive Board; since 1 January 2019, they account for 17% of the Executive Board. ↗ **Employees, p. 21ff.** **www.lufthansagroup.com/en/corporate_governance_declaration.**

The Arbitration Committee and the Nomination Committee were not convened in the reporting year. The Steering Committee met four times in 2018 and the Audit Committee met five times. The Steering Committee prepared the Supervisory Board meetings, occupied itself with succession planning for the Executive Board and made recommendations to the full Supervisory Board on all personnel decisions concerning the Executive Board. The Audit Committee discussed the financial statements for 2017 and the interim reports for 2018 with the CFO before their publication. The committee also dealt with the supervision of accounting processes and the effectiveness of the internal control system, risk management and internal auditing systems. Furthermore, the members received regular reports on the compliance management system and the work of the Group's audit department. They also discussed in detail the Group operational planning for 2019 to 2022, the medium-term financial planning and the condensed, non-financial reporting, which was reviewed by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Dusseldorf. ↗ **Combined non-financial report, p. 206ff.**

Information on the committees' work was provided at the beginning of the following Supervisory Board meeting.

Nicoley Baublies, Robert Kimmitt, Doris Krüger, Eckhard Lieb, Jan-Willem Marquardt, Ralf Müller, Andreas Strache and Birgit Weinreich left the Supervisory Board as of the close of the Annual General Meeting on 8 May 2018. The Supervisory Board thanks the former members for assuming their responsibilities and for their constructive and dedicated work. The periods in office of Herbert Hainer, Carsten Knobel, Martin Koehler, Miriam Sapiro, Matthias Wissmann and myself also ended at the close of the Annual General Meeting; all were re-elected to the Supervisory Board. Michael Nilles was elected to the Supervisory Board for the first time. All seven shareholder representatives elected or re-elected at the Annual General Meeting have a period in office of five years. In spring 2018, the employees of the Lufthansa Group elected Alexander Behrens, Christian Hirsch, Holger Benjamin Koch, Birgit Rohleder, Ilja Schulz, Olivia Stelz and Klaus Winkler to the Supervisory Board with effect from the close of the Annual General Meeting 2018.

At the constitutive meeting of the Supervisory Board on 8 May 2018, I was re-elected as Chairman of the Supervisory Board and Christine Behle was re-elected as my deputy. In accordance with the internal regulations for the Supervisory Board, we are therefore also both members of the Steering Committee and the Arbitration Committee required by Section 27 Paragraph 3 Co-determination Act. Herbert Hainer and Ilja Schulz were also elected to both committees. In accordance with the internal regulations for the Supervisory Board, I also chair the Nomination Committee, to which Herbert Hainer and Martin Koehler were also elected.

Stephan Sturm was elected as Chairman of the Audit Committee and Alexander Behrens, Jörg Cebulla, Carsten Knobel, Monika Ribar and Christina Weber were elected as ordinary members.

Both the shareholder representatives and employee representatives meet the respective statutory quotas of 30% for women and men on the Supervisory Board.

The Supervisory Board appointed PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Dusseldorf, who were elected as auditors for the parent company and the Group at the Annual General Meeting 2018, to audit the financial statements and the consolidated financial statements, the combined management report and the system for the early identification of risks. The Audit Committee acknowledged the declaration of independence provided by PricewaterhouseCoopers and discussed the main topics of the audit. No potential grounds for disqualifying the auditors or doubting their impartiality came to light during the course of the audit.

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), taking account of interpretations by the IFRS Interpretations Committee as applicable in the European Union (EU). The auditors audited the annual financial statements and consolidated financial statements of Deutsche Lufthansa AG and the combined management report as of 31 December 2018 in accordance with the legal requirements, and had no reservations to make. They further confirmed that the system for the early identification of risks established by the Executive Board is suitable for the early identification of developments that could endanger the Company's continued existence. During their audit, the auditors did not come across any facts that would run contrary to the declaration of compliance.

On 6 March 2019, the Audit Committee discussed the audit reports in detail with the CFO in the presence of the two auditors who had signed the auditors' report. At the Supervisory Board accounts meeting on 13 March 2019, the auditors reported on their audit findings and answered questions.

We examined the financial statements and the consolidated financial statements of Deutsche Lufthansa AG, as well as the combined management report and the combined non-financial report, and had no objections to make. The financial statements and the consolidated financial statements were approved. The 2018 annual financial statements of Deutsche Lufthansa AG as prepared by the Executive Board have thereby been adopted. We agree with the Executive Board's proposal for profit distribution.

In view of the change of auditors required by law, the Audit Committee completed extensive work to prepare for the appointment of new auditors from financial year 2020 onwards. The Audit Committee conducted a tendering process in line with the statutory requirements and formulated a recommendation for the full Supervisory Board after a careful review of the candidates. At its meeting in December, the Supervisory Board voted to propose Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft to the Annual General Meeting 2020 to audit the separate and consolidated financial statements of Deutsche Lufthansa AG for 2020.

On 1 December 2018, Wolfgang Mayrhuber, the long-standing Chairman of the Executive Board and Chairman of the Supervisory Board, died at the age of 71. He was a member of the Supervisory Board from May 2013 to September 2017, which he also chaired during this period. From 2001 to 2010, he was a member of the Executive Board of Deutsche Lufthansa AG, which he chaired from 2003 to 2010. He served and influenced our Company for more than 45 years. His name is inextricably linked to Lufthansa's development over this period. He set the course for our Company's success through his great commercial and political vision. At the same time, he always acted for the good of our customers and employees. Everyone at Lufthansa thanks him for his sterling service to Lufthansa and the airline industry. We will always remember him with the greatest respect.

The Supervisory Board thanks the Executive Board and all the employees for their work and for the personal commitment they have demonstrated.

Frankfurt, 13 March 2019

For the Supervisory Board
Karl-Ludwig Kley, Chairman

Lufthansa share

Lufthansa share cannot evade difficult market environment. | Majority of analysts continue to recommend buying share. | Annual General Meeting will propose dividend of EUR 0.80 per share. | Dividend yield at 4.1%.

Difficult year on the stock market for airlines also influences Lufthansa share

The performance of the Lufthansa share in 2018 was marked by profit taking following strong price rises in the previous year, as well as uncertainty in connection with slower macroeconomic growth, trade wars, rising oil prices and greater competition on continental European routes. In the first half-year, the share fell by 33%. Following half-year results that were slightly above market expectations, the price recovered somewhat in the third quarter, rising by 3% over the period. In the final quarter, the price of the Lufthansa share declined by 7%, driven chiefly by concerns about trade wars and the ongoing Brexit negotiations, and followed the general performance of the DAX, which was down by 14% in the fourth quarter.

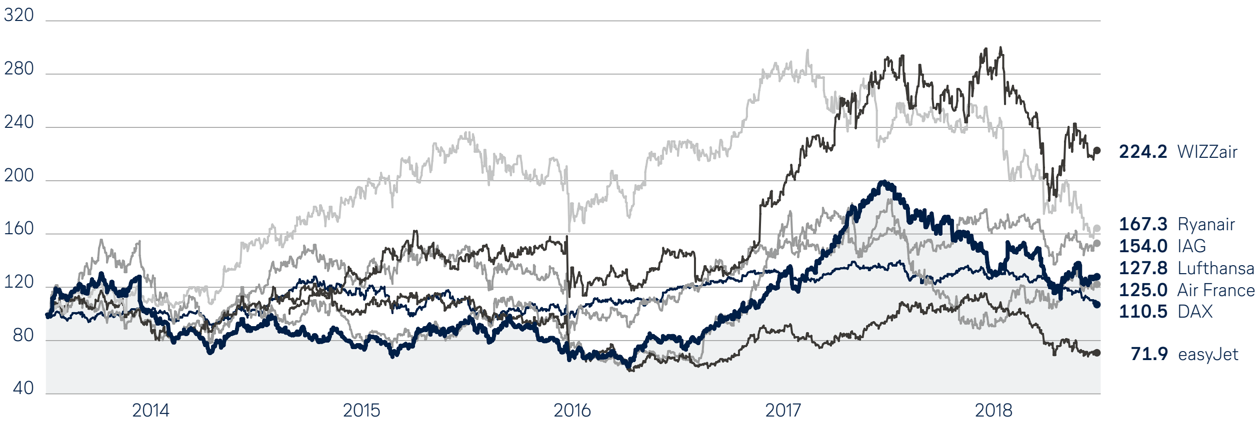
The share reached its high price for the year on 3 January 2018 at EUR 30.90, followed by the low for the year on 30 October 2018 at EUR 17.31. As of year-end, the Lufthansa share traded at EUR 19.70. This represents a fall of 36% in financial year 2018. As a result, performance continued to lag behind that of the DAX index, which fell by 18%. However, performance largely reflected trends in the European airline industry as a whole, in which the shares of the main competitors also sustained losses of over 20%.

Executive Board and Supervisory Board propose dividend of EUR 0.80 per share

The Supervisory Board and Executive Board are proposing to distribute a dividend of EUR 0.80 per share for financial year 2018. This represents a dividend ratio of 12.8% of EBIT and a dividend yield of 4.1% based on the closing price for the year.

C02 PERFORMANCE OF THE LUFTHANSA SHARE
indexed as of 31.12.2013, compared with the DAX and competitors, in %

LUFTHANSA'S SHARE PRICE AS OF 31.12.2018
19.70 €



T007 THE LUFTHANSA SHARE: KEY FIGURES

		2018	2017	2016	2015	2014
Year-end share price	€	19.70	30.72	12.27	14.57	13.83
Highest share price	€	30.90	31.12	15.29	15.35	20.26
Lowest share price	€	17.31	11.32	9.30	10.48	10.88
Number of shares	millions	475.2	471.3	468.8	464.5	462.8
Market capitalisation (at year-end)	€bn	9.4	14.5	5.8	6.7	6.4
Earnings per share	€	4.58	4.98	3.81	3.67	0.12
Cash flow from operating activities per share	€	8.65	11.39	6.92	7.30	4.27
Dividend per share	€	0.80	0.80	0.50	0.50	–
Dividend yield (gross)	%	4.1	2.6	4.1	3.4	–
Dividend payout	€m	380	377	234	232	–
Total shareholder return	%	– 33.3	154.4	– 12.3	5.3	– 7.4

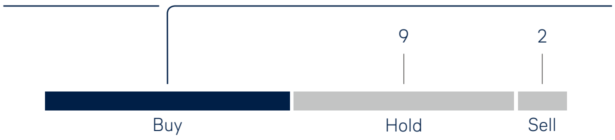
Analysts largely recommend the Lufthansa share as a buy

At year-end, ten analysts recommended buying the share and nine recommended holding it. Only two out of 21 analysts recommended selling the share. The average target price was EUR 23.49.

C03 ANALYSTS' RECOMMENDATIONS[1]

As of 31.12.2018

BUY
10



[1] Average target price: EUR 23.49, average of 21 analysts.
Range: EUR 17.20 to EUR 28.50.

Only slight changes in foreign ownership and shareholder structure

In order to protect international air traffic rights and its operating licence, the German Aviation Compliance Documentation Act (Luftverkehrsnachweissicherungsgesetz – LuftNaSiG) requires Lufthansa to provide evidence that a majority of its shares are held by German shareholders. For this reason, all Lufthansa shares are registered shares with transfer restrictions.

At the end of 2018, the shareholders' register showed that German investors held 72.1% of the shares (previous year: 67.9%). The second largest group, with 8.5%, was shareholders from the USA. Investors from Ireland accounted for 4.6%, followed by Luxembourg with 4.3% and the Cayman Islands and the United Kingdom with 2.8% each. This ensures continued compliance with the provisions of the German Aviation Compliance Documentation Act.

The free float for Lufthansa shares is 100%, as defined by Deutsche Börse. As of the reporting date, 53% of the shares were held by institutional investors and 47% were held by private individuals.

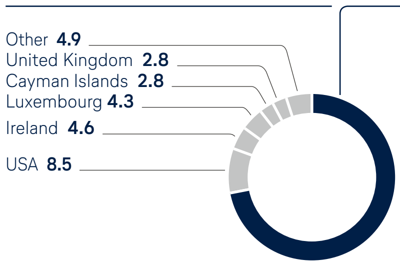
BlackRock, Inc. and Lansdowne Partners International Ltd. were the biggest shareholders in the Lufthansa Group at year-end with 4.46% and 3.62% respectively.

All the transactions requiring disclosure and published during the financial year 2018, as well as the quarterly updates on the shareholder structure, are shown on our website **www.lufthansagroup.com/en/investor-relations.**

C04 SHAREHOLDER STRUCTURE BY NATIONALITY

As of 31.12.2018 in %

GERMANY
72.1



Free float: 100%

Included in the DAX and other important indices

As a member of the DAX, the Lufthansa Group is one of the 30 largest publicly listed companies in Germany. At year-end, the share had an index weighting of 1.07%. With a market capitalisation of EUR 9.4bn at year-end (previous year: EUR 14.5bn), the Lufthansa Group came in at number 28 (previous year: 24) in the ranking of DAX companies by market capitalisation. In terms of stock market turnover, the Lufthansa share was at number 21 in the ranking (previous year: 18). The volume of the share at the Frankfurt Stock Exchange in 2018 was 1,005,610,391 shares (previous year: 1,108,637,613 shares).

The Lufthansa share is included in many classic international share indices. It is also part of the MSCI Global Sustainability, FTSE4Good and ECPI sustainability indices.

In addition to its stock market listings in Germany, investors who are only allowed to hold assets denominated in US dollars can also gain exposure to the Lufthansa Group via the Sponsored American Depository Receipt Program (ADR). Since 2011, the Lufthansa ADRs have also been registered on the standardised trading and information platform OTCQX.

T008 THE LUFTHANSA SHARE: DATA

ISIN International Security Identification Number	DE0008232125
Security identification number	823212
German stock exchange code	LHA
Stock market listing	Frankfurt
Prime sector	Transport & Logistics
Industry	Airlines
Indices (Selection)	DAX, DivDAX Price Index, EURO STOXX, Nasdaq Europe, STOXX Global, FTSE4Good, MSCI Global Sustainability Index

Lufthansa Group pursues intensive dialogue with investors

As in prior years, the Lufthansa Group again provided all its shareholders with timely, comprehensive and objective information in 2018. In the reporting year and in addition to the quarterly meetings, the Executive Board and Investor Relations team explained current developments to institutional investors in the Group at 30 roadshows and 19 investor conferences. This involved more than 300 one-on-one and group meetings. Our investor relations representatives were available to answer questions at four special forums organised for private investors. The service for private shareholders also includes the shareholder information letter, which was published twice in 2018 and can be retrieved on the Investor Relations website. Publications such as financial reports, the latest news, presentations and the financial calendar can also be found at **www.lufthansagroup.com/en/investor-relations.**

COMBINED MANAGEMENT REPORT

To the extent that the combined management report refers to sources other than the combined management report or the consolidated financial statements (e.g. internet sites), the contents of these sources are not part of the combined management report and are solely for informational purposes.
The references made in the combined management report are not necessarily an integral part of the combined management report.

Principles of the Group

Business activities and Group structure

The Lufthansa Group is one of the world's leading aviation companies. | Segments hold leading market positions in their sectors. | Executive Board has six members as of 2019.

Lufthansa Group is a leading European airline group

The Lufthansa Group is an aviation group with operations worldwide. With 135,534 employees, the Lufthansa Group generated revenue of EUR 35,844m in the financial year 2018.

The Lufthansa Group is composed of the segments Network Airlines, Eurowings and Aviation Services. Aviation Services comprises the segments Logistics, MRO, Catering and Additional Businesses and Group Functions. The latter also include Lufthansa AirPlus, Lufthansa Aviation Training and the IT companies. All segments occupy a leading position in their respective markets. ↗ **Business segments, p. 41ff.**

Six-member Executive Board manages the Group

Deutsche Lufthansa AG was managed by an Executive Board made up of five members in 2018. As of 1 January 2019, the Executive Board was expanded to six members with the creation of a new area of responsibility, "Airline Resources & Operations Standards". The Executive Board is chaired by Carsten Spohr, whose contract was renewed until the end of 2023 by the Supervisory Board in the reporting period. Harry Hohmeister is Chief Commercial Officer Network Airlines and is responsible for the commercial management of the Network Airlines. Ulrik Svensson is Chief Financial Officer. Responsibility for the Corporate Human Resources and Legal Affairs function remains with Bettina Volkens. Thorsten Dirks is responsible for Eurowings. As of January 2019, the new Executive Board member for Airline Resources & Operations Standards is Detlef Kayser, who was appointed to the Executive Board by the Supervisory Board in December 2018.

Goals and strategies

Group builds on Network Airlines, Eurowings and Aviation Services – airlines form the core of the Lufthansa Group. | Focus is on developing premium positioning, cost reductions and profitability increases. | Consolidation, flexibility and digitalisation offer great opportunities. | Strategy aims for sustainable increases in Company value.

GROUP STRATEGY

Targeted development of position as leading European airline group

As a leading European airline group, the aim of the Lufthansa Group is to take on a key role in shaping the global aviation market and to remain the first choice for shareholders, customers and employees in the future. In this context, the strategy aims to systematically develop the Group, which consists of Network Airlines, Eurowings and Aviation Services.

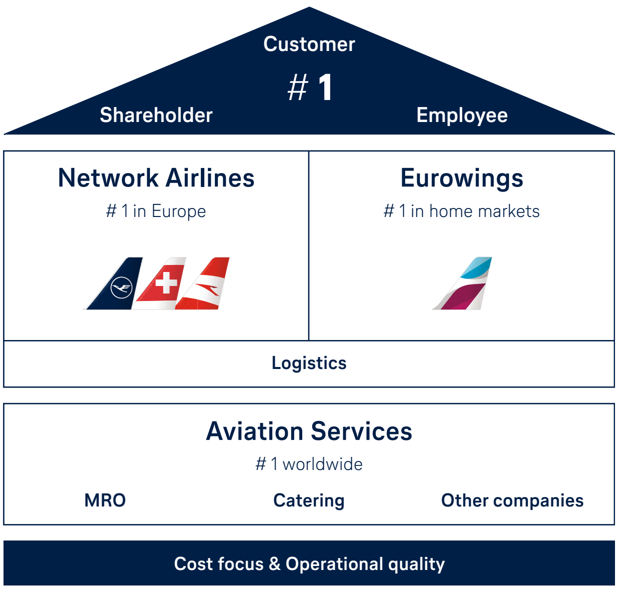
The airlines form the core of the Lufthansa Group. The differentiated portfolio of Network Airlines and Eurowings, which offers direct connections, makes it possible to serve all relevant market segments, representing an attractive offering on relevant geographic markets both for premium customers and for more price-sensitive travellers. Compared with Aviation Services, the airlines are planning to grow faster than average in the future. The former are composed of classic aviation services – essentially the Logistics, MRO and Catering segments – along with data-driven business models, which in addition to their profitable business from external markets, enable the airlines to improve their focus on customers and customer loyalty.

Structuring the Group along the airline value chain helps to maximise synergies between segments and makes it possible to scale business from external markets at the same time. The aim is to consistently exploit potential synergies around the core of the Lufthansa Group. Key drivers include revenue synergies between airlines and Miles & More in terms of loyalty and joint production in the cargo business, in which Lufthansa Cargo transports a large proportion of its freight in the bellies of passenger aircraft belonging to the Lufthansa Group.

Excellent quality and a strict cost focus form the basis for the long-term success of the Lufthansa Group. Consolidation, flexibility and digitalisation continue to be regarded as the key value drivers in the aviation market. They form core elements of the Group strategy and are advanced both across segments and within the individual segments.

The Lufthansa Group regularly reviews options for market consolidation in all segments. Consolidation opportunities that add value are exploited by means of both organic and inorganic growth in order to expand the Lufthansa Group's relevance to customers and its market position in Europe and globally. The aim is always to achieve economies of scale and further synergies.

C05 OBJECTIVE: NUMBER 1 FOR CUSTOMERS, SHAREHOLDERS AND EMPLOYEES



The airline industry remains defined by changing market and competitive conditions, including increasing exogenous uncertainties and shifts in the value chain. They include new virtual interlining services, in which providers such as online travel agents use their systems to combine different flight segments, and increases in the scale of maintenance activities carried out by manufacturers of aircraft and engines. This dynamic environment means flexibility is becoming an increasingly important success factor.

As a shaper and innovation driver of the airline industry, the Lufthansa Group therefore persists in aligning its services, business models and organisational structures with a complex, networked and dynamic market environment. For example, the cost efficiency and adaptability of the Lufthansa Group are safeguarded by means of flexible organisational structures and competition between providers of infrastructure and other suppliers. We also increase the flexibility of our fleet by reducing the number of sub-fleets and standardising them. As a result, one standard specification applies to all the aircraft in the Airbus A320 family delivered to the Lufthansa Group from 2019 onwards. This enables synergy potential to be exploited even better and capacity to be allocated quickly and flexibly across the Group's production sites. Adopting new aircraft technologies also contributes to reducing costs.

In 2018, the Lufthansa Group launched a lean programme for the Group, with the aim of spreading the lean philosophy as an intuitive component of everyday work. Lean methods are introduced and employees are given appropriate training on these methods as part of extensive transformation projects with a focus on the customer, end-to-end process and value creation. The routine application of lean methods in all areas makes processes transparent, measurable and accessible for end-to-end management. The Lufthansa Group expects this to deliver a steady focus on the value actually added by the process. Applying the lean methods should therefore lead to greater efficiency in the Group, ongoing process improvements and lower costs.

The Lufthansa Group aims to expand its position as one of the most innovative and digital airline groups in the world. It therefore makes active use of the opportunities offered by digitalisation to increase the efficiency and stability of its core business, to add greater value for customers by developing commercially attractive products and business models, and to support its consistent quality strategy. Key focus areas include the greater personalisation of services and the development of digital support for the travel experience, by sending notification of delays by app, for instance, or rebooking customers automatically in the event of irregularities. Additional digital activities are strengthening its expertise in e-commerce, in internal and external sales channels.

In addition, digitalisation is strengthening the successful positioning of Aviation Services. To provide consistent support for its innovation and digitalisation activities, the Lufthansa Group has also established organisational units such as the Lufthansa Innovation Hub, and includes digitalisation requirements when training and recruiting employees.

By way of this package of activities, the Lufthansa Group secures its competitiveness and ability to innovate as a leading European airline group in a dynamic market environment, enables profitable growth and develops its ability to shape events.

Network Airlines focus on quality strategy and improve cost-effectiveness

The Network Airlines in the Lufthansa Group offer a locally differentiated premium product to pursue a consistent quality strategy and make optimal use of the attractive customer potential in its home markets. The Five Star rating awarded to Lufthansa German Airlines by the renowned agency Skytrax, which for the first time has awarded an airline outside of Asia, is a tangible result of this quality strategy. This and the introduction of the new brand design for Lufthansa German Airlines are a clear hallmark of the high quality standards and the modernisation and strengthened competitiveness of the Company. In the future, the focus will remain on further improving the customer's travel experience, optimising the route network and the fleet, and pursuing cost reduction initiatives. As a result, new digital self-services throughout the travel chain as well as individualised meal concepts contribute to aligning the product even more closely with customer needs and opening up new sources of revenue. There will also be continuous improvements to aircraft interiors and service at all points of customer contact. In order to keep offering leading product quality alongside lower unit costs, the Lufthansa Group invests continuously in its fleet. The Network Airlines are growing organically, largely by replacing older aircraft with recent models that boast higher seating capacities and greater fuel efficiency without significantly increasing the total number of aircraft.

The Network Airlines strive to offer an attractive, high-quality product over the long term on the basis of a stable multi-hub system. To do so, the Lufthansa Group implements measures to enhance quality in the areas under its control. Reallocating capacities within the multi-hub system, for example, is one way of supporting more even capacity use of airport infrastructure. In addition, the Lufthansa Group works with its system partners to create the conditions for high operating stability and sustainable growth in line with demand. We work with our partners to expand the leading position of our Network Airlines in both European and global hub traffic. Today, the Network Airlines already have commercial joint ventures in key long-haul markets.

A consistent focus on costs forms the basis for the sustainable economic success of the Network Airlines. Cost-cutting continues to this end, especially in areas that have no effect on customers' perceptions of quality. They include streamlining the organisational structures of the Network Airlines and systematically harmonising their commercial management and system landscape, cutting supplier costs and those for infrastructure providers, and modernising wage agreements. Reductions in unit costs are set to continue, while customer perceptions become increasingly positive.

Eurowings is the focus of growth for the Lufthansa Group airlines

With Eurowings, the Lufthansa Group has an innovative and competitive offering in direct traffic, which addresses both price-sensitive and service-oriented customers with low-cost basic fares and additional service options that can be booked flexibly.

In 2019, after the full takeover of SN Airholding SA/NV (Brussels Airlines) and the integration of parts of the Air Berlin group, the focus will be on stabilising the core business and reducing operating complexities. Eurowings is thus paving the way for continued growth in the years ahead. The goal here is both organic growth and further partnerships and acquisitions, in order to keep expanding its market position as the third largest operator in European direct traffic.

To achieve sustainable success in this highly competitive market, Eurowings continues to develop its point-to-point business model. Key focus areas are to achieve a competitive cost structure, keep defining its scalable integration potential and develop leading digital expertise. Eurowings has established a multi-channel distribution platform with a digital focus for this purpose: Eurowings Digital will play a leading role in digitalisation along the travel chain. The competence of Brussels Airlines in the long-haul business is being used to refine its positioning in specific areas of this fast-growing market segment.

Eurowings is managed largely independent of the Network Airlines, so as not to dilute the structural cost advantages of the point-to-point model. At the same time it benefits from belonging to one of the world's largest aviation groups and its wide range of aviation services; from economies of scale in fleet purchases, for instance, and the maintenance competence of Lufthansa Technik.

Aviation Services are seizing growth opportunities and being developed accordingly

With the Aviation Services companies, the Lufthansa Group has several global leaders in their respective markets. In order to build on their successful positioning and deliver profitable growth, Aviation Services are permanently adapting their business models to changing value chains and competitive environments. Lufthansa Technik will increasingly shift its value added towards intelligent maintenance management by means of data-based products and services, for instance, and invest more in digital innovations to improve its product portfolio. Expansion will target attractive, synergetic segments that increase the appeal of the Lufthansa Group's digital environment. Miles & More is developing its third-party business, for example, whereas AirPlus is growing in the lucrative market for payment and billing services for business travel.

Aviation Services will be scrutinised continuously for their value contribution and developed with a clear focus. The Lufthansa Group regularly reviews the attractiveness of individual market segments, their current competitive position, the future revenue potential of the segments and the synergies realised by them, and, in particular, the value contribution for the airlines. At the level of the segments it may make sense to develop companies in the Aviation Services segment within or outside the Lufthansa Group using a differentiated approach or with partners, in order to ensure their long-term growth and sustainable profitability.

FINANCIAL STRATEGY AND VALUE-BASED MANAGEMENT

Financial strategy aims to increase Company value

The financial strategy of the Lufthansa Group seeks to increase its Company value in a sustainable manner. It will concentrate on three dimensions: increasing profitability, focusing the use of capital and safeguarding financial stability.

C06 FINANCIAL STRATEGY

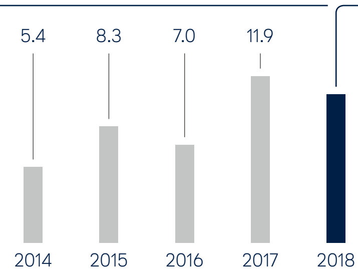
Sustainable increase of Company value

	Improve profitability	Focus capital allocation	Maintain financial stability
Focus	– Sustainable value generation – Intense cost management	– Continuous shareholder participation – Balanced investment level – Working capital management	– Stabilise investment grade rating – Hedging of financial risks – Access to different forms of funding and maintaining appropriate liquidity
Target	– Adjusted ROCE – Adjusted EBIT margin	– Capital expenditure – Dividend	– Adjusted net debt/Adjusted EBITDA

C07 DEVELOPMENT OF ADJUSTED ROCE (AFTER TAXES)

in %

2018
10.6



T009 CALCULATION OF ADJUSTED ROCE AND COST OF CAPITAL[1]

in €m	**2018**	2017	Change in %
Revenue	35,844	35,579	1
Other operating income	2,349	2,714	-13
Operating income	**38,193**	**38,293**	**0**
Operating expenses	35,393	35,153	1
Result from equity investments	174	157	11
EBIT	**2,974**	**3,297**	**-10**
Adjusted EBIT	**2,836**	**2,969**	**-4**
Interest on liquidity	68	178	-62
Taxes (assumption 25% of EBIT + Interest on liquidity)	-761	-869	12
Cost of capital[2]	-860	-832	-3
EACC	**1,422**	**1,774**	**-20**
ROCE[3] in %	**11.1**	**13.2**	**-2.1 pts**
Adjusted ROCE[4] in %	**10.6**	**11.9**	**-1.3 pts**
Balance sheet total	38,213	35,778	7
Non-interest bearing liabilities			
of which liabilities from unused flight documents	3,969	3,773	5
of which trade payables, other financial liabilities, other provisions	6,381	5,988	7
of which advance payments, deferred income, other non-financial liabilities	2,755	2,281	21
of which others	4,099	3,741	10
Capital employed	21,009	19,995	5
Average capital employed	**20,502**	**19,824**	**3**
WACC in %	4.2	4.2	–

[1] The figures for 2017 and 2018 include effects from the first-time application of new accounting standards and other accounting changes. Details can be found on ↗ **p. 29f.** of this Annual Report.
[2] WACC x Average capital employed.
[3] (EBIT + Interest on liquidity – 25% taxes)/Average capital employed.
[4] (Adjusted EBIT + Interest on liquidity – 25% taxes)/Average capital employed.

Increasing profitability

Sustainable value creation in the Company

The Lufthansa Group applies a value-based system of management. At its centre is the profitability of the Company. This is measured by reference to Adjusted EBIT. In order to embed profitability in all decision-making processes, performance-related pay for managers is tied to the financial performance of the Company. ↗ **Remuneration report, p. 84ff.**

The adjusted return on capital employed (Adjusted ROCE) is measured for the Lufthansa Group and the individual companies. If Adjusted ROCE exceeds the weighted average cost of capital (WACC), the Company is creating value.

In 2018, the Lufthansa Group had an Adjusted ROCE after tax of 10.6%. It was 1.3 percentage points down on the previous year and significantly above the WACC of 4.2%. The Company therefore added value again in 2018.

Improved cost management contributes to structural increase in profitability

Greater cost discipline, increasing process simplification and productivity improvements are intended to lift structural profitability. Unit costs at the passenger airlines, adjusted for fuel costs and exchange rates, are to be reduced by 1% to 2% per year. Cost-cutting measures are also implemented on a continuous basis in Aviation Services.

Focused use of capital

Dividend policy aims for continuous distributions

Shareholders should participate directly in the Company's success. The dividend policy provides for a regular dividend payout ratio of 10% to 25% of consolidated EBIT. In addition to the regular dividend payment, the dividend policy also allows for shareholders to participate in particularly positive performance by the Company by means of a special dividend or share buy-back.

The Executive Board and Supervisory Board will table a proposal at the Annual General Meeting on 7 May 2019 to distribute a dividend of EUR 0.80 per share to shareholders for the financial year 2018. This represents a total dividend of EUR 380m or 12.8% of EBIT for 2018.

Balanced investment to modernise the fleet

Going forward, the Lufthansa Group will continue to invest steadily in the renewal of its fleet, in-flight and ground products and infrastructure. The aircraft ordered for the period until 2025 serve mainly to replace older models. Market opportunities arising in the short and medium term can nonetheless be exploited by activating reserve aircraft or procuring used aircraft. This makes the investment profile more balanced and increases focus on the deployment of capital. It also increasingly creates greater room for manoeuvre regarding any further consolidation activity. Regular capital expenditure is financed from the Company's own cash flow. The aim is also to generate significantly positive free cash flow. ↗ C13 **Primary, secondary and financial investments, p. 34.**

Gross capital expenditure (without expenditure on equity investments) rose by 8% to EUR 3,757m in 2018. This was largely due to higher primary investment in down payments and final payments for aircraft, aircraft components and overhauls of aircraft and engines.

Safeguarding of financial stability

Investment grade ratings secure financial room for manoeuvre

Investment grade ratings for the Company's debt secure its financial flexibility. Deutsche Lufthansa AG holds an investment grade rating from the rating agencies. Standard & Poor's gives Deutsche Lufthansa AG a rating of BBB – (positive outlook), while Moody's gives it a rating of Baa3 (stable outlook) and Scope Ratings gives it a rating of BBB – (positive outlook). The Lufthansa Group also strives to secure its investment grade rating over the long term.

T010 DEVELOPMENT OF RATINGS

Rating/outlook	**2018**	2017	2016	2015	2014
Standard & Poor's	BBB–/ positive	BBB–/ stable	BBB–/ negative	BBB–/ stable	BBB–/ stable
Moody's	Baa3/ stable	Baa3/ stable	Ba1/ stable	Ba1/ positive	Ba1/ positive
Scope Ratings	BBB–/ positive	BBB–/ positive	BBB–/ stable		

Adjusted net debt/Adjusted EBITDA serves as an indicator of the Company's ability to service its debts

The ratio of Adjusted net debt/Adjusted EBITDA is used to measure the Group's ability to service its debts. By using Adjusted net debt, the ratio also includes pension provisions as well as classic net indebtedness.

From 2019 onwards, when the new accounting standard for leases is introduced (IFRS 16), it will also include financial obligations from the Group's leases (and for property and aircraft).

At the end of 2018, the ratio was 1.8. Although this was 0.3 points up on the previous year (previous year: 1.5), it is still comfortably within the target corridor for gearing of under 3.5.

T011 ADJUSTED NET DEBT/ADJUSTED EBITDA [1]

	2018 in €m	2017 in €m	Change in %
Net indebtedness[2]	3,242	2,637	23
Pension provisions	5,865	5,116	15
Adjusted net debt	**9,107**	**7,753**	**17**
Adjusted EBIT	2,836	2,969	-4
Depreciation and amortisation	2,180	2,040	7
Adjusted EBITDA	**5,016**	**5,009**	**0**
Adjusted net debt/ Adjusted EBITDA	**1.8**	**1.5**	**17**

[1] The figures for 2017 and 2018 include effects from the first-time application of new accounting standards and other accounting changes. Details can be found on ↗ **p. 29f.** of this Annual Report.
[2] In order to calculate net indebtedness, here 50% of the hybrid bond issued in 2015 (EUR 247m) has been discounted. Calculation of net indebtedness ↗ **p. 38.**

Structured risk management minimises finance risks

Integrated risk management, particularly by hedging fuel, exchange rate and interest rate risks, minimises the short-term financial risks for the Lufthansa Group. The hedges smooth price fluctuations by means of rule-based processes. ↗ **Opportunities and risk report, p. 61ff., Notes to the consolidated financial statements, Note 44, p. 164ff.**

Diverse forms of funding ensure liquidity

Optimising the funding mix reduces financing costs, maintains a balanced maturity profile and diversifies the Lufthansa Group's portfolio of creditors. The majority of the aircraft fleet should remain unencumbered and wholly owned by the Lufthansa Group in order to maintain its great financial and operational flexibility.

T012 LUFTHANSA'S CREDIT RATINGS

Standard & Poor's (June 2018)[1]	Long-term: BBB– Short-term: A-3 Outlook: Positive	**Moody's Investors Service** (September 2018)[1]	Long-term: Baa3 Short-term: N/A Outlook: Stable	**Scope Ratings** (June 2018)[1]	Long-term: BBB– Short-term: S-2 Outlook: Positive
Strengths		**Strengths**		**Strengths**	
⊕ One of the leading global network carriers with an excellent competitive position and one of the largest route networks world-wide; strong market position at hubs in Frankfurt, Munich, Zurich and Vienna		⊕ One of the largest airlines in the world and a leading position in the European airline sector with a strong diversified route network; Eurowings strategy of point-to-point traffic addresses cost competitiveness		⊕ Global network coverage, diversified route network, member of the global airline alliance Star Alliance and a high share of business travellers with a strong market position at hubs in Frankfurt, Munich, Zurich and Vienna	
⊕ Balanced exposure to high-yielding, premium, and long-haul traffic across its route portfolio; leading domestic market position in Germany; regional brands are well established		⊕ Robust business profile with diversified business segments reduces its exposure to volatility in passenger and cargo business		⊕ Leading position in home market of Germany; competitive advantage in premium market for long-haul traffic	
⊕ Besides the passenger airline business well diversified business profile with leading market positions in maintenance, repair and overhaul (MRO) services as well as airline catering adds stability to Lufthansa Group's earnings		⊕ Diversity of business segments; maintenance, repair and overhaul (MRO) and airline catering business segments deliver stable profit contribution		⊕ Diversified operations (maintenance, repair and overhaul (MRO) and airline catering) with strong market positions mitigating cyclicality risks in passenger and cargo traffic	
⊕ Strong liquidity position		⊕ Strong liquidity position		⊕ Solid liquidity position	
Weaknesses		**Weaknesses**		**Weaknesses**	
⊖ Cost position as a competitive disadvantage		⊖ Profitability of the Airline Group depends on external factors including fuel prices and economic development in Europe		⊖ Cyclicality of the airline industry; Lufthansa Group's profitability below its peers	
⊖ High capital intense business model		⊖ Market position is challenged by Middle-Eastern airlines in the long-haul segment and low-cost carriers in the short-haul segment		⊖ Cost advantages could erode by competitive pressure	

[1] Latest report.

The main financing instruments are aircraft financing and unsecured financing arrangements such as borrower's note loans and publicly traded bonds. Furthermore, the Lufthansa Group has bilateral credit lines with a large number of banks, which serve as an additional liquidity reserve. As of 31 December 2018, these credit lines came to EUR 849m (previous year: EUR 885m) and had not been used.

The Group aims to maintain liquidity of at least EUR 2.3bn at all times, in order to continually manage liquidity and refinancing risks for the Lufthansa Group, especially at times of volatile demand and financial markets.

A total of two Japanese operating lease (JOLCO) transactions were concluded in 2018. This enabled funds amounting to a total of EUR 243m to be raised on favourable terms. These JOLCO deals are repaid continuously over the approximately eleven-year term of the respective contracts.

In September 2018, Deutsche Lufthansa AG renewed its Euro Medium Term Note (EMTN) programme, a form of debt issuance programme. The programme enables the Group to issue bonds on the capital market at very short notice. It is listed on the Luxembourg stock exchange. No bonds were issued in 2018, however.

There were no significant off-balance sheet financing activities last year. However, various Lufthansa Group companies did enter into rental and/or operating lease contracts. These mainly relate to leases for aircraft and property. ↗ **Notes to the consolidated financial statements, Note 20, p. 134ff.**

Fleet and route network

Fleet was significantly expanded in 2018. | Fleet strategy aims to standardise and reduce number of aircraft models. | Fleet size can be adapted flexibly to fluctuations in demand. | Extensive route network optimised continuously.

FLEET

Fleet is expanded and modernised

The Lufthansa Group fleet comprised 763 aircraft as of year-end 2018. The fleet expanded year-on-year by 35 aircraft.

The additions to the fleet were 29 new aircraft (six Airbus A359s, six A320neos, two A320ceos, 13 Bombardier CS 300s and two Boeing 773s), eleven used aircraft and six leased aircraft. In 2018, eight aircraft were sold and leases were terminated for three aircraft.

The average age of the aircraft in the fleet was 11.9 years (previous year: 11.4 years).

At year-end 2018, there were 195 aircraft on the Lufthansa Group's order list. In 2019, the Lufthansa Group is expecting to take delivery of up to 32 aircraft.

T013 FLEET ORDERS LUFTHANSA GROUP

	Deliveries
Long-haul fleet	
34 Boeing 777X	2020 to 2025
2 Boeing 777-300ER	2019
2 Boeing 777F	2019
13 Airbus A350	2019 to 2023
2 Airbus A330 – 300	2019
Short-haul fleet	
133 Airbus A320neo family	2019 to 2025
7 Airbus A320ceo	2019
2 Bombardier C Series	2019

T014 GROUP FLEET – NUMBER OF COMMERCIAL AIRCRAFT AND FLEET ORDERS
Lufthansa German Airlines including regional airlines (LH), SWISS including Edelweiss (LX), Austrian Airlines (OS), Eurowings (EW) including Brussels Airlines and Germanwings and Lufthansa Cargo (LCAG) as of 31.12.2018

Manufacturer/type	LH	LX	OS	EW	LCAG	Group fleet	of which finance lease	of which operating lease	Change compared with 31.12.2017	Additions 2019 to 2025	Additional options
Airbus A319	30	5	7	73		115	26	13	+ 1		
Airbus A320	88	28	23	83		222	27	7	+ 13	92	17
Airbus A321	63	9	6	5		83	2		+ 1	48	
Airbus A330	18	16		22		56	8	8	+ 4	2	
Airbus A340	33	9		2		44			– 7		
Airbus A350	12					12			+ 6	13	30
Airbus A380	14					14			–		
Boeing 747	32					32			–		
Boeing 767			6			6			–		
Boeing 777		10	6		7[1]	23	4		+ 5	38	18
Boeing MD-11F					12	12			–		
Bombardier CRJ	35					35			–		
Bombardier C Series		28				28			+ 13	2	30
Bombardier Q Series			18	20		38		20	–		
Embraer	26		17			43			–		
Fokker F100						0			– 1		
Total aircraft	**351**	**105**	**83**	**205**	**19**	**763**	**67**	**48**	**+ 35**	**195**	**95**

[1] Of which pro rata shares of two aircraft operated by AeroLogic.

Fleet strategy aims to standardise and reduce number of aircraft models
Aircraft from Airbus and Boeing make up the majority of the fleet. Aircraft from Bombardier and Embraer are also deployed on short- and medium-haul routes. As part of the fleet strategy, the number of aircraft models in operation has already been scaled back continuously across the Group in order to reduce complexity. The retirement of the last Fokker 100s reduced the number of aircraft types in service from 23 at year-end 2017 to 22 at year-end 2018. 77% of the fleet is the unencumbered property of the Lufthansa Group. Overall, 90% of the fleet is owned and 10% is leased. Ownership is generally cheaper than leasing and provides greater flexibility, so the proportion of leased aircraft in the fleet is relatively low. In order to respond flexibly to fluctuations in demand and adjust capacity at short notice, depreciated aircraft owned by the Lufthansa Group can at short notice remain in service for longer or be retired before their planned phase-out. When new purchases are required, used aircraft are also considered if the opportunity arises.

ROUTE NETWORK

Route network is expanded and optimised
As part of their multi-hub strategy, the Network Airlines offer their customers a wide range of flights via their hubs in Frankfurt, Munich, Zurich and Vienna. It is complemented by the route networks of the alliance and joint venture partners, which offer extensive transfer connections. Eurowings provides a comprehensive range of direct connections, particularly from German-speaking countries.

In the 2018 summer flight timetable, the Lufthansa Group airlines operated a route network comprising 343 destinations in 103 countries.

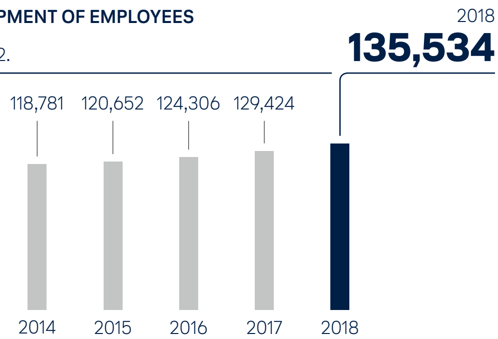
Employees

With more than 135,500 employees around the world, the Lufthansa Group is a truly global Company. | Process-based reorganisation should be completed by year-end 2019. | Comprehensive diversity approach is strengthening competitiveness. | Long-term collective agreements with labour union partners enable sustainable success.

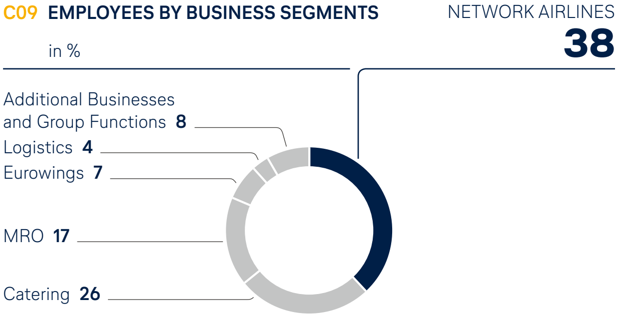
More employees in the Lufthansa Group
At year-end 2018, the Lufthansa Group had 135,534 employees worldwide (previous year: 129,424). This meant that the number of employees grew by 5%. 72,716 employees worked in Germany (previous year: 69,142). This represents 54% of the total workforce (previous year: 53%).

As of the reporting date, the average age of the workforce was unchanged at 41.5 years. Average seniority was 12.7 years (previous year: 14.6). 29% of employees worked part-time in 2018. Fluctuation came to 14% (previous year: 13%).

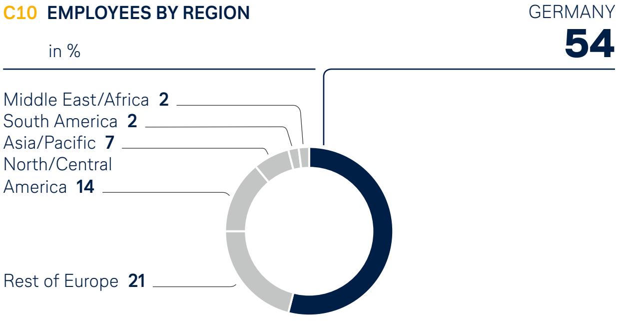
C08 DEVELOPMENT OF EMPLOYEES
as of 31.12.



C09 EMPLOYEES BY BUSINESS SEGMENTS
in %



C10 EMPLOYEES BY REGION
in %



In the reporting year, the Lufthansa Group offered more than nine different recruitment channels around the world for school and university students. As of year-end, 1,087 apprentices were employed in the Lufthansa Group's 26 occupations (previous year: 1,101).

Cultural and structural transformation continues

The success of the Lufthansa Group depends greatly on the ideas, the competence, the enthusiasm, the commitment and the health of its employees. The Group-wide employee survey, which has been carried out annually since 2015, shows that focused activities strengthened employee commitment in the reporting year. The Engagement Index rose again year-on-year by 0.1 points to 2.2 points. Additional information on employee concerns can be found in ↗ **Combined non-financial report, p. 206ff.**

The range of development and training courses to increase the focus on employees and customers is always being expanded. Talent-spotting initiatives were strengthened again in the reporting year. The internal talent programme "Makers of Tomorrow" was organised for the first time and received more than 1,200 applications from employees below the management level based around the world.

Since early 2016, the Lufthansa Group has become successively more process-oriented. This entails the pooling of responsibilities and the reduction of hierarchies. The reorganisation should be completed by the end of 2019.

Promotion of diversity continues

The Lufthansa Group takes a comprehensive approach to diversity and believes that diversity of gender, demography and nationality contribute to broadening perspectives and to making the Company more competitive.

Demanding goals were set to implement the German Act on Equal Participation of Men and Women in Executive Positions in the Public and Private Sectors.

In addition to the statutory requirement to set quotas for the ratio of female Executive Board members and for the ratio of women in the first two management levels, the companies in the Lufthansa Group have set themselves a common target. All companies make their own contribution towards achieving this target, taking their respective operating conditions into account.

In 2016, the Lufthansa Group set targets in this regard and a deadline for achieving them of 31 December 2021. At Deutsche Lufthansa AG, the target for the Executive Board was set at 30%, for the management level 1 below the Executive Board at 20% and for the management level 2 below the Executive Board at 30%. At the Lufthansa Group, the target for management level 1 was set at 18% and for management level 2 at 24%.

To meet these targets, the Group talent promotion programmes were supplemented by additional gender-specific measures.

The Lufthansa Group will continue to intensify its efforts to remain an attractive employer, with a particular focus on modern, flexible working conditions and the compatibility of work with family obligations and with systematic talent management. Diversity targets are part of managers' responsibilities, which reflects the Lufthansa Group's self-image.
↗ **Combined non-financial report, p. 206ff.**

Wage structures successfully developed

The Lufthansa Group aims to conclude long-term, economically viable agreements with its collective bargaining partners. These enable sustainable success, as well as predictability and security for both the Company and its employees.

In February 2018, the Lufthansa Group and the trade union ver.di concluded long-term wage agreements for the around 28,000 ground staff employed by Lufthansa German Airlines, Lufthansa Cargo, Lufthansa Technik and the LSG group in Germany. The wage agreement is valid for 33 months, from 1 January 2018 until 30 September 2020.

In May 2018, Austrian Airlines successfully reached a new competitive collective agreement valid until 2022 for some 4,000 cockpit and cabin crew.

At Eurowings, the wage structures were also developed significantly in tandem with the collective bargaining partners. A new agreement for future cockpit crew at Germanwings GmbH was reached in July 2018 with the Vereinigung Cockpit pilots' union. A collective agreement was signed for the first time in Austria for the more than 300 cockpit and cabin crew at Eurowings Europe GmbH. A new wage settlement for around 200 LGW cockpit crew was agreed following arbitration. In addition, the employment and pay structures were adapted for more than 1,600 cabin crew at Eurowings GmbH and Germanwings GmbH and a new wage agreement on part-time work was agreed with the UFO trade union.

Research and development

The Lufthansa Group and its companies work continuously – both individually and across segments – on innovative products and research and development projects. In some cases, these activities are coordinated centrally. However, most are run separately in the individual segments, since they focus on different areas.

Their individual activities to develop new services and products are described in the chapters on the ↗ **Business segments, p. 41ff.**

Legal and regulatory factors

The Lufthansa Group and its segments are subject to numerous complex legal and regulatory standards. The formal demands made of the Company are increasing all the time. This applies to legislation from various areas, such as that relating to financial law, data and consumer protection, as well as to general requirements for avoiding liability risks. Of particular relevance for the Lufthansa Group in this matter are operating restrictions such as the night-flight ban at various airports, consumer protection, EU emissions trading, national air traffic taxes and the costs of aviation security imposed on airlines, embargo conditions, the implementation of the Single European Sky as well as a lack of competition rules at international level, as laid down by the World Trade Organisation (WTO) in other industries.

Economic report
Macroeconomic situation

Global economic growth has slowed slightly. | German economy expanding slower than European economy overall. | Euro appreciates against all other key currencies. | Short-term interest rates remain low. | Significant fluctuations in oil prices.

Slower global economic growth

Growth in the global economy slowed somewhat in 2018, mainly due to the weaker performance in Europe. The growth rate fell year-on-year from 3.3% to 3.2%. Against this trend, the growth rate in North America rose to 2.8% (previous year: 2.3%). The fastest growth rates were in the Asia/Pacific region, which grew by 4.9% (previous year: 5.1%). There, the Chinese economy expanded by 6.6% (previous year: 6.9%). Economic growth in Europe came to 2.0% (previous year: 2.7%). The German economy expanded by 1.5% (previous year: 2.5%), which is less than for its European neighbours.

T015 GDP DEVELOPMENT

in %	2018[1]	2017	2016	2015	2014
World	3.2	3.3	2.6	3.0	2.9
Europe	2.0	2.7	2.0	2.4	2.0
Germany	1.5	2.5	2.2	1.5	2.2
North America	2.8	2.3	1.5	2.7	2.5
South America	1.5	1.9	–0.2	0.4	1.4
Asia/Pacific	4.9	5.1	4.7	4.9	4.8
China	6.6	6.9	6.7	6.9	7.3
Middle East	2.4	1.4	4.0	2.4	2.7
Africa	3.2	3.4	1.9	3.1	2.7

Source: Global Insight World Overview as of 15.1.2019.
[1] Forecast.

Euro appreciates against other key currencies

The euro went up against all other key currencies on average over the course of the year. The average exchange rate against the US dollar was 5% higher than the previous year. The euro gained 1% against the pound sterling in 2018. The euro also gained 4% against the Japanese yen. The euro likewise gained in value against the Chinese renminbi and the Swiss franc, by 3% and 5% respectively.

T016 CURRENCY DEVELOPMENT EUR 1 in foreign currency

	2018	2017	2016	2015	2014
USD	1.1800	1.1194	1.1062	1.1093	1.3263
JPY	130.33	125.46	120.05	134.25	140.33
CHF	1.1548	1.1022	1.0899	1.0675	1.2145
CNY	7.8083	7.5955	7.3491	6.9697	8.1742
GBP	0.8848	0.8745	0.8168	0.7259	0.8059

Source: Bloomberg, annual average daily price.

Short- and long-term interest rates move in different directions

Short-term interest rates for the euro area remained historically low in 2018. The average six-month Euribor was –0.27% (previous year: –0.26%). Long-term rates rose significantly year-on-year, however, with the average ten-year euro swap rate climbing from 0.81% to 0.96%. The discount rate, which is particularly important for measuring pension obligations and which is derived from the average return on a basket of investment-grade corporate bonds, was stable in 2018 at 2.0%.

T017 INTEREST RATE DEVELOPMENT in %

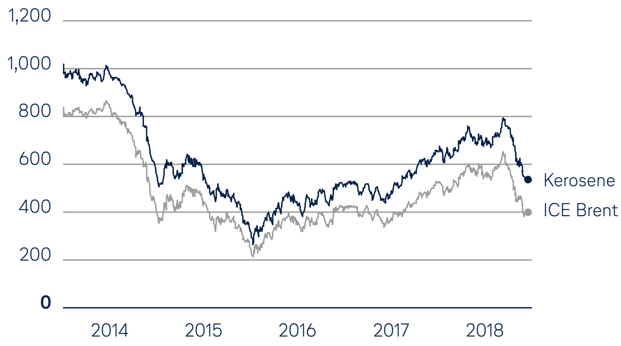
Instrument	2018	2017	2016	2015	2014
6-month Euribor Average rate	–0.27	–0.26	–0.17	0.05	0.31
6-month Euribor Year-end level	–0.24	–0.27	–0.22	–0.04	0.17
10-year euro swap Average rate	0.96	0.81	0.53	0.88	1.46
10-year euro swap Year-end level	0.81	0.89	0.66	1.00	0.81

Source: Bloomberg.

Oil price highly volatile
Oil prices were very volatile during 2018, ranging from USD 50.47/barrel to USD 86.29/barrel. The average price over 2018 as a whole was USD 71.61/barrel, or 31% more than in the previous year. As of year-end 2018, a barrel of Brent Crude cost USD 53.80 (year-end 2017: USD 66.87/barrel). The jet fuel crack, the price difference between crude oil and kerosene, moved between USD 11.09/barrel and USD 20.94/barrel in 2018. On average over the year, it traded at USD 15.10/barrel and thus 26% higher than in the previous year. The price at year-end was USD 13.93/barrel (year-end 2017: USD 14.09/barrel).

C11 PRICE DEVELOPMENT OF CRUDE OIL AND KEROSENE

in USD/t



Source: Lufthansa, based on market data.

Sector developments

Air traffic remains a structural growth industry. | Sector earnings suffer from rising costs. | Airfreight market grows for second consecutive year. | MRO market benefits from growth in global air traffic. | Airline catering market growing in all segments served.

The development of the airline industry affects the performance of all segments in the Lufthansa Group: directly, in the case of the airlines, and indirectly, via the impact on demand from key customer groups for Aviation Services. The Group constantly monitors sector developments so that it can respond quickly where necessary to any changes in the operating environment.

Continued strong growth in passenger traffic
Ongoing global economic growth had a positive impact on demand for air travel. According to IATA, worldwide revenue passenger-kilometres were up by 7% in 2018. This puts growth for 2018 on par with the average growth rate for the past five years.

Regional differences persisted. Airlines from the Asia/Pacific region saw the fastest growth in revenue passenger-kilometres at 9%. For European airlines, the growth rate was 7%. According to the Federal Association of the German Aviation Industry (BDL), sales for airlines in Germany sank by 1%.

Yields in global passenger traffic fell by –0.9% according to IATA (previous year: –0.8%).

In 2018, the European air travel market was heavily influenced by the market consolidation caused by Air Berlin’s insolvency. The capacity shortfall that this caused was met gradually in Europe, and it has since been more than made up for. Furthermore, the summer was marked by infrastructure bottlenecks across the aviation sector, so the number of flight cancellations and delays rose significantly.

In North America, the market consolidation and the capacity discipline of the players on the market, particularly the three large commercial joint ventures, continue to pay off. Growth by low-cost providers on long-haul routes is tangible, however, and is greater across the North Atlantic than in other traffic regions. However, the capacity on the transatlantic routes from Germany that was missing as a result of Air Berlin's market exit has not yet been fully recovered.

On the routes to Asia, growth in the state-owned airlines in the Gulf and Bosporus regions has continued at a moderate pace compared with the previous year and is significantly below the very high growth rates in the past.

T018 SALES PERFORMANCE IN THE AIRLINE INDUSTRY 2018

in % compared with previous year	Revenue passenger-kilometres	Cargo tonne-kilometres
Europe	7	3
North America	5	7
Central and South America	6	6
Asia/Pacific	9	2
Middle East	4	4
Africa	2	–1
Industry	**7**	**4**

Source: IATA Air Passenger/Air Freight Market Analysis (12/2018).

Decline in earnings expected for the global airline industry

Earnings growth in the industry could not match the strong increase in passenger numbers. The International Air Transport Association (IATA) expects net profit for the worldwide airline industry to fall to USD 32.3bn in 2018 (previous year: USD 37.7bn), mainly due to higher fuel and payroll costs. On a regional basis, the highest net profits of USD 14.7bn are expected in North America. European airlines are forecast to generate a net profit of USD 7.5bn.

Airfreight remains growth sector

Global airfreight volumes rose by 4% in 2018. This is a slower rate than for passenger traffic. Cargo airlines from North America reported the fastest growth, with 7%. The growth rate for European airlines was 3%.

Yields in global airfreight traffic rose by 10.0% according to IATA (previous year: 8.1%).

This means that the global airfreight market put in a positive performance for the second consecutive year, but growth slowed towards the end of the year. Competition in the global airfreight market remains intense. Lufthansa Cargo's competitors are other airlines with significant freight capacities in their long-haul passenger fleets as well as airlines with a mix of cargo and passenger aircraft and pure freighter operators.

MRO industry continues to benefit from growth in air traffic

Growth in global air traffic drives demand for maintenance, repair and overhaul services for aircraft (MRO). Compared with the previous year, it is expected that the volume of the MRO market for commercial aircraft has increased by 8% to around USD 86bn by the end of 2018. The forecast for growth in the Asia/Pacific region is particularly strong, with an expected increase of 13% to USD 28bn. The EMEA region (Europe/Middle East/Africa) saw significant growth forecast at 7% with a market volume of USD 33bn. Market volume in the Americas region, however, rose only by an estimated 5% to USD 25bn. The tense supply chain situation for engines continued to pose a serious challenge in 2018 to the entire MRO market, because suppliers were unable to deliver some urgently required materials on time.

Lufthansa Technik's main competitors are aircraft, engine and component manufacturers, original equipment manufacturers (OEMs), the MRO operations of other airlines as well as independent providers. High development costs and a low share of the revenue from aircraft sales mean that OEM in particular have an interest in expanding their share of the MRO market. As a result, they make access to their intellectual property difficult for independent MRO providers, partly by restrictively marketing the licences needed to maintain their products and also by providing maintenance manuals with only a bare minimum of information. Digitalisation is another area of the MRO market that is seeing greater interest from aircraft manufacturers, who are trying to use digital platforms to force their way in-between the airlines and MRO providers.

Catering market growing in all business segments served

The market segments served by the LSG group – airlines, railways and retail – also grew in 2018. At the airline, the shift is still under way from free service to in-flight sales; at the same time, the demands being made of classic catering are rising, as a differentiating feature on long-haul routes and for premium classes. The upcoming liberalisation of the European rail market in 2020 is already forcing operators to improve their positioning, also via their catering services. The retail segment is still reporting growth, particularly for ready-to-eat products.

Course of business

Earnings for the Lufthansa Group down on previous year's record figure due to losses at Eurowings alone. | Earnings of Network Airlines and Aviation Services up on the year. | Network Airlines make up for higher fuel costs with cost cutting and profitable growth. | Eurowings burdened with non-recurring expenses for integrating the aircraft acquired from Air Berlin.

OVERVIEW OF THE COURSE OF BUSINESS

Further significant growth at the Lufthansa Group in 2018
The Lufthansa Group again reported strong growth in 2018. The airlines in the Lufthansa Group carried a total of 142 million passengers, more than ever before. New highs were also achieved in terms of capacity, sales and passenger load factor.

Revenue increased by 6% after adjusting for the effects of first-time application of the accounting standard IFRS 15 (Revenue from Contracts with Customers). Adjusted EBIT for the Group saw a decline of 4% year-on-year to EUR 2,836m (previous year: EUR 2,969m). The Adjusted EBIT margin fell by 0.4 percentage points to 7.9%. On a like-for-like basis, adjusted for changes in the accounting, Adjusted EBIT came to EUR 2,714m and so was 9% down on the previous year.

The cause of the earnings decline was losses at Eurowings, primarily in connection with high non-recurring expenses for integrating the aircraft acquired from Air Berlin into the fleet.

The earnings of Network Airlines and Aviation Services were up on the previous year, however. Considerable unit cost reductions and profitable growth at Network Airlines were more than able to compensate for higher fuel costs and other expenses due to irregularities in flight operations.

Strong balance sheet is a key condition for strategic development
At year-end 2018, Lufthansa again had a strong balance sheet. Gearing of 1.8 remained significantly below the upper limit of the target corridor, which is 3.5.

Its strong balance sheet enables the Group to keep on investing in its strategic development. As a result, a wide range of innovative products was introduced in the air and on the ground in 2018, supported by the ongoing modernisation of the fleet. Eurowings completed an important step towards consolidating the European market by integrating key parts of the former Air Berlin fleet. A new wage agreement signed with ground staff also ensures that long-term industrial relations remain settled.

SIGNIFICANT EVENTS

Long-term tariff agreement was concluded with ver.di
On 7 February 2018, the Lufthansa Group and the trade union ver.di concluded long-term wage agreements for the around 28,000 ground staff employed by Lufthansa German Airlines, Lufthansa Cargo, Lufthansa Technik and the LSG group in Germany. The wage agreement provides for a total increase in remuneration of 4.9% to 6.1% over the course of 33 months. The wage agreement is valid from 1 January 2018 until 30 September 2020.

Carsten Spohr is confirmed as Chairman of the Executive Board and CEO for another five years
The Supervisory Board of Deutsche Lufthansa AG appointed Carsten Spohr as Chairman of the Executive Board and CEO for another five years on 14 March 2018. Carsten Spohr, who has been a member of the Executive Board of Deutsche Lufthansa AG since 2011 and its Chairman and CEO since 2014, has had his contract extended until the end of December 2023. ↗ **Business activities and Group structure, p. 13.**

Modernisation of fleet advances

On 7 May 2018, the Supervisory Board of Deutsche Lufthansa AG approved the purchase of up to 16 additional aircraft in total. The order comprises two long-haul Boeing 777-300ER aircraft for SWISS, two B777Fs for Lufthansa Cargo and up to twelve short and medium-haul aircraft from the Airbus A320 family. These are scheduled to be delivered in stages between now and 2022.

On 28 September 2018, the Supervisory Board of Deutsche Lufthansa AG approved the purchase of 27 A320neo and A321neo aircraft. The aircraft are to be delivered in 2023 and 2024. Their list price is USD 3bn. ↗ **Network Airlines business segment, p. 41ff.**

Karl-Ludwig Kley elected Chairman of the Supervisory Board of Deutsche Lufthansa AG

The Supervisory Board of Deutsche Lufthansa AG met for its constituent meeting in its new composition following the Annual General Meeting on 8 May 2018. Karl-Ludwig Kley was once again elected as Chairman. Christine Behle was once again elected Deputy Chair. The new shareholder representatives had previously been elected at the Annual General Meeting. ↗ **Report of the Supervisory Board, p. 5ff.**

Executive Board of Deutsche Lufthansa AG expanded

On 4 December 2018, the Supervisory Board of Deutsche Lufthansa AG voted to expand the Executive Board by adding a new area of responsibility, Airline Resources & Operations Standards, as of January 2019. This pools vital functions such as fleet management, flight operations standards, ground operations standards, infrastructure, system partners and Group safety at the Executive Board level.

Detlef Kayser, previously Executive Vice President Strategy and Fleet, will take responsibility for the new role. His contract is valid for three years until 31 December 2021. In view of the rapid growth and increased importance of Eurowings as a second brand, Thorsten Dirks will focus exclusively on Eurowings in the future.

EVENTS AFTER THE BALANCE SHEET DATE

Since 31 December 2018, no events of particular importance have occurred that would be expected to have a significant influence on the net assets, financial and earnings position.

Earnings, assets and financial position

Revenue up by 6% on adjusted basis. | Higher fuel costs, integration expense at Eurowings and costs for irregularities in flight operations burden earnings. | Strict cost management ensures Adjusted EBIT stays at a high level – down 4% year-on-year. | Capital expenditure of nearly EUR 3.8bn serves largely to modernise the fleet. | Equity ratio of 25% underlines balance sheet strength.

MATERIAL CHANGES TO THE FINANCIAL REPORTING

The first-time application of the accounting standard IFRS 15 (Revenue from Contracts with Customers) leads to significant changes in the presentation of individual income and expense items in the segments Network Airlines and Eurowings. For example, the EUR 2,257m in traffic revenue and passenger-related airport fees that was previously recorded in gross is now reported as a net amount in financial year 2018. In addition, training and travel management income in the amount of EUR 359m was reclassified from other operating income to revenue. In line with the transitional provisions selected, the prior-year figures were not adjusted. For comparability purposes, the developments in the affected income and expense items and in the performance indicators derived from these are also shown with adjustments, in other words without netting effects in 2018.

From this year onwards, the costs of recurring overhaul work on engines were also capitalised as a separate component of an aircraft and depreciated over their normal useful life. This improves the presentation of earnings and assets, which in the past were severely affected, particularly when looking at individual quarters, by timing differences in engine overhauls compared with the previous year.

The new methodology results in material changes in the recognition of individual expenses and earnings in the segments Network Airlines, Eurowings and Logistics. It is applied retrospectively and the previous year's figures are adjusted accordingly.

The effects of the items concerned on the consolidated financial statements for financial years 2017 and 2018 are shown in the following tables and in the ↗ **Notes to the consolidated financial statements, Note 2, p. 106ff.**

T019 RESTATEMENT EFFECTS OF ENGINE MAINTENANCE

	Network Airlines	Eurowings	Logistics	Consolidation	**Lufthansa Group**
Increase in capitalised internal expenses 2018	–	–	–	470	470
Reduction in MRO expense 2018	422	35	22	-489	-10
Increase in depreciation and amortisation 2018	-266	-88	-19	35	-338
Effect on Adjusted EBIT 2018	**156**	**-53**	**3**	**16**	**122**
Increase in capitalised internal expenses 2017	–	–	–	332	332
Reduction in MRO expense 2017	301	32	38	-386	-15
Increase in depreciation and amortisation 2017	-268	-66	-17	30	-321
Effect on Adjusted EBIT 2017	**33**	**-34**	**21**	**-24**	**-4**

T020 RESTATEMENTEFFECTS IFRS 15

	Network Airlines	Eurowings	Additional Businesses and Group Functions	**Lufthansa Group**
Revenue	- 1,670	- 587	359	- 1,898
of which traffic revenue	- 1,670	- 587	–	- 2,257
Expenses	- 1,670	- 587	–	- 2,257
of which fees and charges	- 1,670	- 587	–	- 2,257

For ease of understanding, the following notes also show how individual items would have developed for financial years 2017 and 2018 without the accounting change, i.e. without the adjustment to the key performance indicators.

EARNINGS POSITION

Revenue and income

T021 REVENUE AND INCOME

	2018 in €m	2017 in €m	Change in %
Traffic revenue	28,103	28,399	- 1
Other revenue	7,741	7,180	8
Total revenue	**35,844**	**35,579**	**1**
Changes in inventories and work performed by the entity and capitalised	531	438	21
Other operating income [1]	1,753	2,150	- 18
Total operating income	**38,128**	**38,167**	**0**

[1] Without fixed asset write-ups and book gains.

Operating income in the financial year 2018 came to EUR 38,128m, a year-on-year increase of 6%, adjusted for the effects of the changes under IFRS 15. Revenue also rose by 6% on an adjusted basis.

Traffic revenue up by 7% on adjusted basis

Traffic revenue fell by 1% on a reported basis to EUR 28,103m (previous year: EUR 28,399m). Adjusted for the offsetting of fees and charges in line with IFRS 15, traffic revenue was 7% higher than in the previous year. The increase is largely due to higher sales in the passenger business (+ 9%). Higher average prices in the airfreight business also contributed to revenue growth. This partly made up for the negative impacts of exchange rate movements.

Adjusted for the IFRS 15 effect, traffic revenue at Network Airlines was up by 5% to EUR 20,877m. Eurowings reported an adjusted increase of 20% to EUR 4,118m. The total number of passengers was up by 10% to 142.3 million, with a further year-on-year increase of 0.5 percentage points in the passenger load factor. Traffic revenue in the Logistics segment also rose year on year by 7% to EUR 2,550m. In a positive market environment, the yields in this segment were up by 6.7% despite negative exchange rate effects.

Further information on the regional breakdown of traffic revenue for the Network Airlines, Eurowings and Logistics segments can be found in the chapters ↗ **Business segments, p. 41ff.**

Other revenue up by 3% on adjusted basis

Other revenue rose by 8% to EUR 7,741m, particularly due to the reclassification of revenue from the AirPlus and LAT group because of the first-time application of IFRS 15 (previous year: EUR 7,180m). Without this effect, it would have gone up by 3%. The MRO segment generated other revenue amounting to EUR 3,812m (+ 7%), Catering generated EUR 2,499m (- 2%) and Additional Businesses (including AirPlus and LAT revenue) generated EUR 648m (+ 141%). The airborne companies contributed EUR 782m (- 1%) to other revenue, particularly with income from customer loyalty programmes, handling services and in-flight sales.

Revenue rises 6% on the previous year on an adjusted basis

Revenue, which consists of traffic revenue plus other revenue, went up on a reported basis by 1% to EUR 35,844m (previous year: EUR 35,579m). Adjusted for the effects of the first-time application of IFRS 15, revenue was 6% higher year-on-year.

Further information on the distribution of revenue by segment can be found in the ↗ **Segment reporting, p. 157ff.**

Changes in inventories and other capitalised internal expenses up by 21%

The first-time capitalisation of major engine overhaul events carried out internally by the MRO segment increased other capitalised internal expenses by EUR 470m in 2018. The effect came to EUR 332m for the previous year. This difference largely explains the improvement of the item on the whole year-on-year.

Other operating income 2% down on previous year on an adjusted basis

Other income fell on a reported basis by 18% to EUR 1,753m (previous year: EUR 2,150m). This resulted from the reclassification of travel management and training income to revenue in line with IFRS 15. Without this effect, other operating income would have been 2% below the previous year.

Expenses

Operating expenses increased year-on-year by 7%, adjusted for effects of netting in accordance with IFRS 15.

Increase in cost of materials and services largely driven by higher fuel costs

The cost of materials and services fell by 2% on a reported basis to EUR 18,669m (previous year: EUR 19,028m). Excluding the netting effect of IFRS 15, it rose by 10%. This includes non-recurring expenses at Eurowings for the technical integration of the aircraft acquired from Air Berlin.

Fuel costs were the main driver of the increase, rising year-on-year by 16%. The average price for kerosene, including fuel hedging, was USD 666.30/tonne in 2018. Fuel prices were therefore up by 15% despite hedging. Consumption also increased by 5%. The euro's rise against the US dollar only partially compensated for these effects. Fuel costs included a positive result of price hedging of EUR 689m (previous year: EUR –67m).

Fees and charges were 30% down on the previous year at EUR 4,457m due to the netting effect of IFRS 15 (previous year: EUR 6,357m). Without this effect, fees and charges rose by 6% and thus by less than traffic revenue. The cost of materials and services also includes expenses for external maintenance services, which were 20% up on the previous year. Expenses in connection with flight irregularities increased by 70% to EUR 518m in 2018 (previous year: EUR 304m).

Staff costs up by a disproportionate amount

Staff costs rose year-on-year by 2% to EUR 8,924m (previous year: EUR 8,723m). This was less than the rise in average staff numbers, which came to 4% primarily as a result of strong growth at Eurowings. Positive exchange rate effects and the restructuring of pension plans in Germany carried out in prior years offset the increase due to pay scale increases.

Depreciation and amortisation up by 7%

Depreciation and amortisation rose by 7% to EUR 2,180m (previous year: EUR 2,040m). Aircraft and reserve engines accounted for more than 80% of this. Changing the accounting method for engine overhauls increased depreciation in the financial year 2018 by EUR 338m (previous year's effect: EUR 321m).

Other operating expenses up 2% year-on-year

Other operating expenses went up by 2%, largely due to higher outside staff and travel costs (EUR +112m).

T022 EXPENSES

	2018 in €m	2017 in €m	Change in %	Share of operating expenses in %
Cost of materials and services	18,669	19,028	–2	53
of which fuel	6,087	5,232	16	17
of which fees and charges	4,457	6,357	–30	13
of which external services MRO	1,848	1,534	20	5
of which operating lease/charter expenses	718	739	–3	2
Staff costs [1]	8,924	8,723	2	25
Depreciation [2]	2,180	2,040	7	6
Other operating expenses [3]	5,693	5,564	2	16
of which indirect staff costs and external staff	1,226	1,114	10	3
of which rental and maintenance expenses	923	884	4	3
Total operating expenses	**35,466**	**35,355**	**0**	**100**

[1] Without past service costs/settlement.
[2] Without impairment losses.
[3] Without book losses.

Earnings performance

Adjusted EBIT is down 4% on the previous year
Adjusted EBIT down on a reported basis by 4% to EUR 2,836m (previous year: EUR 2,969m). The Adjusted EBIT margin fell by 0.4 percentage points to 7.9% (previous year: 8.3%). Adjusted for the effects of IFRS 15, the decline amounted to 0.8 percentage points.

Changes in accounting for engine overhauls resulted in a positive effect on Adjusted EBIT of EUR 122m in the financial year. This was due to the comparatively large number of overhaul events. The methodological change only affected the previous year by EUR –4m. Without the accounting changes, Adjusted EBIT would have fallen by 9%. ↗ T023 Reconciliation of results.

Adjusted EBIT in the Network Airlines business segment rose by 6% to EUR 2,429m (previous year: EUR 2,296m). Eurowings reported a fall in Adjusted EBIT to EUR – 231m (previous year: EUR + 60m). Adjusted EBIT for the Logistics segment went up by 2% to EUR 268m (previous year: EUR 263m). Adjusted EBIT in the MRO segment also improved by 2% to EUR 425m (previous year: EUR 415m). Adjusted EBIT in the Catering segment rose by 74% to EUR 115m (previous year: EUR 66m). The other Group companies, which under IFRS 8 do not require separate reporting, and the Group functions reduced the Group's operating Adjusted EBIT by a total of EUR – 189m (previous year: EUR – 130m).

T023 RECONCILIATION OF RESULTS

	2018		2017	
in €m	Income statement	Reconciliation Adjusted EBIT	Income statement	Reconciliation Adjusted EBIT
Total revenue	**35,844**	**–**	**35,579**	**–**
Changes in inventories and work performed by the entity and capitalised	531	–	438	–
Other operating income	1,818	–	2,276	–
of which book gains et al.	–	– 51	–	– 43
of which write-ups on capital assets	–	– 15	–	– 83
of which badwill	–	–	–	–
Total operating income	**38,193**	**– 66**	**38,293**	**– 126**
Cost of materials and services	– 18,669	–	– 19,028	–
Staff costs	– 8,811	–	– 8,172	–
of which past service costs/settlement	–	– 113	–	– 551
Depreciation	– 2,205	–	– 2,382	–
of which impairment losses	–	24	–	343
Other operating expenses	– 5,708	–	– 5,571	–
of which impairment losses on assets held for sale	–	–	–	–
of which expenses incurred from book losses	–	17	–	6
Total operating expenses	**– 35,393**	**– 72**	**– 35,153**	**– 202**
Profit/loss from operating activities	**2,800**	**–**	**3,140**	**–**
Result from equity investments	174	–	157	–
EBIT	**2,974**	**–**	**3,297**	**–**
Total amount of reconciliation Adjusted EBIT	–	– 138	–	– 328
Adjusted EBIT	**–**	**2,836**	**–**	**2,969**
Write-downs (included in profit from operating activities)	2,205	–	2,382	–
Write-downs on financial investments, securities and assets held for sale	–	–	–	–
EBITDA	**5,179**	**–**	**5,679**	**–**

Only slight differences between EBIT and Adjusted EBIT

Adjusted EBIT was EUR 138m lower than EBIT in the reporting year (previous year: EUR –328m), mainly because of income from changes in pension plans. Past service expenses mostly related to adjustments to the plans for cockpit crew at SWISS, whereas book gains mostly resulted from the disposal of an operating segment at the AirPlus group.

The result from operating activities declined year-on-year by 11% to EUR 2,800m (previous year: EUR 3,140m). The result from equity investments of EUR 174m was 11% up on the previous year (previous year: EUR 157m).

Financial result down to EUR –16m

The financial result fell to EUR – 16m (previous year: EUR 18m).

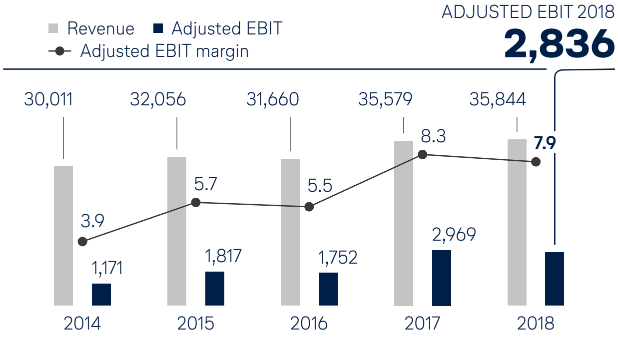
Net interest improved to EUR –144m (previous year: EUR – 195m). Lower interest expenses more than made up for the decline in interest income, mostly from short-term investments in securities.

However, the result from other financial items fell to EUR – 46m (previous year: EUR 56m). The decline was partly due to negative earnings contributions from share valuations within the strategic liquidity reserve, which are recognised for the first time through profit or loss in 2018 in accordance with IFRS 9. Earnings were also shifted from other financial items to net interest. The positive interest rate hedging results from cross-currency swaps, which from the reporting year onwards are classified as hedging instruments, are now presented with the underlying interest expenses.

T024 PROFIT BREAKDOWN OF THE LUFTHANSA GROUP

	2018 in €m	2017 in €m	Change in %
Operating income	38,193	28,293	0
Operating expenses	- 35,393	- 35,153	1
Profit from operating activities	**2,800**	**3,140**	**- 11**
Financial result	- 16	18	
Profit/loss before income taxes	**2,784**	**3,158**	**- 12**
Income taxes	- 588	- 784	- 25
Profit/loss from continuing operations	**2,196**	**2,374**	**- 7**
Profit/loss attributable to minority interests	- 33	- 34	- 3
Net profit/loss attributable to shareholders of Deutsche Lufthansa AG	**2,163**	**2,340**	**- 8**

C12 DEVELOPMENT OF REVENUE, ADJUSTED EBIT in €m **AND ADJUSTED EBIT MARGIN** in %



Net profit for the period again above the EUR 2bn mark

Adjusted EBITDA, defined as Adjusted EBIT plus depreciation and amortisation, was stable year-on-year at EUR 5,016m (previous year: EUR 5,009m). Profit before income taxes of EUR 2,784m was 12% down on the year (previous year: EUR 3,158m).

Income tax expenses came to EUR 588m in 2018 (previous year: EUR 784m), which represents a tax ratio of 21% (previous year: 25%). Less earnings attributable to minority interests of EUR 33m (previous year: EUR 34m), the net profit for the period attributable to the shareholders of Deutsche Lufthansa AG was EUR 2,163m, which constitutes a decline of 8% (previous year: EUR 2,340m).

Earnings per share were also 8% down on the year at EUR 4.58 (previous year: EUR 4.98). ↗ **Notes to the consolidated financial statements, Note 15, p. 126.**

Long-term earnings reveal significant improvement in profitability

The Lufthansa Group and its segments operate in a volatile environment, which is severely exposed to economic cycles and other external factors. Despite this, the Company is confident of its ability to generate stable income, even during times of crisis, and to benefit particularly strongly from economic upswings.

The significant earnings improvement over the past five years underlines the Group's higher structural profitability. One-time earnings reductions were accepted in prior years in order to strengthen productivity for weaker economic periods. The resolution of collective bargaining conflicts stabilised customer demand and relieved pressure on costs. Finally, continuous cost-cutting measures and progress on consolidating the European market contributed to a sustainable increase in the earnings level.

Dividend

Dividend policy aims for continuous distributions

Shareholders should participate regularly in the Company's success. The long-term dividend policy provides for a regular dividend payout ratio of 10% to 25% of consolidated EBIT. In addition to the regular dividend payment, the dividend policy also allows for shareholders to participate in particularly positive performance of the Company by means of a special dividend or share buy-back.

T025 DEVELOPMENT OF EARNINGS AND DIVIDENDS

		2018	2017	2016	2015	2014
EBIT	€m	2,974	3,297	2,275	1,676	1,000
Net profit/loss (Group)	€m	2,163	2,340	1,776	1,698	55
Dividend per share	€	0.80	0.80	0.50	0.50	–
Dividend ratio (based on EBIT)	%	12.8	11.4	10.3	13.9	–

Executive Board and Supervisory Board propose dividend of EUR 0.80 per share

For the financial year 2018, there was a net profit at Deutsche Lufthansa AG of EUR 339m. Following the transfer of EUR 41m from retained earnings, distributable profit comes to EUR 380m.

In line with the dividend policy, the Executive Board and Supervisory Board will table a proposal at the Annual General Meeting on 7 May 2019 to distribute a dividend of EUR 0.80 per share to shareholders for the financial year 2018. This represents a total dividend of EUR 380m or 12.8% of EBIT for 2018.

FINANCIAL POSITION

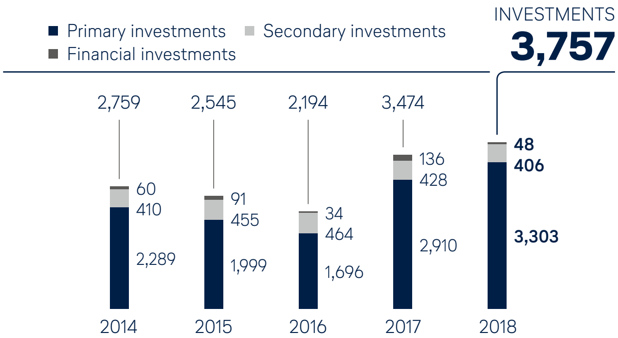
Capital expenditure

Capital expenditure (without spending on equity interests) rose in the financial year 2018 by 8% to EUR 3,757m (previous year: EUR 3,474m). Higher capital expenditure reflected the change in accounting for engine overhauls, which are now capitalised. EUR 470m of total capital expenditure related to engine overhaul events in the reporting year. Capital expenditure in 2018 would therefore have been EUR 3,287m without the effect from accounting changes. Adjusting the figure for the previous year increased capital expenditure in 2017 by EUR 333m.

Majority of capital expenditure is on the fleet

Primary investment in down payments and final payments for aircraft, aircraft components, and aircraft and engine overhauls went up by 14% to EUR 3,303m (previous year: EUR 2,910m). This accounts for 88% of total capital expenditure. Capital expenditure for other items of property, plant and equipment and for intangible assets, known collectively as secondary investment, fell by 5% to EUR 406m (previous year: EUR 428m). Of the total, EUR 297m (previous year: EUR 322m) was on property, plant and equipment, such as technical equipment and machinery, and on operating and office equipment. EUR 109m (+3%) was invested in intangible assets, such as licences and IT software. Financial investments (not including equity investments) of EUR 48m (previous year: EUR 136m) mainly related to cash outflows for loans and investments in fixed-term deposits.

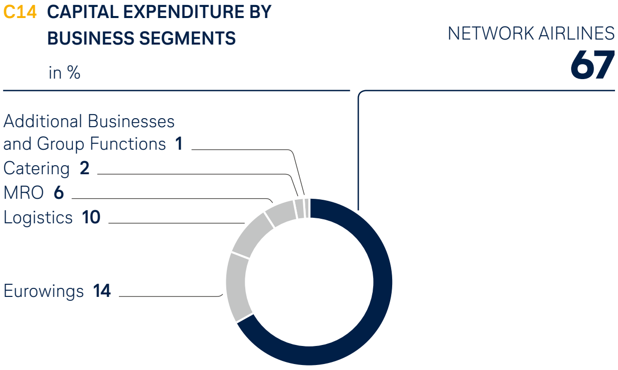
C13 PRIMARY, SECONDARY AND FINANCIAL INVESTMENTS in €m[1]



[1] Excluding acquisition of shares.

Network Airlines accounted for the bulk of capital expenditure at EUR 2,573m (25% higher than in the previous year). Capital expenditure at the Eurowings companies came to EUR 515m (–47%).

C14 CAPITAL EXPENDITURE BY BUSINESS SEGMENTS in %



Capital expenditure of EUR 374m (+373%) in the Logistics segment consisted mainly of down payments and finance leases for cargo aircraft. Capital expenditure of EUR 241m in the MRO business segment (+3%) was mainly for the purchase of reserve engines. Capital expenditure of EUR 79m (–6%) in the Catering segment consisted mainly of maintaining existing production facilities.

Cash flow

Cash flow from operating activities down, mainly due to absence of previous year's positive effects
The Group's cash flow from operating activities was 23% below the figure for the previous year at EUR 4,109m (previous year: EUR 5,368m). Accounting changes for engine overhauls caused cash flows to move between operating and investing activities. Cash flow from operating activities improved, because cash outflows of EUR 470m (previous year: EUR 333m) are now attributed to cash flow from investing activities.

Cash flow from operating activities was mainly affected by lower cash inflows related to cash-effective accounting changes in trade working capital and other assets and liabilities. These came to EUR 134m in the reporting year (previous year: EUR 960m). Cash inflows from changes in unused flight documents were significantly lower than in the previous year. This reflects strong growth in passenger business and the related cash inflows towards the end of 2017, which was not repeated to the same extent in 2018. Cash outflows also rose as a result of much higher expenses for performance-related salary components in the previous year, which are paid in the following year. Finally, higher tax payments had a negative effect, some of them relating to prior periods.

Free cash flow still positive despite declines
Gross capital expenditure (without acquisitions of equity interests) for the Lufthansa Group came to EUR 3,757m. This included the primary, secondary and financial investment listed above. Payments of EUR 388m were also made for repairable spare parts for aircraft and payments of EUR 60m for acquisitions of equity interests.

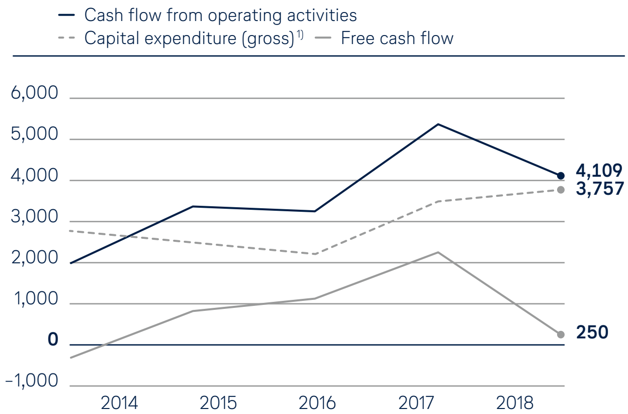
Asset disposals gave rise to income of EUR 152m. Interest and dividend income went up by 31% to EUR 194m. This brought total net cash used for investing activities to EUR 3,859m (previous year: EUR 3,251m).

T026 ABBREVIATED CASH FLOW STATEMENT OF THE LUFTHANSA GROUP

	2018 in €m	2017 in €m	Change in %
Profit/loss before income taxes	2,784	3,158	–12
Depreciation and amortisation/reversals	2,201	2,339	–6
Net proceeds on disposal of non-current assets	–34	–37	–8
Net interest/result from equity investments	–30	38	
Income tax payments	–670	–385	74
Significant non-cash expenses/income	–276	–705	–61
Change in trade working capital	410	259	58
Change in other assets and liabilities	–276	701	
Cash flow from operating activities	**4,109**	**5,368**	**–23**
Investments and additions to repairable spare parts	–4,205	–3,548	19
Purchase/disposal of shares/non-current assets	152	149	2
Dividends and interest received	194	148	31
Net cash from/used in investing activities	**–3,859**	**–3,251**	**19**
Free cash flow	**250**	**2,117**	**–88**
Purchase/disposal of securities/fund investments	**590**	**–1,755**	
Capital increase	–	–	–
Transactions with minority interests	1	1	–
Non-current borrowing and repayment of non-current borrowing	–209	139	
Dividends paid	–349	–232	50
Interest paid	–69	–153	–55
Net cash from/used in financing activities	**–626**	**–245**	**156**
Changes due to currency translation differences	2	–37	
Cash and cash equivalents 1.1.	**1,218**	**1,138**	**7**
Cash and cash equivalents 31.12.	**1,434**	**1,218**	**18**

After deducting this net cash used for investing activities, free cash flow for the financial year 2018 was positive at EUR 250m (previous year: EUR 2,117m).

C15 CASH FLOW AND CAPITAL EXPENDITURE in €m



[1] Capital expenditure shown without pro rata profit/loss from the equity valuation.

Financing activities result in net cash outflow
The purchase and disposal of securities including allocations to the pension fund resulted in cash inflows of EUR 590m (previous year: outflow of EUR 1,755m).

The balance of financing activities was a net cash outflow of EUR 626m (previous year: EUR 245m). New borrowing of EUR 987m, partly for several aircraft financing deals and one short-term bank loan, was offset by cash outflows of EUR 1,196m in connection with scheduled and early debt repayments. Other cash outflows of EUR 418m were for interest payments and the payment of dividends to the shareholders of Deutsche Lufthansa AG and minority shareholders.

Liquidity of nearly EUR 3.2bn remains high
Cash and cash equivalents went up by 18% to EUR 1,434m (previous year: EUR 1,218m). However, holdings of current securities fell by 32% to EUR 1,735m (previous year: EUR 2,551m). Total liquidity came to EUR 3,169m (previous year: EUR 3,769m).

NET ASSETS

The Group's total assets rose by 7% as of 31 December 2018 to EUR 38,213m (previous year: EUR 35,778m).

Non-current assets were up by 11% at EUR 27,559m (previous year: EUR 24,749m). This accounts for 72% of total assets (previous year: 69%). Current assets fell by 3% to EUR 10,654m (previous year: EUR 11,029m). Their share of total assets fell from 31% in the previous year to 28% in 2018.

Shareholders' equity went up by 5% to EUR 9,573m (previous year: EUR 9,110m). Altogether, non-current funding accounted for 58% of total assets (previous year: 65%). Non-current financing covered 80% of non-current assets (previous year: 93%). Current funding rose to 42% of total assets (previous year: 35%).

Assets

Investing activities raise non-current assets by 11%
Within non-current assets, the item "Aircraft and reserve engines" rose by 9% to EUR 16,776m in conjunction with increased investment activity (previous year: EUR 15,333m). Repairable spare parts were up by 21% to EUR 2,133m due to inventory increases in the MRO segment for new orders and new aircraft models (previous year: EUR 1,758m).

The increase of 29% in derivative financial instruments to EUR 828m (previous year: EUR 642m) stemmed largely from the valuation of non-current exchange rate hedges. Deferred tax assets went up by 28% to EUR 2,131m (previous year: EUR 1,661m), partly due to neutral valuation effects for pensions, market valuations of derivative financial instruments and valuation adjustments in line with IFRS 15 in the frequent flyer bonus programme.

Current assets down 3% year-on-year
Within current assets, receivables including contract assets presented separately for the first time in accordance with IFRS 15 increased by 9% to EUR 5,810m, largely due to greater commercial activity (previous year: EUR 5,313m). Derivative financial instruments fell by 41% to EUR 357m, mainly due to the realisation of fuel hedges (previous year: EUR 600m). Cash and cash equivalents, consisting of current securities, bank balances and cash-in-hand, were down by 18% to EUR 3,235m (previous year: EUR 3,948m). The funds were used in addition to free cash inflows to pay dividends and interest, redeem borrowing and make contributions to pension plan assets.

Shareholders' equity and liabilities

Equity ratio remains high

Shareholders' equity (including minority interests) went up year-on-year by 5% to EUR 9,573m (previous year: EUR 9,110m).

The effect of the significantly positive after-tax result was diminished by the increase in pension provisions without effect on profit and loss (EUR 974m) and dividend payments to Company shareholders (EUR 377m). The decline in the market valuation reserve for financial instruments had a negative effect of EUR 367m, especially due to the realisation of positive market values from fuel hedging.

The introduction of IFRS 15 and 9 required an adjustment of EUR –318m to shareholders' equity as of 1 January 2018. The new accounting method for engine overhauls was applied retrospectively, so the figures for the previous year have been adjusted accordingly.

The equity ratio fell slightly to 25.1% (previous year: 25.5%).

T027 DEVELOPMENT OF EARNINGS, EQUITY, EQUITY RATIO AND RETURN ON EQUITY

		2018	2017	2016	2015	2014
Result [1]	€m	2,196	2,374	1,803	1,722	75
Equity [1]	€m	9,573	9,110	7,149	5,845	4,031
Equity ratio [1]	%	25.1	25.5	20.6	18.0	13.2
Return on equity [1]	%	22.9	26.1	25.2	29.5	1.9

[1] Including minority interests.

Non-current liabilities and provisions down by 11%

Within non-current liabilities, pension obligations rose by 15% to EUR 5,865m (previous year: EUR 5,116m). This was mainly due to the negative performance of plan assets. Additional service expenses through profit or loss and accrued interest were largely covered by ongoing contributions, however. The initial contribution for cabin crew in Germany in 2017 meant that the contribution of EUR 463m in the reporting year was significantly lower than in the previous year (previous year: EUR 1,950m). Pension payments by the companies of EUR 337m (previous year: EUR 308m) reduced the amount of provisions.

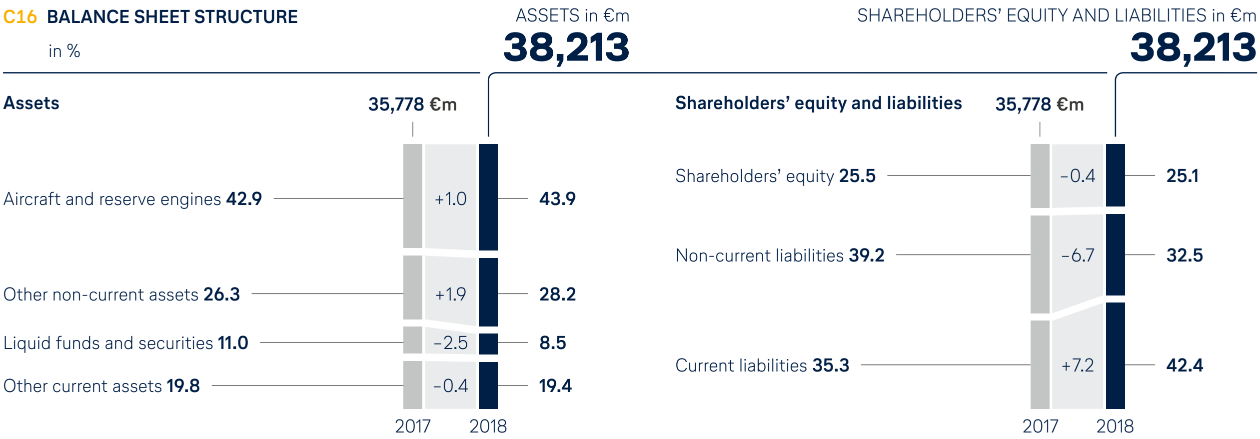
Non-current borrowing declined by 18% to EUR 5,008m due to refinancing activities that altered the maturity profile and the early redemption of individual borrower's note loans (previous year: EUR 6,142m). Non-current borrowing also comprised two aircraft financing models via structured entities for EUR 243m in total, as well as finance leases of EUR 241m.

Contract liabilities are now shown as a separate item as required by IFRS 15. Since the obligations from customer loyalty programmes are now all classified as current, the portion previously classified as non-current (previous year: EUR 1,237m) was reclassified as current.

Current liabilities and provisions up by 28%

Altogether, current liabilities and provisions rose by 28% to EUR 16,215m (previous year: EUR 12,638m).

C16 BALANCE SHEET STRUCTURE
in %



Within the current portions of financial borrowing, scheduled repayments, including for tranches of borrower's note loans and finance leases, were almost offset by new current borrowing. The steep increase in current financial liabilities to EUR 1,677m (previous year: EUR 672m) results mainly from the reclassification of liabilities due to changes in maturities.

Contract liabilities from unused flight documents went up by 5% to EUR 3,969m (previous year: EUR 3,773m). Miscellaneous contract liabilities are presented separately for the first time and came to EUR 2,316m at the end of the year. Liabilities from customer loyalty programmes accounted for EUR 2,186m of the total. The year-on-year increase in current liabilities is largely the result of the reclassification mentioned above and a revaluation effect in the course of applying IFRS 15.

Trade payables and other financial liabilities increased due to Company growth by 10% to EUR 5,764m (previous year: EUR 5,249m).

Net indebtedness up on the previous year

Net indebtedness of EUR 3,489m was 21% up on the previous year (previous year: EUR 2,884m). This is the balance of gross financial debt and available financial assets. The increase was due to the use of available liquidity to pay interest, dividends and pensions. Borrowing was down 2% on the previous year, by contrast, at EUR 6,724m (previous year: EUR 6,832m).

The total of net indebtedness and pension obligations was EUR 9,354m as of the reporting date, which is a year-on-year increase of 17% (previous year: EUR 8,000m).

T028 CALCULATION OF NET INDEBTEDNESS

	2018 in €m	2017 in €m	Change in %
Liabilities to banks	1,957	2,044	-4
Bonds	1,007	1,005	0
Other non-current borrowing	3,721	3,765	-1
	6,685	**6,814**	**-2**
Other bank borrowing	39	18	117
Group indebtedness	**6,724**	**6,832**	**-2**
Cash and cash equivalents	1,500	1,397	7
Securities	1,735	2,551	-32
Net indebtedness	**3,489**	**2,884**	**21**
Pension provisions	5,865	5,116	15
Net indebtedness and pensions	**9,354**	**8,000**	**17**

Target achievement and overall statement by the Executive Board on the economic position

Lufthansa achieves its earnings target despite significant headwinds. | Profitable growth and efficiency gains compensate for most of the burden.

TARGET ACHIEVEMENT

The revenue forecast for 2018 presented in the Annual Report 2017 did not include the effects of first-time application of the accounting standard IFRS 15 (Revenue from Contracts with Customers). The revenue recognised for 2018 in the Annual Report 2018 includes these IFRS 15 effects. To enable a comparison between actual performance and the forecast, table ↗ T029 **Target achievement revenue** shows 2018 revenue adjusted for IFRS 15 effects and the corresponding year-on-year change.

The forecast presented in the Annual Report 2017 for Adjusted EBIT in financial year 2018 did not include the effects of accounting changes on the costs of engine overhauls. Adjusted EBIT as recognised in the Annual Report 2018 for financial years 2017 and 2018 includes these effects. To enable a comparison between actual performance and forecast here too, the effects were eliminated for both years in table ↗ T030 **Target achievement Adjusted EBIT** and the change was shown on an adjusted basis.

T029 TARGET ACHIEVEMENT REVENUE

	Revenue 2017[1] in €m	Revenue 2018 reported[2] in €m	Revenue 2018 adjusted[3] in €m	Change reported[2] in %	Change adjusted[3] in %	**Forecast for 2018[1) 3)]**
Lufthansa German Airlines	16,441	15,917	17,211	-3	5	
SWISS	4,727	4,897	4,970	4	5	
Austrian Airlines	2,358	2,178	2,482	-8	5	
Network Airlines	23,317	22,719	24,389	-3	5	slightly above previous year
Eurowings	4,041	4,230	4,817	5	19	significantly above previous year
Logistics	2,524	2,713	2,713	7	7	slightly above previous year
MRO	5,404	5,918	5,918	10	10	significantly above previous year
Catering	3,219	3,217	3,217	0	0	slightly below previous year
Additional Businesses and Group Functions	446	992	633	122	42	
Internal revenue/Reconciliation	-3,372	-3,945	-3,945	-17	-17	
Lufthansa Group	**35,579**	**35,844**	**37,742**	**1**	**6**	**significantly above previous year**

1) As stated in the Annual Report 2017.
2) Incl. IFRS 15 effect.
3) Without IFRS 15 effect.

T030 TARGET ACHIEVEMENT ADJUSTED EBIT[1]

	Adjusted EBIT 2017[2] in €m	Adjusted EBIT 2018 adjusted in €m	Change adjusted in %	**Forecast for 2018[2]**
Lufthansa German Airlines	1,627	1,615	-1	slightly below previous year
SWISS	542	617	14	slightly below previous year
Austrian Airlines	94	42	-55	slightly below previous year
Network Airlines	2,263	2,273	0	slightly below previous year
Eurowings	94	-178		slightly below previous year
Logistik	242	265	10	slightly below previous year
Technik	415	425	2	slightly above previous year
Catering	66	115	74	slightly above previous year
Additional Businesses and Group Functions	-130	-189	-45	slightly below previous year
Internal revenue/Reconciliation	23	3	-87	
Lufthansa Group	**2,973**	**2,714**	**-9**	**slightly below previous year**

1) Without effects of accounting changes for costs of engine overhauls.
2) As stated in the Annual Report 2017.

Earnings performance of the Lufthansa Group in line with forecast

The revenue and earnings development of the Lufthansa Group largely corresponded to the forecast published in the Annual Report 2017. Expectations of revenue significantly higher than the previous year were not met in full, however, with an increase of 6% after adjustment for IFRS 15 effects. The main reason for this was lower capacity growth than originally planned. The decline of 9% in Adjusted EBIT was within expectations, by contrast, although the increase in fuel costs was higher than originally forecast, integration expenses at Eurowings were higher than expected and irregularities in flight operations caused significant additional costs. Profitable growth and significant unit cost reductions at Network Airlines almost completely offset these effects.

The key balance sheet and cash flow KPIs were as expected. Capital expenditure was higher than forecast, solely due to the change in accounting for engine overhauls.

T031 TARGET ACHIEVEMENT OPERATING FIGURES

	Forecast for 2018[1]	2018 compared with previous year in %
Capacity (ASK)	+ 7.0% from organic growth plus + 2.5% from inorganic growth	8
Unit revenues (RASK)[2]	roughly stable	- 0.5
Unit costs (CASK) without fuel[2] [3]	- 1.0% to - 2.0%	- 1.2

[1] As stated in the Annual Report 2017.
[2] Exchange rate-adjusted.
[3] Without effects of accounting changes for costs of engine overhauls.

T032 TARGET ACHIEVEMENT AND DEVELOPMENT OF SIGNIFICANT KPIS

		Result 2017[1]	Forecast for 2018[1]	Result 2018
Capital expenditure (gross)	€m	3,005	3,400	3,757[2]
Adjusted ROCE	%	11.6	slightly below previous year	10.6
EACC	€m	1,758	significantly positive	1,422
Adjusted net debt/ Adjusted EBITDA		1.7	significantly below 3.5	1.8

[1] As stated in the Annual Report 2017.
[2] Adjusted for the effect of changing the accounting for the cost of engine overhauls: EUR 3,287m.

Business segment targets met or exceeded, with few exceptions

All the revenue forecasts were achieved in the segments, but the increase at Eurowings in particular was not quite as strong as originally forecast. In terms of Adjusted EBIT, all the segments and airlines with the exception of Austrian Airlines and Eurowings met or exceeded their targets.

OVERALL STATEMENT BY THE EXECUTIVE BOARD ON THE ECONOMIC POSITION

The Lufthansa Group again performed well in 2018, consolidating the improvements achieved in the previous year. The operating result was approximately the same as in the previous year.

Its business model proved to be robust in the face of various adverse factors: In the year under review, the Company's operating business was impaired by irregularities in flight operations, particularly at the Eurowings segment, but also at Network Airlines. Rising fuel costs and higher integration expenses than planned at Eurowings also burdened the earnings performance of the Lufthansa Group.

The Group was largely able to compensate for these adversities by means of profitable growth and greater cost efficiency. The integration of 77 aircraft acquired from the Air Berlin group into Eurowings was completed at the end of September 2018, so the focus is now on reducing operating complexity, which has risen significantly in the course of mostly inorganic growth. A large number of activities has also been defined across the Group to strengthen the stability of flight operations, including creating the new Executive Board function of Airline Resources & Operations Standards.

The relaunch of the Lufthansa German Airlines corporate design in February 2018 underlined the airline's premium position. It was also expressed in a large number of further product improvements, including many in the digital space. The continuous renewal of the fleet contributed to further enhancement of the customer experience, and delivered significant efficiency gains and reduced emissions.

The individual efficiency and growth programmes were successfully implemented and continued in the Aviation Services segment. The Logistics and MRO segments continued to put in a solid performance. The Catering segment made great progress with its transformation programme.

So, despite various, primarily external challenges in the reporting year, the Lufthansa Group has stabilised its business at an earnings level that is significantly higher than in the past. The strong market position of the three Network Airlines and the growth potential at Eurowings are good indicators of a sustained positive performance going forward.

Business segments
Network Airlines business segment

Network Airlines segment comprises Lufthansa German Airlines, SWISS and Austrian Airlines. | Focus on premium positioning, new distribution strategy and operational stability. | Earnings higher than previous year, despite higher fuel costs.

22.7
€bn **Revenue**

2,429
€m **Adjusted EBIT**

T033 **KEY FIGURES NETWORK AIRLINES**

		2018	2017	Change in %
Revenue	€m	22,719	23,317	-3[1]
of which with companies of the Lufthansa Group	€m	727	673	8
Adjusted EBITDA	€m	3,926	3,775	4
Adjusted EBIT	€m	2,429	2,296	6
EBIT	€m	2,549	2,749	-7
Adjusted EBIT margin	%	10.7	9.8	0.9 pts
Adjusted ROCE	%	19.4	18.3	1.1 pts
EACC	€m	1,518	1,666	-9
Segment capital expenditure	€m	2,573	2,051	25
Employees as of 31.12.	number	51,778	50,190	3
Average number of employees	number	51,327	49,679	3

[1] Without IFRS 15 effect: 5%.

Business activities

Network Airlines focus on the quality of the product and services
The Network Airlines segment comprises Lufthansa German Airlines, SWISS and Austrian Airlines. The three airlines offer their customers a premium experience, with high-quality products and services. Customers rate them as the three best-quality airlines in western Europe, according to the Skytrax ranking.

The multi-hub strategy offers passengers a comprehensive route network along with the greatest possible flexibility for their journey. In the 2018 summer flight timetable, the route network comprised 287 destinations in 86 countries, served via the international hubs in Frankfurt, Munich, Zurich and Vienna. Commercial joint ventures with leading international airlines also make connections more attractive for customers, partly by adding new destinations to the route network.

Course of business and operating performance

Operating stability to be improved
Changes to flight timetables, flight cancellations and delays caused significant disruption to operational stability in financial year 2018. The causes of this were partly attributable to the Company itself and partly attributable to bottlenecks at many airports, staff shortages, strikes by air traffic control employees and bad weather.

For a long time, the airlines have been working with airports and air traffic controls on measures to stabilise flight operations. The problem has also been recognised by policymakers. At the federal government's Aviation Summit in October 2018, a variety of targeted measures were decided upon to improve air traffic. All the measures focus on qualitative growth. As part of the implementation process, the Network Airlines have reduced their growth plans in order to manage growth better. An Operational Excellence project was launched, which reports to the new Executive Board position Airline Resources & Operations Standards. ↗ **Combined non-financial report, p. 206ff.**

Distribution strategy to be expanded

The Network Airlines continue to work hard to implement their new distribution strategy. Following the introduction of a charge for bookings via travel agents in September 2015, this year the Network Airlines connected further partners to the Lufthansa Group's direct and NDC channels. This brought the number of global partners to more than 2,000. Conditions were also established for the next step to improve the commercial offering. Lufthansa German Airlines, SWISS and Austrian Airlines will continue to make their pricing systems more dynamic and in the first half of 2019 will start to introduce continuous pricing. More precise price increments will make the airlines more competitive in price comparisons and increase the passenger load factor.

Network Airlines continue to use synergies to increase profitability

The Network Airlines are taking a wide range of steps to cut costs and exploit income potential as much as possible. Further advances were made in the organisational integration of the airlines' commercial functions. Fleets are being continuously renewed at all the airlines to achieve the greatest possible flexibility in this area. For example, the Airbus A320 aircraft delivered to all the airlines of the Lufthansa Group from 2019 onwards are to be standardised. In addition to modernising its fleet, Network Airlines is continuing to optimise its network portfolio and is implementing measures to reduce fuel costs. Costs are to be reduced by a wide range of activities; the cost-cutting measures are explained in detail in the sections on the individual airlines.

Online services to be relaunched and standardised

The Network Airlines are implementing the merging of individual technologies for online sales and online self-services on a step-by-step basis. The digitalisation of key service processes (check-in, rebooking, cancellation) will be continued together. This is also intended to ensure the customer has a seamless online experience across all websites. In the future, they will also be offered the entire product range of all of the Network Airlines on their individual websites.

The new SWISS website is currently undergoing beta testing. After the implementation of customer feedback received from this testing, the new website will go live. The relaunch of the Lufthansa German Airlines and Austrian Airlines websites will follow.

Traffic growth sets new records

Network Airlines carried a total of 104 million passengers in 2018 (previous year: 97 million). This represents a year-on-year increase of 7% and sets a new record for passenger numbers. The number of flights also went up by 7%. Capacity and sales were both expanded by 6%. The passenger load factor rose by 0.4 percentage points to 81.5% (previous year: 81.1%). Yields fell by 1.4% due to exchange rate movements. After adjustment for exchange rates, they were 0.5% higher than the previous year. Traffic revenue increased by 5%, adjusted for the effects of IFRS 15.

T034 TRAFFIC FIGURES NETWORK AIRLINES

		2018	2017	Change in %
Passengers [1]	thousands	103,844	96,732	7
Flights [1]	number	896,678	841,473	7
Available seat-kilometres [1]	millions	284,741	269,495	6
Revenue seat-kilometres [1]	millions	231,952	218,502	6
Passenger load factor	%	81.5	81.1	0.4 pts

[1] Previous year's figures have been adjusted.

From a regional perspective, capacity and sales were expanded in all traffic regions. The passenger load factor improved in all traffic regions, with the exception of Asia/Pacific. Yields fell in all the traffic regions. Traffic revenue rose in all traffic regions apart from the Middle East/Africa.

T035 TRENDS IN TRAFFIC REGIONS
Network Airlines

	Net traffic revenue external revenue		Number of passengers		Available seat-kilometres		Revenue seat-kilometres		Passenger load factor	
	2018 in €m	Change in % [1]	**2018** in thousands	Change in %	**2018** in millions	Change in %	**2018** in millions	Change in %	**2018** in %	Change in pts
Europe	8,651	7	80,087	8	84,031	9	64,727	9	77.0	0.6
America	6,867	4	11,767	5	107,614	5	90,184	5	83.8	0.7
Asia/Pacific	3,872	4	6,995	4	67,547	4	56,875	4	84.2	– 0.1
Middle East/ Africa	1,487	– 1	4,995	5	25,549	5	20,166	5	78.9	0.1
Total	**20,877**	**5**	**103,844**	**7**	**284,741**	**6**	**231,952**	**6**	**81.5**	**0.4**

[1] IFRS 15 restatement 2017.

Revenue and earnings development

Revenue performed well on adjusted basis

Revenues fell by 3% to EUR 22,719m as a result of netting in accordance with IFRS 15 (previous year: EUR 23,317m). Adjusted for this effect, the increase came to 5%. Traffic revenue was also 5% up on the previous year, adjusted for the effects of IFRS 15. Other operating income was down by 13% at EUR 699m due to lower exchange rate gains (previous year: EUR 801m). Constant currency unit revenues (RASK[1]) excluding IFRS 15 effects were up slightly by 0.3%.

T036 OPERATING FIGURES NETWORK AIRLINES[1]

	2018 in € cent	2017 in € cent	Change in %	Exchange-rate adjusted change in %
Yields	9.0	9.1	-1.4	0.5
Unit revenue (RASK)	8.1	8.2	-1.5	0.3
Unit cost (CASK) without fuel	5.6	5.8	-4.0	-2.4

[1] On a like-for-like basis, also previous year including IFRS 15 effects.

Expenses up in absolute terms

Operating expenses fell by 4% to EUR 21,024m as a result of netting in accordance with IFRS 15 (previous year: EUR 21,841m). Adjusted for the effects of IFRS 15, operating expenses rose by 4%. Constant currency unit costs excluding fuel (CASK[2]) for Network Airlines decreased by 2.4%, adjusted for IFRS 15 effects. Constant currency unit costs excluding fuel would have fallen by 1.7% without the change in accounting for engine overhauls.

The cost of materials and services fell year-on-year by 6% to EUR 11,884m (previous year: EUR 12,617m). This was due to netting in connection with the application of IFRS 15. On an adjusted basis, they increased by 7%.

Fuel costs went up by 13% to EUR 4,731m (previous year: EUR 4,172m). Fees and charges amounted to EUR 3,224m (previous year: EUR 4,737m). Adjusted for the effects of IFRS 15, fees and charges rose by 3%. The increase was below growth in traffic revenue, however. Expenses for MRO services increased by 3% to EUR 1,691m (previous year: EUR 1,636m). Other purchased services went up by 34% to EUR 628m (previous year: EUR 468m), partly because of higher costs as a result of flight irregularities.

Operating staff costs fell by 1% to EUR 4,159m (previous year: EUR 4,203m). Effects from growth in the workforce were offset by lower pension expenses among other things.

Depreciation and amortisation rose by 1% to EUR 1,497m in total (previous year: EUR 1,479m).

At EUR 3,484m, other operating expenses were 2% lower than a year ago (previous year: EUR 3,542m). Lower exchange rate losses were absorbed by the increase in other expense items that went up in line with the general business trend.

T037 OPERATING EXPENSES NETWORK AIRLINES

	2018 in €m	2017 in €m	Change in %
Cost of materials and services	11,884	12,617	-6
of which fuel	4,731	4,172	13
of which fees	3,224	4,737	-32
of which operating lease/charter	181	218	-17
of which MRO services	1,691	1,636	3
Staff costs[1]	4,159	4,203	-1
Depreciation and amortisation[2]	1,497	1,479	1
Other operating expenses[3]	3,484	3,542	-2
Total operating expenses	**21,024**	**21,841**	**-4**

[1] Without past service costs/settlement.
[2] Without impairment losses.
[3] Without book losses.

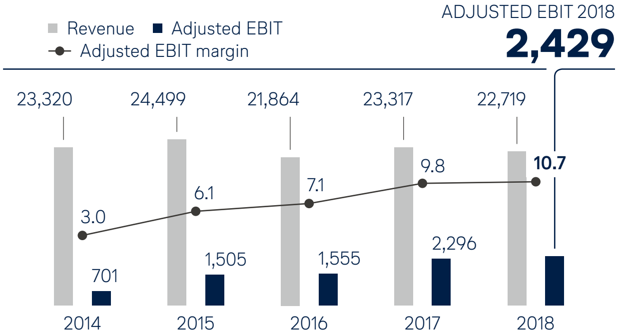
Adjusted EBIT is up by 6% on the previous year

Including the result from equity investments of EUR 35m (previous year: EUR 19m), Network Airlines reported Adjusted EBIT of EUR 2,429m, 6% up on the previous year (previous year: EUR 2,296m). This meant that the Adjusted EBIT margin came to 10.7%, a year-on-year increase of 0.9 percentage points (previous year: 9.8%). Adjusted for the effects of IFRS 15, the rise amounted to 0.2 percentage points. Without the changes to accounting for engine overhaul events, Adjusted EBIT in 2018 would have been EUR 2,273m, which would have been on par with the previous year (previous year: EUR 2,263m).

EBIT for the Network Airlines fell year-on-year by 7% to EUR 2,549m (previous year: EUR 2,749m). It was therefore EUR 120m more than Adjusted EBIT (previous year: EUR +453m). In 2018, the difference is mainly due to income from changes to pension plans, especially for cockpit crew at SWISS.

[1] RASK: total operating income (excluding reconciliation items from Adjusted EBIT), adjusted for income from the release of provisions and including all exchange rate gains and losses recognised in other operating income or expenses. Figures from the previous year were adjusted in accordance with the changes due to IFRS 15.
[2] CASK: total operating expenses (excluding reconciliation items within Adjusted EBIT) excluding the foreign exchange losses recognised in other operating expenses, adjusted for income from the release of provisions.

C17 NETWORK AIRLINES: DEVELOPMENT OF REVENUE, ADJUSTED EBIT in €m AND ADJUSTED EBIT MARGIN[1] in %



[1] Values for 2014 and 2015 in accordance with the former segment Passenger Airline Group.

In the previous year, the adjustments chiefly related to the positive non-recurring effect of modifying retirement and transitional pension plans for cockpit staff at Lufthansa German Airlines.

Segment capital expenditure increases

Segment capital expenditure rose year-on-year by 25% to EUR 2,573m (previous year: EUR 2,051m). This was mainly due to higher capital expenditure on the fleets of Lufthansa German Airlines and SWISS, in both the short- and long-haul sectors.

LUFTHANSA GERMAN AIRLINES

T038 KEY FIGURES LUFTHANSA GERMAN AIRLINES[1]

		2018	2017	Change in %
Revenue	€m	15,917	16,441	– 3[2]
Adjusted EBITDA	€m	2,750	2,673	3
Adjusted EBIT	€m	1,753	1,669	5
EBIT	€m	1,773	2,105	– 16
Adjusted EBIT margin	%	11.0	10.2	0.8 pts
Employees as of 31.12.	number	34,754	33,779	3
Average number of employees	number	34,599	33,428	4
Flights	number	582,663	542,668	7
Passengers[3]	thousands	70,108	65,826	7
Available seat-kilometres	millions	196,769	187,762	5
Revenue seat-kilometres[3]	millions	160,074	153,171	5
Passenger load factor	%	81.4	81.6	– 0.2 pts

[1] Including regional partners.
[2] Without IFRS 15 effect: 5%.
[3] Previous year's figures have been adjusted.

Lufthansa German Airlines is the largest airline in Germany. It has hubs at the two biggest German airports in Frankfurt and Munich. The Lufthansa CityLine and Air Dolomiti regional airlines are also part of Lufthansa German Airlines. Overall, Lufthansa German Airlines operates a fleet of 351 aircraft and serves a route network comprising 209 destinations in 74 countries.

Fleet is continuously modernised and route network optimised

Lufthansa German Airlines continued its fleet renewal programme in 2018. This enables it to reduce unit costs, particularly by cutting fuel consumption, and results in lower CO_2 and noise emissions. Lufthansa German Airlines stationed a total of six Airbus A350-900s, one of the latest and most environmentally friendly wide-bodied aircraft in the world, in Munich in 2018 and put another six A320neos into service. By year-end 2018 a total of twelve A350-900s and 16 A320neo aircraft were in operation.

New destinations were added to Lufthansa German Airlines' summer flight timetable for 2018. The long-haul destinations include Shenyang, San Diego and San José in Costa Rica.

System partnerships reinforced

The commercial management of the multi-hub system is centralised. This makes it possible to respond flexibly to changes in operating conditions. The key to the long-term success of the hubs are competitive costs, quality and terminal capacities in line with demand. To achieve this, Lufthansa German Airlines is in detailed negotiations with the airports at the two biggest hubs, Frankfurt and Munich, aimed at becoming more attractive to passengers, increasing profitability and enabling growth by strengthening their system partnership.

Lufthansa German Airlines successfully moved five of its total of 14 A380 aircraft from Frankfurt to Munich in 2018. They flew to Los Angeles, Hong Kong and Beijing in the summer timetable 2018. This transfer contributed to increasing earnings at the Munich site.

Digital services to be expanded

Lufthansa German Airlines strives for quality leadership in its markets. To achieve this, it continually identifies and implements measures to refine customer services along the entire travel chain. Around 30% of flight tickets are sold online via Lufthansa German Airlines digital platforms. Since their use continues to increase, the online services are being developed all the time. So, in autumn 2018, the first larger cloud solution was introduced for the customer-facing airline websites. This technology offers greater potential for meeting customer needs cost-effectively in the future by developing new versions faster.

The focus of new developments is to personalise and differentiate customer services. Destination and price searches can be filtered by budget and other preferences in order to offer the best available fares. As well as a direct link to the check-in page, options are provided for enhancing the journey with other individual services such as upgrades or additional baggage.

Measures to improve earnings and increase efficiency are having an effect

Lufthansa German Airlines is successfully continuing the top management initiative started in 2017, continuously implementing measures to deliver sustainable earnings improvements and efficiency gains. One of the focus areas is the ongoing modernisation of the fleet. Reducing fuel consumption, optimising the network portfolio and interfaces, in MRO for instance, and more efficient rostering are other priorities. Another programme has also been launched to improve the operating performance. It is intended to increase customer satisfaction and reduce costs caused by irregularities in flight operations.

Further increases in passenger numbers and load factor

Lufthansa German Airlines increased the number of passengers it carried by 7% to 70 million in 2018 (previous year: 66 million). The number of flights also went up by 7%. Capacity and sales both increased by 5%. The passenger load factor came to 81.4%, just 0.2 percentage points below the previous year's figure (previous year: 81.6%). Yields contracted by 0.4% due to competition. After adjustment for exchange rates, they were 1.1% higher than the previous year. Traffic revenue increased by 4%, adjusted for the effects of IFRS 15.

Revenue and earnings up

Lufthansa German Airlines' revenue fell by 3% to EUR 15,917m in 2018 due to the effects of IFRS 15 (previous year: EUR 16,441m). Adjusted for these effects, revenue was 5% up on the previous year. Total revenue increased by 4%, adjusted for the effects of IFRS 15.

Operating expenses fell by 5% to EUR 14,695m (previous year: EUR 15,435m). Adjusted for the effects of IFRS 15, operating expenses were 4% up on the previous year. Fuel cost in particular was up by 13%. MRO expenses increased by 8%.

Adjusted EBIT rose by 5% to EUR 1,753m (previous year: EUR 1,669m). This meant that the Adjusted EBIT margin came to 11.0%, a year-on-year increase of 0.8 percentage points (previous year: 10.2%). Without the effect of the accounting change for engine overhaul expenses, Adjusted EBIT would have been 1% down on the previous year.

SWISS

T039 KEY FIGURES SWISS[1]

		2018	2017	Change in %
Revenue	€m	4,897	4,727	4[2]
Adjusted EBITDA	€m	926	844	10
Adjusted EBIT	€m	593	534	11
EBIT	€m	686	542	27
Adjusted EBIT margin	%	12.1	11.3	0.8 pts
Employees as of 31.12.	number	9,941	9,497	5
Average number of employees	number	9,629	9,510	1
Flights[3]	number	171,548	163,229	5
Passengers[3]	thousands	20,416	18,648	9
Available seat-kilometres[3]	millions	60,638	56,020	8
Revenue seat-kilometres[3]	millions	50,204	45,593	10
Passenger load factor[3]	%	82.8	81.4	1.4 pts

[1] Including Edelweiss Air.
Further information on SWISS can be found at **www.swiss.com**.
[2] Without IFRS 15 effect: 5%.
[3] Previous year's figures have been adjusted.

SWISS is the biggest airline in Switzerland. With its sister company Edelweiss Air, it serves a global route network of 155 destinations in 56 countries with a fleet of 105 aircraft from airports in Zurich, Geneva and Lugano. The separately managed Swiss WorldCargo division uses the belly capacities of SWISS aircraft to offer comprehensive airport-to-airport services for high-value goods and sensitive freight to 130 destinations in more than 80 countries.

Fleet renewal continues successfully

SWISS successfully advanced its fleet modernisation in 2018. It introduced two more Boeing 777-300ER aircraft on long-haul routes and now has ten aircraft of this type in service. Another two B777-300ERs will join the fleet in early 2020 to deepen and expand the route network.

Thirteen more C Series were integrated into the fleet on short- and medium-haul routes. This means that 28 of the 30 C Series aircraft ordered are now in service at SWISS. In addition, SWISS converted the call option for seven A320neo and three A321neo aircraft from the A320neo family into firm orders. The aircraft will join the fleet in 2023 and 2024. These new orders supplement the ten A320neos and five A321neos already ordered, which will replace older A320 and A321 aircraft between 2019 and 2022. The aircraft from the A320neo family offer significant and compelling reductions in fuel consumption and noise levels.

Ground services to be expanded

SWISS further strengthened its position as a premium carrier in 2018. It also made significant capital expenditure on the ground, in order to offer its passengers a consistently high-end product along the entire travel chain.

SWISS opened a new First Class Lounge in Terminal A at Zurich Airport. The lounge meets the highest aesthetic standards and has its own check-in, security gate and à la carte restaurant. In the same terminal, SWISS also opened new Business Class and Senator Lounges featuring a modern zoning concept for individual preferences and their compelling Swiss design. The SWISS lounges at Geneva Airport were also modernised. The new furnishings are aesthetically pleasing and offer passengers even greater comfort.

Market position significantly strengthened in Geneva

SWISS significantly improved its competitiveness in Geneva. The fleet based in Geneva now consists solely of C Series aircraft. SWISS also introduced new services in Geneva to further optimise the travel experience for its passengers by making it even more personal. Among other things, the premium catering concept SWISS Saveurs was introduced on European flights departing from Geneva. It enables all SWISS customers to design their in-flight culinary experience to their own taste – in addition to the basic product included in their fare category.

Further optimisation of cost structures

Next year, SWISS will again work hard to keep optimising its cost structure. One major contribution will come from the greater efficiency of the fleet due to the B777 and C Series aircraft. Closer cooperation with Helvetic Airways, its wet lease partner using the latest generation of aircraft, will also reduce costs.

Passenger numbers at record level

SWISS set another new record for passenger numbers in 2018. The number of passengers carried increased by 9% to 20.4 million (previous year: 18.6 million). and the number of flights went up by 5%. Capacity went up by 8% and sales went up by 10%. The passenger load factor rose by 1.4 percentage points to 82.8% (previous year: 81.4%). Yields fell by 1.3%. After adjustment for exchange rates, they were 2.2% higher than the previous year. Traffic revenue increased by 5%, adjusted for the effects of IFRS 15.

Revenue and earnings up year-on-year

Revenue at SWISS increased by 4% to EUR 4,897m in 2018, primarily due to higher volumes (previous year: EUR 4,727m). Adjusted for the effects of IFRS 15, revenue was 5% higher year-on-year. Total revenue increased by 6%, adjusted for the effects of IFRS 15.

Operating expenses went up by 3% to EUR 4,494m (previous year: EUR 4,343m). Adjusted for the effects of IFRS 15, operating expenses were 5% up on the previous year. Fuel cost in particular was up by 15%. MRO costs fell by 9%.

Adjusted EBIT rose accordingly by 11% to EUR 593m (previous year: EUR 534m). This meant that the Adjusted EBIT margin came to 12.1%, a year-on-year increase of 0.8 percentage points (previous year: 11.3%). Without the effect of the accounting change for engine overhaul expenses, Adjusted EBIT would have been 14% up on the previous year.

AUSTRIAN AIRLINES

T040 KEY FIGURES AUSTRIAN AIRLINES[1]

		2018	2017	Change in %
Revenue	€m	2,178	2,358	– 8[2]
Adjusted EBITDA	€m	252	261	– 3
Adjusted EBIT	€m	83	93	– 11
EBIT	€m	90	100	– 10
Adjusted EBIT margin	%	3.8	3.9	– 0.1 pts
Employees as of 31.12.	number	7,083	6,914	2
Average number of employees	number	7,099	6,741	5
Flights	number	150,963	143,999	5
Passengers[3]	thousands	13,936	12,849	8
Available seat-kilometres	millions	27,703	26,075	6
Revenue seat-kilometres[3]	millions	21,966	20,018	10
Passenger load factor	%	79.3	76.8	2.5 pts

[1] Further information on Austrian Airlines can be found at **www.austrian.com.**
[1] Without IFRS 15 effect: 5%.
[3] Previous year's figures have been adjusted.

Austrian Airlines is Austria's largest airline. It operates a global route network to 117 destinations in 47 countries with its own comprehensive fleet of 83 aircraft.

Route network deepened and expanded
Austrian Airlines further expanded its route network. Tokyo and Cape Town were introduced as new long-haul destinations. Another Boeing 777 was added to the long-haul fleet and went into service in May 2018. Austrian Airlines increased its short- and medium-haul services with connections to Berlin, Dusseldorf, Stuttgart and Tel Aviv. Connections to holiday destinations in Italy and Greece were likewise expanded.

Focus on innovations and product improvements
Premium Economy Class was brought in for the entire long-haul route network at Austrian Airlines in early March 2018. It gives passengers seats with a greater reclining angle, a bigger seat pitch, a broader seat area and a larger screen for on-demand entertainment, as well as providing higher-quality catering than in Economy Class. The product is based on the successful introduction of Premium Economy Class at Lufthansa German Airlines and emphasises the synergies within the Lufthansa Group. A standardised seat model made it possible to reduce the development costs significantly.

Austrian Airlines has new CEO and CFO
At its meeting on 20 June 2018, the Supervisory Board of Austrian Airlines AG appointed Alexis von Hoensbroech as the new CEO and Chairman of the Executive Board of Austrian Airlines. He succeeded Kay Kratky on 1 August 2018. Wolfgang Jani succeeded Heinz Lachinger as CFO on 16 April 2018.

Focus on increasing profitability
Strong demand and increasing competition in Vienna prompted Austrian Airlines to refine its strategy with regard to its customers and their needs. Significant reductions in complexity and a greater focus on the core business and hub traffic in Vienna were defined as the basis for greater profitability. The three core elements of the ten-point programme include moving decentralised crew bases to Vienna, modernising the fleet by phasing out the Dash turboprops and expanding the A320 fleet, and streamlining the network. The latter is linked with the reorganisation of flights to Germany from regional Austrian airports. Synergies in administration and operations were also reviewed and implemented.

Passenger numbers once again at record level
With almost 14 million passengers, Austrian Airlines transported 8% more customers than in 2017 (previous year: 12.8 million) and also more than ever before in the 60-year history of the airline. Capacity was increased by 6% and sales were up by 10%. The load factor was 2.5 percentage points higher year-on-year, at 79.3% (previous year: 76.8%). Yields were down 1.3% year-on-year. After adjustment for exchange rates, they were 0.3% lower than in the previous year. Traffic revenue was up 6% on the previous year, adjusted for the effects of IFRS 15.

Adjusted EBIT down on the previous year
Revenue for Austrian Airlines came to EUR 2,178m in 2018 due to the effects of IFRS 15, a decrease of 8% on the previous year (EUR 2,358m). Adjusted for these effects, revenue rose by 5%. Total revenue increased by 4%, adjusted for the effects of IFRS 15.

Operating expenses fell by 8% to EUR 2,173m. Adjusted for the effects of IFRS 15, operating expenses were 5% up on the previous year. This reflects growth in flight operations as well as the 16% increase in fuel costs. Irregularities in flight operations also led to extraordinary costs. MRO costs fell by 17%, however.

Adjusted EBIT was 11% down on the previous year at EUR 83m (previous year: EUR 93m). This meant that the Adjusted EBIT margin came to 3.8%, a year-on-year decrease of 0.1 percentage points (previous year: 3.9%). Without the effect of the accounting change for engine overhaul expenses, Adjusted EBIT would have been 55% down on the previous year. To counteract the resulting lower profitability, unprofitable routes were removed from the list of long-haul routes and capacity was relocated to more profitable destinations. In European traffic, capacity was particularly expanded where there is competition with low-cost carriers. Other unprofitable routes were closed in exchange.

Eurowings business segment

The Eurowings business segment focuses on the growing market for European direct sales. | Concept is based on the central steering of various flight operations. | Takeover of key parts of Air Berlin significantly strengthened market position. | Fast growth consolidates position as third largest provider of direct flights in Europe. | Integration expenses significantly burdened results.

4.2
€bn **Revenue**

– 231
€m **Adjusted EBIT**

T041 KEY FIGURES EUROWINGS

		2018	2017	Change in %
Revenue	€m	4,230	4,041	5[1]
of which with companies of the Lufthansa Group	€m	18	– 4	
Adjusted EBITDA	€m	142	322	– 56
Adjusted EBIT	€m	– 231	60	
EBIT	€m	– 231	– 33	– 600
Adjusted EBIT margin	%	– 5.5	1.5	– 7.0 pts
Adjusted ROCE	%	– 8.2	2.8	– 11.0 pts
EACC	€m	– 262	– 92	– 185
Segment capital expenditure	€m	515	972	– 47
Employees as of 31.12.	number	9,255	7,501	23
Average number of employees	number	9,296	7,190	29

[1] Without IFRS 15 effect: 19%.

Business activities

Eurowings focuses on the market for direct European flights and delivers growth and market consolidation
The Eurowings segment comprises the airlines Eurowings, Germanwings, Eurowings Europe, Brussels Airlines and Luftfahrtgesellschaft Walter (LGW). The equity investment in SunExpress is also part of this segment. The route network of the Eurowings segment was served from a total of 13 bases in the summer flight timetable 2018, comprising 197 destinations in 62 countries.

With Eurowings, the Lufthansa Group has an innovative and competitive offering for price-sensitive and service-oriented customers in the growing European direct traffic segment. In addition to its greater efficiency and competitive costs, the concept is based on a scalable company structure that enables the flexible integration of new partners with a variety of cooperation models. The Eurowings concept is based on the central management of different flight operations, known as a platform model.

Course of business and operating performance

Market position significantly strengthened by takeover of former Air Berlin aircraft
Eurowings grew quickly in 2018, especially due to the acquisition of important parts of the former Air Berlin fleet. This made Eurowings the third largest operator of direct flights in Europe. In the reporting year, the number of aircraft increased from 180 to 205 and the workforce from 7,501 to 9,255. A total of 77 aircraft were acquired from the former Air Berlin fleet and around 3,000 former Air Berlin employees were hired. Now that the technical integration is finished, the focus is on raising customer satisfaction by improving operational stability and increasing profitability. This also involves reducing the operating complexity, which rose significantly in the course of the takeover. In addition, the focus is on reinforcing a single corporate culture by successfully integrating the large number of new employees.

Leading position at airports in Germany, Austria and Belgium to be expanded
Its strong growth enabled Eurowings to become the leading airline at eight airports in its home markets of Germany, Austria and Belgium, and the number two at five other airports in the reporting year. In summer 2018, Eurowings almost doubled its market share in Mallorca, Spain, where it is the new number two. The airline also built a new long-haul operation at Dusseldorf Airport in 2018.

Measures introduced to avoid irregularities in flight operations

There were increasing service irregularities in the form of flight delays and cancellations in the course of 2018, which made significant modifications to the Eurowings 2018 summer flight timetable necessary. These irregularities were caused partly by the European Commission not approving the acquisition of NIKI Luftfahrt GmbH and by the termination of the partnership with the successor company Laudamotion. The operating activities of Eurowings were also adversely affected by other external factors such as air traffic controller strikes, staff shortages within European air traffic control and weather-related flight cancellations.

Various steps were taken at the start of the winter flight timetable 2018 to stabilise flight operations and make lasting improvements. More slack was built into flight timetables, the number of reserve aircraft and standby crews was increased, landings were brought forward to avoid night-flight bans, and block and ground times were extended. After just a few weeks, these measures already had initial positive effects.

Significant traffic growth

Traffic was up significantly due to the addition of aircraft following Air Berlin's insolvency, which included the acquisition of LGW, and due to Brussels Airlines' acquisition of Thomas Cook Belgium. Altogether, Eurowings' flight operations carried over 38 million passengers in 2018 (previous year: 33 million). This represents a year-on-year increase of 18% and the number of flights went up by 16%. Capacity and sales increased by 21% and 23% respectively. The passenger load factor rose by 1.4 percentage points to 81.3% (previous year: 79.9%). Yields fell by 2.4% as a result of the growth and consolidation. After adjustment for exchange rates, they were 1.9% lower than the previous year. Traffic revenue increased by 20%, adjusted for the effects of IFRS 15.

T042 TRAFFIC FIGURES EUROWINGS

		2018	2017	Change in %
Passengers	thousands	38,491	32,613	18
Flights	number	322,620	277,804	16
Available seat-kilometres	millions	64,748	53,381	21
Revenue seat-kilometres	millions	52,609	42,647	23
Passenger load factor	%	81.3	79.9	1.4 pts

From a regional perspective, capacity and sales were expanded in all traffic regions. The passenger load factor went up on short-haul routes and remained unchanged on long-haul routes. Yields fell on short-haul routes and increased on long-haul routes. Traffic revenue increased in all traffic regions.

Revenue and earnings development

Revenue up due to growth

Revenue at the Eurowings segment rose year-on-year by 5% to EUR 4,230m (previous year: EUR 4,041m). Adjusted for the effects of IFRS 15, revenue rose by 19%. Constant currency unit revenues (RASK) excluding IFRS 15 effects were down by 2.9%.

T043 OPERATING FIGURES EUROWINGS [1]

	2018 in € cent	2017 in € cent	Change in %	Exchange-rate adjusted change in %
Yields	7.8	8.0	-2.4	-1.9
Unit revenue (RASK)	6.8	7.0	-3.2	-2.9
Unit cost (CASK) without fuel	5.7	5.6	1.7	2.2

[1] On a like-for-like basis, also previous year including IFRS 15 effects.

T044 TRENDS IN TRAFFIC REGIONS
Eurowings

	Net traffic revenue external revenue		Number of passengers		Available seat-kilometres		Revenue seat-kilometres		Passenger load factor	
	2018 in €m	Change in % [1]	2018 in thousands	Change in %	2018 in millions	Change in %	2018 in millions	Change in %	2018 in %	Change in pts
Short-haul	3,097	16	35,222	17	42,348	19	34,247	22	80.9	2.0
Long-haul	1,020	38	3,269	26	22,400	25	18,362	25	82.0	0.0
Total	**4,117**	**20**	**38,491**	**18**	**64,748**	**21**	**52,609**	**23**	**81.3**	**1.4**

[1] IFRS 15 restatement 2017.

Expenses up due to integration costs

Operating expenses increased year-on-year by 11% to EUR 4,775m, mostly due to volumes, but also due to non-recurring integration costs and irregularities in flight operations (previous year: EUR 4,294m). Adjusted for the effects of IFRS 15, operating expenses rose by 25%. Constant currency unit costs (CASK) excluding fuel increased by 2.2% on the previous year. There would have been an increase of 1.9% without the effect of the change in accounting for the cost of engine overhauls.

T045 OPERATING EXPENSES EUROWINGS

	2018 in €m	2017 in €m	Change in %
Cost of materials and services	3,174	3,044	4
of which fuel	973	733	33
of which fees	957	1,335	–28
of which operating lease/ charter expenses	323	391	–17
of which MRO services	427	293	46
Staff costs [1]	619	484	28
Depreciation and amortisation [2]	372	262	42
Other operating expenses [3]	610	504	21
Total operating expenses	**4,775**	**4,294**	**11**

[1] Without past service costs/settlement.
[2] Without impairment losses.
[3] Without book losses.

Within the cost of materials and services, fuel costs were up by 33% due to higher volumes and prices at EUR 973m (previous year: EUR 733m). Fees and charges were 28% down on the previous year at EUR 957m because of netting effects in accordance with IFRS 15 (previous year: EUR 1,335m). Without this effect, fees and charges were up by 16%.

Expenses for leases increased by 95% to EUR 84m (previous year: EUR 43m). This is mainly due to the takeover of LGW and changes to the leases for SunExpress wide-bodied aircraft. Additional wet leases and higher MRO expenses for aircraft overhauls were incurred in connection with the acquisition of 77 aircraft from the former Air Berlin fleet, whose technical integration took longer than originally planned. MRO expenses rose by 46% to EUR 427m in total (previous year: EUR 293m). Earnings were also burdened by higher expenses due to compensation payments for irregularities in flight operations.

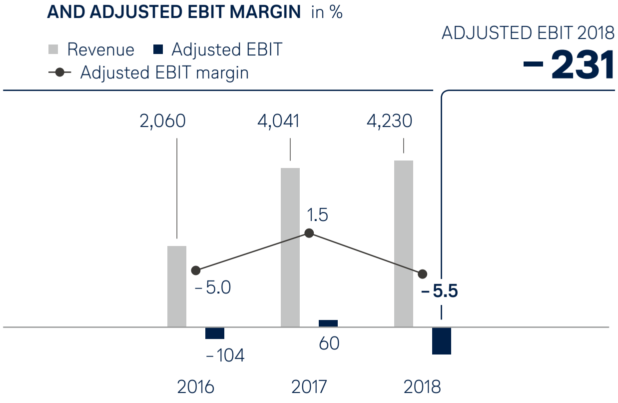
Staff costs rose year-on-year due to growth of the workforce by 28% to EUR 619m (previous year: EUR 484m).

Depreciation and amortisation rose year-on-year by 42% to EUR 372m (previous year: EUR 262m). The main reason for this was the rise in aircraft depreciation following the rapid growth of the fleet.

Adjusted EBIT reduced by one-off expenses

Earnings were significantly reduced in 2018 by non-recurring integration costs in flight operations. These came to around EUR 170m. Including these expenses, Adjusted EBIT fell to EUR –231m (previous year: EUR 60m). The Adjusted EBIT margin fell by 7.0 percentage points to –5.5% (previous year: 1.5%). Adjusted for the effects of IFRS 15, the decline amounted to 6.3 percentage points. Without the effect of the accounting change for engine overhaul expenses, Adjusted EBIT would have been EUR –178m (previous year: EUR 94m).

C18 EUROWINGS: DEVELOPMENT OF REVENUE, ADJUSTED EBIT in €m AND ADJUSTED EBIT MARGIN in %



EBIT for Eurowings fell EUR 198m year-on-year to EUR –231m (previous year: EUR –33m). In the reporting year, it was therefore the same as Adjusted EBIT (previous year: EUR –93m). In 2017, the difference was mainly due to impairment losses on financial investments and measurement effects for pensions in connection with the wage agreement with the Vereinigung Cockpit pilots' union.

Segment capital expenditure down

Segment capital expenditure fell year-on-year by 47% to EUR 515m (previous year: EUR 972m). Capital expenditure was significantly higher in the previous year because of the aircraft purchased following the insolvency of Air Berlin. In the reporting year, capital expenditure mainly entailed the purchase of aircraft as part of the takeover of LGW, as well as expanding long-haul routes at Brussels Airlines.

Logistics business segment

Lufthansa Cargo is Europe's leading freight airline. | Quality improvements and global partnerships strengthen market position. | More efficient processes lead to lower costs and greater flexibility. | Customers benefit from increasing digitalisation. | Revenue and earnings up year-on-year.

2.7
€bn **Revenue**

268
€m **Adjusted EBIT**

T046 KEY FIGURES LOGISTICS

		2018	2017	Change in %
Revenue	€m	2,713	2,524	7
of which with companies of the Lufthansa Group	€m	32	27	19
Adjusted EBITDA	€m	372	363	2
Adjusted EBIT	€m	268	263	2
EBIT	€m	263	262	0
Adjusted EBIT margin	%	9.9	10.4	-0.5 pts
Adjusted ROCE	%	14.6	16.2	-1.6 pts
EACC	€m	139	142	-2
Segment capital expenditure	€m	374	79	373
Employees as of 31.12.	number	4,505	4,511	0
Average number of employees	number	4,422	4,504	-2

Business activities

Lufthansa Cargo is Europe's leading freight airline

In addition to Lufthansa Cargo AG, the Lufthansa Group's logistics specialists, the Logistics segment includes the airfreight container management specialist Jettainer group, the time:matters subsidiary, which specialises in particularly urgent consignments, and the equity investment in the cargo airline AeroLogic. Lufthansa Cargo also has equity investments in various handling companies and smaller companies involved in aspects of digitalising the sector.

The focus of Lufthansa Cargo's operations lies in the airport-to-airport airfreight business. Its product portfolio encompasses standard and express freight as well as highly specialised products. These include the transport of living animals, valuable cargo, post and dangerous goods, as well as the growing sector of temperature-sensitive goods. The company has specialised infrastructure at Frankfurt Airport to handle these sensitive goods, including the Frankfurt Animal Lounge and the Lufthansa Cargo Cool Centre.

The Lufthansa Cargo freighter fleet consisted of five Boeing 777F and twelve Boeing MD-11F aircraft as of the end of the financial year. Lufthansa Cargo markets capacities on its own freighters and chartered cargo aircraft, along with belly capacities on passenger aircraft operated by Lufthansa German Airlines, Austrian Airlines, SunExpress and on Eurowings long-haul flights. Since 1 September 2018, Lufthansa Cargo has also been marketing the freight capacities of Brussels Airlines. Freighters and passenger aircraft each carried about half of the total cargo. Altogether, Lufthansa Cargo offers connections to more than 300 destinations in around 100 countries. AeroLogic is based in Leipzig and operates its ten B777 freighters to 28 destinations around the world on behalf of its two shareholders, Lufthansa Cargo and DHL Express.

International partnerships to be expanded

Lufthansa Cargo continues to develop its partnerships. A new partnership with United Airlines began in May 2018. Most of the stations in Europe and the USA have already been incorporated. Other European countries and the US feeder service will be integrated in the first half of 2019. In addition, the partnership with Cathay Pacific Cargo on flights from Europe to Hong Kong will be expanded in early 2019.

Course of business and operating performance

Leading position to be further extended

Continuous quality enhancements and global partnerships should help Lufthansa Cargo to build on its leading position in the airfreight industry. Lufthansa Cargo also aims to further simplify and automate airfreight processes and to sustainably reduce unit costs.

The strategic programme of cost-cutting measures adopted in 2016 was brought to a successful close in October 2018. The company is more streamlined as a result and can react faster within its volatile industry.

Strict cost controls will remain in place in 2019, both in terms of processes and the efficient use of production resources.

Fleet is being modernised and expanded

Two more Boeing 777Fs will be integrated into the fleet in February and March 2019. They will replace the MD-11F freighters in the medium term, thereby expediting the fleet's modernisation. Lufthansa Cargo also leased another Boeing 777F freighter in January 2019, which is in service at AeroLogic. A fourth is to follow in autumn 2019.

Digitalisation brings many advantages for customers

Digitalisation is a key pillar of the strategic Cargo Evolution programme. Issues concerning digitalisation were given even higher priority both in the organisation of Lufthansa Cargo and in its project portfolio. Current focal points include the renewal of the IT infrastructure and the ongoing digitalisation of customer interfaces, with the aim of networking the company digitally with all the participants in the transport chain, from booking through to delivery.

Almost three quarters of all bills of lading are now produced electronically. Digitalisation means customers benefit from greater transparency, higher speeds, better quality and more flexibility as well as greater efficiency.

Further modernisation of ground infrastructure

The freight centre in Frankfurt is being continually modernised. This involved expanding capacities and further improving the entire infrastructure of the cool centre for temperature-sensitive airfreight consignments in 2018. The individual steps form part of an integrated, modular modernisation concept for the logistics centre in Frankfurt, which is being implemented in stages.

Positive trend in capacity and sales

Capacity at Lufthansa Cargo increased by 5% in 2018. Belly capacities grew faster than freighter capacities. Sales were up by 1% as a result of higher capacities in the freighters. Higher belly capacities could not be sold in full, because they were concentrated on routes that are less relevant for the cargo business. The cargo load factor therefore fell overall by 3.2 percentage points to 65.9% (previous year: 69.1%). Lufthansa Cargo was nevertheless able to expand yields again significantly compared with the previous year. After adjustment for exchange rates, they were 8.6% higher than the previous year.

T047 TRAFFIC FIGURES AND OPERATING FIGURES LOGISTICS

		2018	2017	Change in %
Available cargo tonne-kilometres	millions	13,555	12,867	5
Revenue cargo tonne-kilometres	millions	8,934	8,886	1
Cargo load factor	%	65.9	69.1	– 3.2 pts
Yields[1]	€ cent	28.5	26.7	6.7[2]

[1] On a like-for-like basis, also previous year including IFRS 15 effects.
[2] Exchange rate-adjusted change: 8.6%.

The main traffic regions for Lufthansa Cargo remain Asia/Pacific and America, and this is where capacity, sales and traffic revenue were expanded the most. Yields increased most strongly in the Asia/Pacific region and in the Middle East/Africa.

T048 TRENDS IN TRAFFIC REGIONS
Lufthansa Cargo

	Net traffic revenue external revenue		Available cargo-tonne-kilometres		Revenue cargo-tonne-kilometres		Cargo load factor	
	2018 in €m	Change in %	**2018** in millions	Change in %	**2018** in millions	Change in %	**2018** in %	Change in %
Europe	198	0	716	4	316	– 7	44.1	– 5.2
America	1,068	6	6,256	6	3,909	2	62.5	– 2.4
Asia/Pacific	1,107	12	5,512	8	4,166	1	75.6	– 4.9
Middle East/Africa	177	0	1,071	– 7	543	– 9	50.7	– 1.1
Total	**2,550**	**7**	**13,555**	**5**	**8,934**	**1**	**65.9**	**– 3.2**

Revenue and earnings development

Revenue up on previous year

Revenue in the Logistics segment rose by 7% to EUR 2,713m in 2018 (previous year: EUR 2,524m). This was particularly due to the strong rise in yields. Total revenue increased by 7% to EUR 2,770m (previous year: EUR 2,597m).

Expenses up for operating reasons

Operating expenses went up by 8% to EUR 2,538m (previous year: EUR 2,357m). Fuel expenses rose by 16% to EUR 379m due to pricing (previous year: EUR 326m). Charter expenses were up by 23% at EUR 839m, primarily driven by taking on the marketing of belly capacities for Brussels Airlines at the end of the third quarter 2018 (previous year: EUR 683m). Staff costs fell by 3% to EUR 420m due to redundancies at Lufthansa Cargo as part of the successful implementation of the strategic cost-cutting programme (previous year: EUR 435m).

T049 OPERATING EXPENSES LOGISTICS

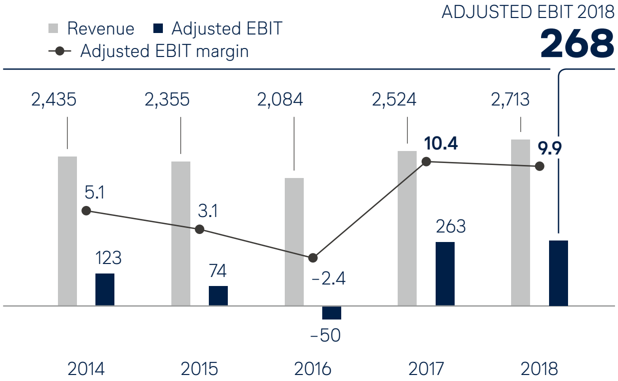
	2018 in €m	2017 in €m	Change in %
Cost of materials and services	1,753	1,575	11
of which fuel	379	326	16
of which fees	292	302	-3
of which charter expenses	839	683	23
of which MRO services	120	123	-2
Staff costs [1]	420	435	-3
Depreciation and amortisation [2]	104	100	4
Other operating expenses [3]	261	247	6
Total operating expenses	**2,538**	**2,357**	**8**

[1] Without past service costs/settlement.
[2] Without impairment losses.
[3] Without book losses.

Adjusted EBIT improves

Adjusted EBIT rose by 2% to EUR 268m (previous year: EUR 263m). With the accounting changes for engine overhaul events, which particularly affected expenses in 2017, Adjusted EBIT would have gone up by 10% to EUR 265m (previous year: EUR 242m).

C19 LOGISTICS: DEVELOPMENT OF REVENUE, ADJUSTED EBIT in €m AND ADJUSTED EBIT MARGIN in %



Segment capital expenditure increases

Capital expenditure went up significantly to EUR 374m in the reporting period mainly due to the down payment for two new B777 freighters (previous year: EUR 79m).

MRO business segment

Lufthansa Technik is a leading global provider of maintenance, repair and overhaul services for civilian commercial aircraft. | Focus on innovation and digital products. | Continuous cost reductions sustainably improve earnings. | Revenue up, primarily due to higher extra-Group income. | Earnings up on the previous year.

5.9
€bn **Revenue**

425
€m **Adjusted EBIT**

T050 KEY FIGURES MRO

		2018	2017	Change in %
Revenue	€m	5,918	5,404	10
of which with companies of the Lufthansa Group	€m	2,106	1,836	15
Adjusted EBITDA	€m	549	530	4
Adjusted EBIT	€m	425	415	2
EBIT	€m	426	411	4
Adjusted EBIT margin	%	7.2	7.7	-0.5 pts
Adjusted ROCE	%	7.1	7.7	-0.6 pts
EACC	€m	129	147	-12
Segment capital expenditure	€m	241	233	3
Employees as of 31.12.	number	23,219	21,502	8
Average number of employees	number	22,537	21,200	6
Fully consolidated companies	number	22	23	-4

Business activities

Lufthansa Technik is the world's leading MRO provider

Lufthansa Technik is the world's leading independent provider of maintenance, repair and overhaul services (MRO) for civilian commercial aircraft. The Lufthansa Technik group consists of 31 technical maintenance operations around the world. The company also holds direct and indirect stakes in 61 companies. Lufthansa Technik AG serves more than 850 customers worldwide, including OEMs, aircraft leasing companies and operators of VIP jets, as well as airlines. About one third of its business is with Group companies and two thirds of its business is with external customers.

Lufthansa Technik's range of services comprises eight divisions: aircraft maintenance, aircraft overhaul, engine maintenance, component maintenance, aircraft systems, development and manufacture of cabin products, development of digital products, and initial equipment and servicing of VIP aircraft. The portfolio covers a variety of differently structured products and product combinations, from the repair of individual components to consultancy services and the fully integrated supply of entire fleets.

Focus remains on innovation and digital products

Lufthansa Technik continued to develop its proprietary product AVIATAR in 2018, an independent and integrated software platform. AVIATAR supports customers in real-time with the management of complex fleet operations and helps to diagnose errors in individual components, so supporting the digital transformation of air traffic. Ten partners and customers are now working with AVIATAR and more than 1,000 aircraft are live on the platform, benefitting from optimised operating times and lower subsequent costs as well as safer and more dependable fleet operations.

In the engine maintenance segment, Lufthansa Technik has industrialised its proprietary development, an inspection method for engine components. This process uses a robot equipped with high-end sensors to carry out digital inspections for tears in engine components. In addition, with Cyclean Dry Ice, Lufthansa Technik has developed a unique method for washing engines with carbon dioxide dry ice, which will supplement water-based engine washing methods from 2019 onwards. As well as being more environmentally friendly, the method has the advantage that it can be applied even when outside temperatures are below freezing. This means that engines can be washed 365 days a year, even in regions that experience permafrost.

The Gate App from Lufthansa Technik Logistik Services (LTLS), a subsidiary of Lufthansa Technik AG, enables components to be tracked with the help of an industrial tablet. It not only enables the mobile, convenient and flexible identification of aircraft material, but also digitalises the entire process.

To optimise internal processes, the Lufthansa Technik subsidiary Intercoat has developed and put into operation the world's first semi-automated facility for coating components with INTERFILL®, a filler to make components fit for use again. The advanced epoxy coating method previously involved nothing but manual work. With the new semi-automated plant, the components can now be coated in just one step.

Lufthansa Technik drives its international growth
In the engine maintenance segment, Lufthansa Technik and its partners are advancing the expansion of their new equity investments XEOS, EME Aero and 3D.aero. In 2018, the joint venture with GE Aviation, XEOS, celebrated the topping-out ceremony of its state-of-the-art maintenance centre in Poland. The latest generation of engines from General Electric, chiefly the GEnx-2B model, later also the GE9X, will be serviced, repaired and overhauled here from spring 2019. EME Aero (Engine Maintenance Europe), a joint venture between Lufthansa Technik and MTU Aero Engines, was also able to acquire land in the Polish "Aviation Valley" near Rzeszów Airport, thus paving the way for the construction of one of the biggest and most modern MRO shops in the world for geared turbofan engines. The plan is to begin operations in late 2019.

Lufthansa Technik and LG Electronics signed a declaration of intent to establish a joint venture for aircraft displays and systems in the reporting year. The new joint venture will combine the advanced, light and flexible OLED display technology from LG with Lufthansa Technik's expertise in the aviation business to open up new markets for on-board aircraft applications such as welcome screens and interior trim. The new company will commence operations in the first half of 2019.

Course of business and operating performance

Important contracts have been renewed and signed
The number of aircraft serviced under exclusive contracts went up by 13% to 5,131 in the reporting period. In the financial year 2018, the company won 29 new customers and signed 576 contracts with a volume of EUR 5bn for 2018 and the following years.

Global capacities to be expanded in line with demand
Lufthansa Technik's worldwide MRO capacities are to be continuously expanded to meet increasing demand. In June, Lufthansa Technik opened a new wide-body tail dock at its maintenance site in Munich. The dock facilitates maintenance work on the aircraft models Airbus A330, A340 and A350 and makes it possible to carry out several jobs at the same time.

Lufthansa Technik Malta was authorised to overhaul A350s by the German Federal Aviation Office in 2018. The first A350 is expected for overhaul work in spring 2019. In addition, the Lufthansa Technik Puerto Rico subsidiary was approved for the maintenance of the A320neo by the US Federal Aviation Administration. At its site in Hamburg, Lufthansa Technik received approval from the Civil Aviation Administration of China (CAAC) to act as a maintenance operation for the aircraft models Boeing 737-700 and -800.

Focus remains on continuous cost reductions
To safeguard the success and continued viability of Lufthansa Technik, ongoing projects are implemented in all operating segments and at the central level to improve the costs and efficiency of the Group and to increase its long-term earnings. Steps are taken to improve margins in component maintenance, for example. One aim is to shorten throughput and logistics times and to keep costs down at the same time.

Revenue and earnings development

Revenue increased significantly

Lufthansa Technik increased its revenue by 10% to EUR 5,918m in 2018 (previous year: EUR 5,404m). Strong growth in America and a solid performance in Europe, Lufthansa Technik's main market, also contributed to this.

External revenue benefited from contract extensions for engine and component maintenance and greater demand for aircraft overhaul services. Intra-Group revenue went up largely due to a higher share of engine business with Lufthansa German Airlines.

Other operating income fell by 19% to EUR 264m because of exchange rate effects (previous year: EUR 326m). Total income for the MRO segment rose by 8% to EUR 6,182m (previous year: EUR 5,730m).

Expenses up, particularly due to higher volumes

Operating expenses went up by 8% to EUR 5,764m in 2018 (previous year: EUR 5,345m). The cost of materials and services increased by 11% to EUR 3,359m as a result of more engine and component business, as well as higher purchased services (previous year: EUR 3,039m). Personnel costs of EUR 1,435m were 6% up on the previous year (EUR 1,356m). This is due to growth in the size of the workforce. Other operating expenses went up by 1% to EUR 846m (previous year: EUR 835m). Continuous cost-cutting measures had a positive impact on total expenses.

T051 OPERATING EXPENSES MRO

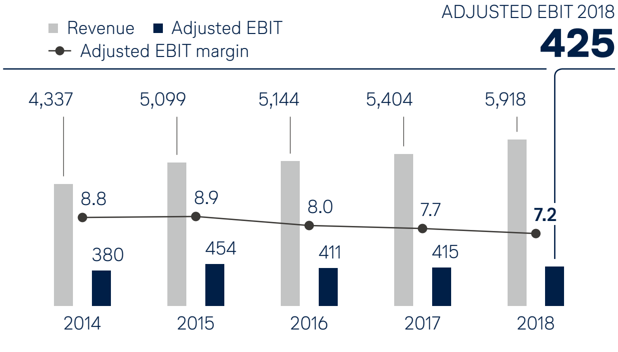
	2018 in €m	2017 in €m	Change in %
Cost of materials and services	3,359	3,039	11
of which raw materials, consumables and supplies	2,036	1,971	3
of which external services	1,109	847	31
Staff costs [1]	1,435	1,356	6
Depreciation and amortisation [2]	124	115	8
Other operating expenses [3]	846	835	1
Total operating expenses	**5,764**	**5,345**	**8**

1) Without past service costs/settlement.
2) Without impairment losses.
3) Without book losses.

Adjusted EBIT up on the previous year

Lufthansa Technik's Adjusted EBIT rose year-on-year by 2% to EUR 425m (previous year: EUR 415m). The strong performance in component maintenance in particular more than made up for the performance of the engine business. The engine business suffered from capacity bottlenecks and unusually long throughput times because of market-wide shortages of spare parts.

C20 MRO: DEVELOPMENT OF REVENUE, ADJUSTED EBIT in €m AND ADJUSTED EBIT MARGIN in %



Segment capital expenditure at a high level

Capital expenditure of EUR 241m was 3% up on the previous year (EUR 233m). Key capital expenditure included the purchase of reserve engines, developing the engine servicing joint venture with General Electric (XEOS) and MTU (EME), expanding the Mobile Engine Services network and developing digital products.

Catering business segment

The LSG group is a leading global provider of airline catering. | Transformation of business model leads to greater flexibility and agility. | Strong customer interest underpins strategic realignment. | Revenue stable year-on-year. | Adjusted EBIT significantly higher.

3.2
€bn **Revenue**

115
€m **Adjusted EBIT**

T052 KEY FIGURES CATERING

		2018	2017	Change in %
Revenue	€m	3,217	3,219	0
of which with companies of the Lufthansa Group	€m	718	663	8
Adjusted EBITDA	€m	181	130	39
Adjusted EBIT	€m	115	66	74
EBIT	€m	110	45	144
Adjusted EBIT margin	%	3.6	2.1	1.5 pts
Adjusted ROCE	%	6.9	3.9	3.0 pts
EACC	€m	30	–17	
Segment capital expenditure	€m	79	84	–6
Employees as of 31.12.	number	35,512	34,563	3
Average number of employees	number	35,548	35,122	1
Fully consolidated companies	number	126	120	5

Business activities

Strong brand portfolio offers extensive range of products and services

The LSG group offers a complete portfolio of products and services related to in-flight service. It has strong independent expert brands. LSG Sky Chefs provides catering for airlines and rail operators as well as lounge management. Every year, it supplies around 700 million meals and is present at 205 airports around the world for more than 300 airlines and a growing number of European rail operators. Retail inMotion is responsible for the development and management of airline-specific in-flight sales programmes. SPIRIANT specialises in the design and procurement of in-flight service equipment, whereas Evertaste makes convenience food for the travel and retail industries. The company also offers security services at airports in North America via SCIS. In Germany, the LSG group operates the Ringeltaube retail markets at airports.

Successfully tapping into new customer groups and expanding the market position of Retail inMotion, to make it a leading provider of on-board sales and technology experts, are stable pillars on which to build the future of the LSG group.

Course of business and operating performance

Transformation of operating business is under way

In view of changes in customer demand, the LSG group has initiated a fundamental transformation of its operating business model, in which Europe is going full steam ahead as a pilot region, promptly setting up central production structures and flexible logistics models. Authorisation to build two regional production plants in Czechia and western Germany are key milestones in this process. Their range will also enable the future production centres to supply major airports at which the LSG group is not currently present.

Customer interest confirms new strategic direction

Major catering contracts were renewed with United Airlines, American Airlines, LATAM, Cathay Dragon and TAP Portugal for several stations in 2018. Contracts to supply Asiana Airlines and Alitalia at their hubs in Seoul and Rome expired, on the other hand. Retail inMotion maintained its position, partly by winning the management contract for the exclusive Etihad in-flight sales programme, marketing innovative concepts for SWISS and Eurowings, and introducing a full-service digital retail platform with new mobile applications for passengers and crews. In the rail business, Comboios de Portugal was acquired as a new customer, and Egypt Air, Aeroflot and Deutsche Bahn were supplied with equipment for the first time.

Two new joint ventures were opened in Wenzhou, China, and Lagos, Nigeria, and the catering joint venture in Luanda, Angola, was extended ahead of schedule.

The plant in Brussels, Belgium, won the QSAI Award as the best catering facility in Europe and also began supplying Amsterdam Airport.

The culinary experts at the LSG group demonstrated their exceptional powers of innovation by developing food for astronauts, which has to meet very high specifications in terms of nutrients, medical aspects and shelf-life, and has been a bonus meal for the ISS crew since June.

Basis established for digitalising processes and cutting costs

At the same time, the company introduced process-based standards across all sites and divisions to create a solid basis for digitalising workflows in production and administration. They include developing applications to establish increasingly paperless production processes and to pilot driverless forklift trucks and robots. Increasing digitalisation is being used to seize opportunities for cutting costs and enhancing customer utility.

Revenue and earnings development

Revenue stable year-on-year

Despite negative exchange rate movements, revenue for the Catering segment was stable year-on-year at EUR 3,217m (previous year: EUR 3,219m), particularly buoyed by solid growth from the Group companies Lufthansa German Airlines and Eurowings. Total revenue increased by 1% to EUR 3,294m (previous year: EUR 3,274m).

Expenses reduced

Operating expenses fell by 1% to EUR 3,208m thanks to positive exchange rate effects, lower expenses for restructuring the European business and lower write-downs on trade receivables (previous year: EUR 3,240m).

T053 OPERATING EXPENSES CATERING

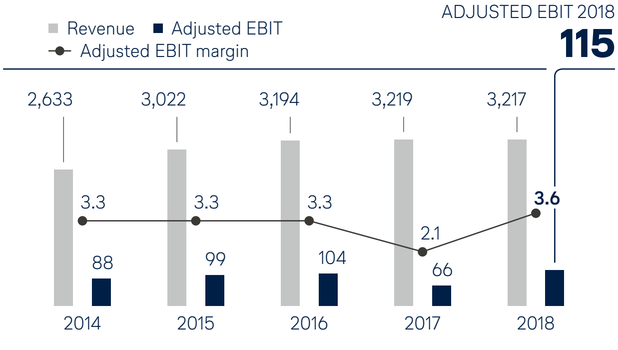
	2018 in €m	2017 in €m	Change in %
Cost of materials and services	1,385	1,396	–1
Staff costs [1]	1,218	1,220	0
Depreciation and amortisation [2]	66	64	3
Other operating expenses [3]	539	560	–4
Total operating expenses	**3,208**	**3,240**	**–1**

[1] Without past service costs/settlement.
[2] Without impairment losses.
[3] Without book losses.

Adjusted EBIT up on the previous year

Adjusted EBIT rose accordingly by 74% to EUR 115m (previous year: EUR 66m).

C21 CATERING: DEVELOPMENT OF REVENUE, ADJUSTED EBIT in €m **AND ADJUSTED EBIT MARGIN** in %



Little change in segment capital expenditure

Segment capital expenditure of EUR 79m was 6% down from the previous year (EUR 84m) and was mainly spent on the modernisation of production facilities.

Additional Businesses and Group Functions

AirPlus expands product portfolio and focuses on core business. | Strong expansion of training capacities weighs on earnings at Lufthansa Aviation Training. | IT companies expand their business. | Result of Group Functions suffered from absence of previous year's non-recurring effect.

T054 KEY FIGURES ADDITIONAL BUSINESSES AND GROUP FUNCTIONS

		2018	2017	Change in %
Total operating income	€m	2,876	2,689	7
Adjusted EBITDA	€m	–135	–77	–75
Adjusted EBIT	€m	–189	–130	–45
EBIT	€m	–162	–133	–22
Segment capital expenditure	€m	59	62	–5
Employees as of 31.12.	number	11,265	11,157	1
Average number of employees	number	11,200	11,161	0

Additional Businesses and Group Functions include the Group's service and financial companies, above all AirPlus, Lufthansa Aviation Training and the IT companies, as well as the Group functions for the Lufthansa Group.

AirPlus expands product portfolio and sharpens focus on core business

Lufthansa AirPlus Servicekarten GmbH (AirPlus) is a leading international provider of solutions for the everyday management of business travel. The company is an international provider on the global market for payment and settlement services in the core business segment for business travel. Under the brand AirPlus International, the company offers market-specific solutions in over 60 countries worldwide. The company served more than 50,000 corporate customers in total in the reporting year.

AirPlus developed the European Corporate Card Solution in 2018. The new card solution helps companies and their employees that are mostly active in Europe to simplify payment processes. Instead of different national banking partners, AirPlus is the central point of contact for everything from implementing the card programme through to payment and reporting. AirPlus is planning to roll the product out to European markets by the end of 2019.

AirPlus also applied its service expertise to international road toll collection under the Road Account brand, and has taken a leading position in the German market. In the context of focussing on its own core business, AirPlus sold this segment as of year-end 2018 to Union Tank Eckstein GmbH & Co. KG (UTA), so opening up attractive prospects for the customers and employees too.

Adjusted EBIT for the company fell to EUR –13m, mainly due to the costs of modernising the IT and process environment (previous year: EUR 49m).

Lufthansa Aviation Training offers comprehensive vocational and professional training for cockpit and cabin crew

Lufthansa Aviation Training GmbH (LAT) is one of the leading flight training companies, providing vocational and professional training for cockpit and cabin crew at twelve training centres. It can look back on more than 60 years of experience in the business. LAT's customer portfolio includes the companies in the Lufthansa Group as well as more than 200 nationally and internationally known airlines.

LAT has pooled all its internal flight schools in Germany, Switzerland and the US under the European Flight Academy (EFA) brand. The company is based in Munich and trains the next generation of airborne staff for the different Lufthansa Group airlines.

Recruitment of trainee pilots was increased significantly by implementing an extensive package of activities as well as a marketing and communications campaign in 2018. Over the course of the year, around 450 students began their two-year pilot training at the European Flight Academy. In the previous year, there were around 240 students.

In 2018, LAT made extensive investments in infrastructure and new training equipment, especially flight simulators. At the same time, the company invests in innovative products and in digitalisation to ensure it can continue to play a pioneering role in these areas in the future.

For this reason the company's Adjusted EBIT fell by 36% year-on-year to EUR 27m (previous year: EUR 42m).

IT companies continue to expand their business

Lufthansa Systems GmbH & Co. KG continued to build on its position within and outside of the Lufthansa Group with more than 350 international airline customers. With the Aviation Campus, an environment was created to provide even more support to projects and initiatives within the Lufthansa Group, and so to make the working relationship even more cooperative, dependable, innovative and digital. New ideas are exchanged and relationships are deepened with partners and start-ups.

The digital transformation process means that Lufthansa Industry Solutions is benefiting from high demand for IT consultancy and system integration services from customers both within and outside of the Lufthansa Group. The IT service provider is therefore expanding its competences in core areas such as IT security, internet of things (IoT), data analytics, artificial intelligence and cloud solutions. Its customer base in its target sectors comprises more than 200 companies.

Including all of their equity investments, the IT companies generated Adjusted EBIT of EUR 32m in the reporting period, 3% lower than in the previous year (previous year: EUR 33m).

Result of Group Functions suffered from absence of previous year's non-recurring effect

The results for the Additional Businesses and Group Functions business segment are largely determined by the Group functions, whose earnings reflect the currency hedging and financing activities carried out by Deutsche Lufthansa AG on behalf of the companies in the Group. The result is therefore heavily exposed to exchange rate movements.

Total operating income for the Group functions increased by 3% to EUR 1,392m. Operating expenses went up by 4% to EUR 1,678m. Adjusted EBIT therefore fell by 6% to EUR –286m (EUR –270m). The lower earnings stem mainly from the absence of one-off exchange rate gains experienced in the previous year and higher IT expenses.

Result for Additional Businesses and Group Functions below previous year

Total operating income for Additional Businesses and Group Functions rose by 7% to EUR 2,876m (previous year: EUR 2,689m). Operating expenses rose by 10% to EUR 3,109m (previous year: EUR 2,839m). Adjusted EBIT fell by 45% to EUR –189m (previous year: EUR –130m).

Opportunities and risk report

The management of opportunities and risks is integrated into all business processes. | Opportunities and risks are identified early and are managed and monitored proactively. | Group risk management also includes CSR-relevant issues and their risks for external stakeholders. | Opportunities are exploited selectively.

OPPORTUNITIES AND RISK MANAGEMENT

Opportunity management process

For the highly dynamic global airline industry, opportunities can arise both externally – from new customer wishes, market structures, ongoing consolidation or changes in the regulatory environment, for instance – and internally – from new products, innovations, quality improvements and competitive differentiation.

Employees and managers in the Lufthansa Group identify opportunities in the course of day-to-day processes and market observation. This is also an integral part of the annual strategy and planning process. Scenario analyses and accurate return calculations are used to precisely examine opportunities and the associated risks. Opportunities that, in an overall assessment, are considered advantageous for the development of the Lufthansa Group are pursued and implemented by means of defined steps. They are managed by the established planning and forecasting processes as well as by projects.

Objectives and strategy of the risk management system

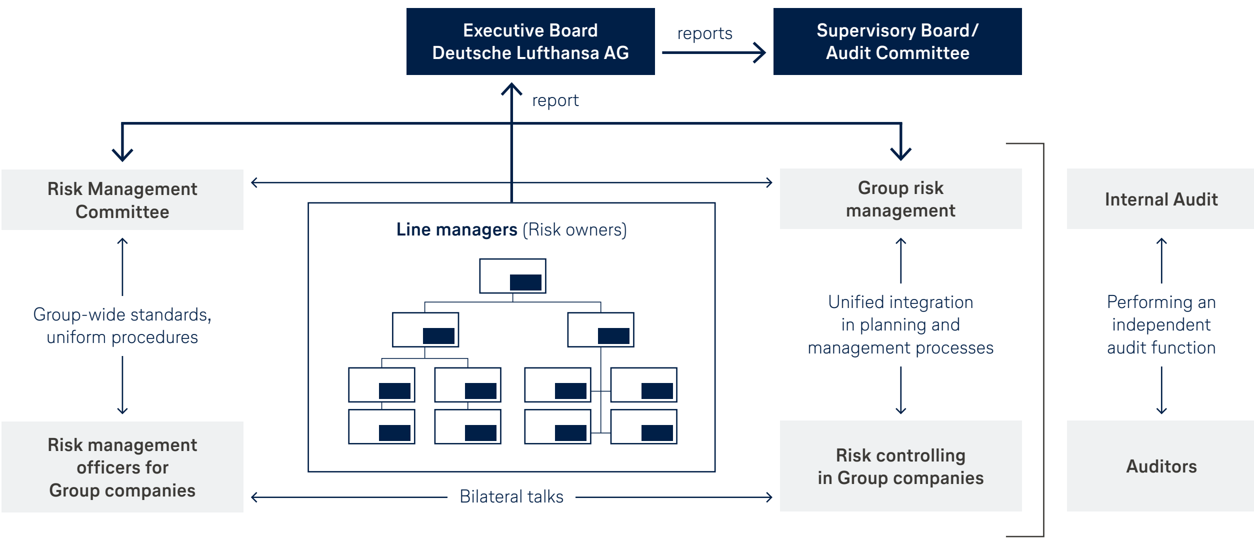
Risk management at the Lufthansa Group aims to fully identify material risks, to present and compare them transparently and to assess and manage them. Risk owners are obliged to monitor and manage risks proactively and to include relevant information in the planning, steering and control processes. The Group guidelines on risk management adopted by the Executive Board define all the binding methodological and organisational standards for dealing with opportunities and risks.

Structure of the risk management system

The scope of consideration covered by the Lufthansa Group's risk management system comprises all of the airlines in the Lufthansa Group, the MRO, Logistics and Catering segments, as well as Lufthansa Aviation Training, Lufthansa AirPlus, Miles & More, Lufthansa Global Business Services, the IT companies and the Delvag group.

↗ **C22 Risk management in the Lufthansa Group** shows the different functions involved.

C22 RISK MANAGEMENT IN THE LUFTHANSA GROUP



The Supervisory Board's Audit Committee monitors the existence and the effectiveness of the Lufthansa Group's risk management.

The Risk Management Committee ensures, on behalf of the Executive Board, that business risks are always identified at an early stage, evaluated and managed across all functions and processes. It is also responsible for improving the effectiveness and efficiency of risk management. Appointments to and the responsibilities of the committee are defined in internal regulations.

Functional responsibility for ensuring that the risk management system is standardised across the Group was moved in 2018 from the staff unit "Risk Management, Internal Control System and Data Protection" to "Corporate Controlling". It continues to report to the CFO. Group risk management is responsible for implementing uniform standards and methods, for coordinating and continuously refining the risk management process and for all risk management reporting in the Lufthansa Group.

The managing directors or management boards of all the companies covered by the risk management system also appoint risk managers. They are responsible for implementing the Group guidelines within their own companies and are in close, regular dialogue with the Lufthansa Group's risk management function. In addition, they ensure that risk-relevant information is agreed with the planning and forecasting processes in their company (risk controlling).

Managers with budgetary and/or disciplinary responsibility are designated as risk owners. Their role is to implement risk management for their area. The identification, evaluation, monitoring and management of risks are therefore fundamental aspects of every management role. The "principles of risk management" stipulate that the occurrence of predictable risks that have not been reported in the past is considered to be a serious management error.

The Internal Audit department carries out internal, independent system audits focusing on the effectiveness, appropriateness and cost-effectiveness of the risk management system practised in the Lufthansa Group.

During its annual audit of the financial statements, the auditor examines the system for the early identification of risks in place at Deutsche Lufthansa AG with regard to statutory requirements. In 2018, the review came to the conclusion that all statutory requirements were met in full.

Stages of the risk management process

The closed and continuous risk management process, which is supported by IT, begins with the identification of current and future, existing and potential opportunities and risks from all material internal and external areas. The Lufthansa Group defines opportunities and risks as the possible positive or negative deviations from a forecast figure or a defined objective for potential future developments or events. The risks identified are checked for plausibility by the companies' risk coordinators and gathered together in the Group's risk portfolio. The risk portfolio documents the systematic entirety of all individual risks and constitutes the quality-assured result of the identification phase. As the risk landscape is dynamic and subject to change, the identification of risks is a continuous task for the risk owners.

Risk owners are obliged at least once a quarter to verify that the risks for which they are responsible are complete and up to date. They also evaluate the extent to which circumstances involving risk have already been included in the forecast results and to what extent there are additional opportunities or risks of achieving a better or worse result than the one forecast. They actively manage opportunities and risks by means of risk mitigation instruments and measures.

On this basis, the Executive Board is informed about the current risk situation of the Lufthansa Group and of the operating segments every quarter. The Executive Board reports annually to the Audit Committee on the performance of the risk management system, the current risk situation of the Lufthansa Group and on significant individual risks and their management. In the event of significant changes to previously or recently identified top risks, mandatory ad hoc reporting processes have been defined in addition to these standard reports.

Evaluation methodology in the risk management process

Once the risks have been identified, all the individual risks are measured according to uniform measurement principles within the Lufthansa Group. Wherever possible, objective criteria or figures derived from past experience are used. Risk measurement forms the basis for consolidating similar individual risks into an aggregate risk. Suitable instruments for risk management are defined with the aim of proactively limiting the risk position. Continuous risk monitoring identifies changes in individual risks and any required adjustments to risk management at an early stage. Steps necessary to manage and monitor risks are initiated as required. Steps, in this sense, mean clearly defined activities with a fixed duration, responsibility and time frame, which serve to develop control instruments. The progress made is also monitored continuously. The methodological evaluation of risks at the Lufthansa Group distinguishes between qualitative and quantitative risks. Risks are generally evaluated on a net basis, i.e. taking implemented and effective management and monitoring instruments into account.

Qualitative risks are mostly long-term developments with potentially adverse consequences for the Lufthansa Group. As concrete information is often not available, these risks cannot or cannot yet be quantified. In the context of qualitative risks, risk management amounts to a strategic approach to uncertainty. Qualitative risks are often identified in the form of "weak signals". In order to evaluate such risks as systematically as possible in spite of this, estimates are made about their significance and their magnitude. Significance describes the potential impact of the individual risk – for example, on the Group's reputation, business model or earnings. The estimate of magnitude assesses how pronounced or intense the (weak) signals are that indicate a potential risk to the Lufthansa Group or a specific company. ↗ **C23 Lufthansa risk evalution for qualitative and quantitative risks** shows the different categories used.

Quantitative risks are those whose potential effect on earnings can be estimated. A distinction is made between different probabilities of occurrence. The extent of loss is given as the potential monetary impact on the planned Adjusted EBIT. Depending on the type of risk, this may relate either to relatively infrequent event risks, such as an airspace closure, or to risks from deviations from planned business developments, due to fuel price volatility, for instance. Quantitative risks therefore form the basis for the overarching verification of potential deviations from plans and forecasts. The thresholds for classifying the monetary Adjusted EBIT effect are defined centrally for the Lufthansa Group and for the Group companies according to standardised criteria.

The individual qualitative and quantitative risks are divided into classes A, B, C, D and other risks to assess their materiality. In accordance with DRS 20, all quantitative A and B risks as well as all qualitative A and B risks that are at least of a "substantial" significance and a "high" magnitude count as material risks for the Lufthansa Group. ↗ **C23 Lufthansa risk evaluation for qualitative and quantitative risks.**

Risks for the Lufthansa Group that meet this materiality criterion are presented in a table in the order of their significance for the Lufthansa Group in the section ↗ **Opportunities and risks at an individual level, p. 64ff.** and are described in detail below. In some cases, equivalent risks are shown here in a more aggregated form than that used for internal management purposes. Unless stated otherwise, all the segments in the Lufthansa Group are exposed to a greater or lesser degree to the risks described.

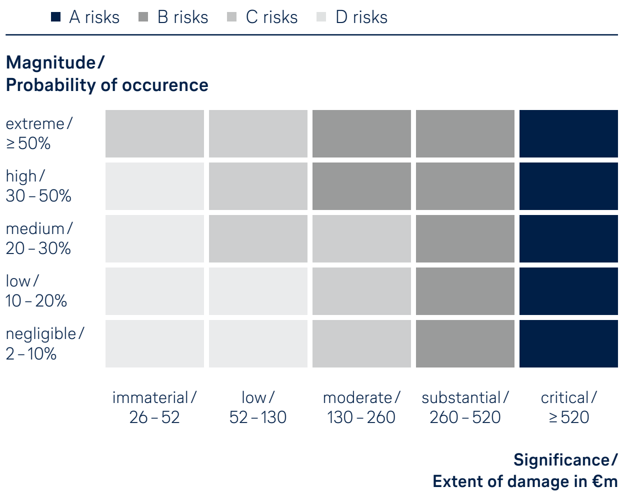
Inclusion of CSR Directive Implementation Act in risk management

When the CSR Directive Implementation Act (CSR-RUG) came into effect in April 2017, the Lufthansa Group's risk management was expanded to cover aspects relevant to CSR (environmental, employee and social concerns, as well as human rights, anti-corruption measures, bribery and the supply chain) and their risks for external stakeholders. The risk management methodology remained unchanged, however. Risks are reported in the non-financial report in line with CSR-RUG if they would have a severely adverse impact on the Company and their occurrence is highly likely. The Act was revised in 2018. As in the previous year there were no CSR risks that required reporting.

Internal Control System for monitoring the risk management process

The risk management process in the Lufthansa Group is monitored by an internal control system (ICS). This entails systematically reviewing the effectiveness of control measures for substantial risks as part of the Lufthansa Group's ICS. The relevant risks are selected annually. The review includes an assessment of the structure and the functionality of the Lufthansa Group's ICS. Reporting on the results of the review forms part of the report to the supervisory boards of the individual companies on the effectiveness of the ICS, and to the Audit Committee of the Deutsche Lufthansa AG Supervisory Board on an overall basis.

C23 LUFTHANSA RISK EVALUATION FOR QUALITATIVE AND QUANTITATIVE RISKS



OPPORTUNITIES AND RISKS AT AN INDIVIDUAL LEVEL

The table, below, shows the top risks for the Lufthansa Group. They comprise all quantitative A and B risks, as well as qualitative risks with a rating of at least “substantial” and “high” in the order of their significance. Detailed explanations can be found in the following sections.

Macroeconomic opportunities and risks

Uncertain economic environment

The Lufthansa Group’s forecast for 2019 is based on the expectation that future macroeconomic conditions and sector developments will correspond to the description given in the ↗ **Forecast, p. 75ff.** If the global economy performs better than forecast, this is expected to have a positive effect on the Lufthansa Group’s business. Future revenue and earnings for the Lufthansa Group may, in this case, exceed the current forecast. As a global company, the Lufthansa Group can also benefit from positive developments outside its own core market. The same applies if the performance of the global economy and of individual markets that are relevant for the Lufthansa Group is worse than forecast.

Risks with potential effects on global economic growth, and thereby for the Lufthansa Group’s sales, primarily arise from increasing uncertainty about political developments, such as the ongoing protectionist economic policy of the USA.

Uncertainties remain about the short and medium-term effects of Brexit on the European economy in general and air transport in particular. The Lufthansa Group monitors the political developments surrounding Brexit and is prepared for a variety of scenarios. In recent months, the Group has looked in greater detail at a “no-deal” exit of the United Kingdom from the European Union and has already taken the first steps to prepare for it. It cannot be ruled out that macroeconomic or regulatory changes have an impact on the financial performance of the Lufthansa Group.

Crises, wars, political unrest or natural disasters

The still critical security situation, particularly in the Middle East and North Africa but also in Europe and Germany, as well as the latent risk of terrorist attacks on air traffic and aviation infrastructure could have concrete effects on business operations and on the safety of the Lufthansa Group’s flight operations, customers and employees. Potential losses could result from primary effects, such as not being able to fly to individual destinations, but also from significant secondary effects, including a fall in passenger numbers, higher insurance premiums, higher fuel costs due to airspace closures or more stringent statutory security requirements.

T055 TOP RISKS LUFTHANSA GROUP

	Significance	Magnitude	Trend	Description
Quantitative risks				
Fuel price movements	critical	extreme	→	↗ p. 67f.
Cyber and IT risks	critical	extreme	→	↗ p. 71f.
Breaches of compliance requirements	critical	high	↑	↗ p. 72
Exchange rate losses on pension fund investments	critical	negligible	→	↗ p. 69
Exchange rate movements	substantial	extreme	↓	↗ p. 68
Earnings risks	substantial	extreme	↑	↗ p. 66
Crises, wars, political unrest or natural disasters	substantial	high	→	↗ p. 64f.
Risks from irregularities in flight operations	substantial	medium	→	↗ p. 66
Counterparty risks	substantial	low	→	↗ p. 69
Loss of the investment grade rating	substantial	negligible	↓	↗ p. 69
Qualitative risks				
Flight operations risks	critical	negligible	→	↗ p. 70f.
Pandemic diseases	substantial	high	→	↗ p. 65
Human resources	substantial	high	→	↗ p. 70
Increased noise legislation	substantial	high	→	↗ p. 67
Market entry Original Equipment Manufacturer [1]	critical	high	→	↗ p. 66
Contaminated foods [1]	critical	low	→	↗ p. 71

[1] Risk evaluation on segment level.

Because of its strong symbolic effect, civil aviation is still a potential target of terrorist attacks, which have to be evaluated in the context of the wider regional environment. Threats to civil aviation from complex anti-aircraft systems, especially in the hands of non-state forces, and greater challenges in the use and coordination of airspace as a result of increasing military activity still require comprehensive measures to assess and manage the risks to flights over areas of conflict. The demands made of the security functions of international companies rise continuously in view of the political environment and the continuous development of new technology. Increasing security regulations due to a higher amount of threats, as well as a tightening of entry requirements for passengers around the world, could lead to further restrictions in international air traffic and thereby to adverse effects for the air transport industry.

In order to analyse, track and manage these risks, the Lufthansa Group carries out comprehensive monitoring of the global security situation and current events that may affect the Lufthansa Group. This relates both to immediate action and to the anticipation of possible dangers and the implementation of effective protective measures in advance. The Lufthansa Group prepares comprehensive security analyses on an ongoing basis in order to assess developments in advance and so to draw up preventive scenarios in the event of any disruptions. It can draw on an extensive network of national and international security services and specialised security advisers to do so. The necessary security measures depend on the probability and consequences of the event.

To evaluate security-relevant events in the context of the regional environment, the Lufthansa Group uses a quality management system, which helps with the continuous evaluation of local security procedures, both in existing operations and with new destinations. In order to ensure compliance with national, European and international aviation security legislation and the Lufthansa Group's own security standards, these sites are inspected regularly in the course of risk audits for aviation security and country risks. If necessary, deficits are compensated for by additional measures that may affect all relevant functional areas. In addition, perceptions of Germany in certain regions of the world and the profile of the Lufthansa Group compared with other, particularly exposed Western airlines are taken into account when choosing infrastructure and processes abroad.

Pandemic diseases

Risks exist around the world from the transmission of pathogens from animals to humans, from humans to humans and by other means. Epidemics, pandemics or other causes such as bioterrorism could cause high rates of disease in various countries, regions or continents, which could lead to a drastic fall in passenger numbers in the short, medium or long term due to a fear of contagion. Furthermore, it is possible that staff are not willing to fly to the countries concerned for fear of infection and that local employees want to leave these countries. A high prevalence of sickness among employees may endanger operations.

The Lufthansa Group permanently reviews information from the World Health Organisation (WHO), the Robert Koch Institute in Germany and other institutions in order to identify risks of an epidemic or pandemic as early as possible. Employees receive detailed information, risk groups are given personal protective equipment and preventive vaccination campaigns against influenza run throughout the Lufthansa Group every year.

Sector-specific opportunities and risks

Market growth and competition

The airline industry overall remains on a long-term growth path, with above-average growth rates at low-cost carriers in particular and in specific growth regions such as Asia/Pacific.

The Lufthansa Group is broadly positioned, which enables it to benefit from global growth across all of its business segments. At the same time, the ongoing consolidation of the industry plays an important role. The Lufthansa Group can strengthen its competitive position in a fragmented market environment, stabilise pricing and seize growth opportunities by means of strategic acquisitions and partnerships. The current fleet orders and delivery slots for aircraft with new technology allow the airlines in the Lufthansa Group to participate actively in this global growth and respond flexibly to changes in the market and in competition by adjusting capacity.

Market consolidation

For some years, an increased trend towards consolidation in the fragmented European airline sector has been apparent. Examples in the reporting year include the takeover of Austrian company Laudamotion by Ryanair or the insolvencies of Small Planet Airlines (Germany) and Primera Air Scandinavia. The Lufthansa Group probes this environment from a position as an active consolidator and evaluates potential M&A transactions. It aims to exploit opportunities from the ongoing market consolidation, such as economies of scale, efficiency gains or access to attractive slots. At the same time, the Lufthansa Group emphasises a careful analysis and assessment of the risks of such transactions, including complexity and integration risks.

Converging business models and new customer requirements

In the European market, the convergence of the business models of low-cost carriers and full-service airlines continues. This is resulting in increasing cost pressure in the full-service airline segment, which is being addressed by the use of new technologies and efficient use of resources. In a price-sensitive market, the Lufthansa Group is therefore also concentrating on high-quality products and discerning customers in its strong home markets as well as on expanding Eurowings.

Customers are increasingly seeking a personalised travel experience. The Company's clear aim remains to fulfil this premium product promise. The Lufthansa Group invests continuously in employees and systems in this area. So, under the strategic "New Premium" slogan, the Network Airlines aspire to provide every customer with the right product at the right time. The establishment of Eurowings Digital GmbH in the reporting year also drives the development of innovative products and services for travellers, especially in the form of software solutions and mobile applications in the low-cost segment.

Service companies

With its service companies in the Logistics, MRO and Catering segments, the Lufthansa Group has a broad base from which it participates in the global growth of the airline industry. Lufthansa Cargo is pursuing growth opportunities by developing innovative products, digitalisation and establishing further airfreight joint ventures. Lufthansa Technik is concentrating on extending its service portfolio, with a focus on digitalisation, development opportunities in the growth markets of Asia and America and expanding partnerships with OEMs (Original Equipment Manufacturers). Changing customer requirements are prompting the catering specialist LSG group to develop new business models and sales structures, such as the development and management of IT-enabled onboard retail solutions. Regional challenges range from comprehensive restructuring in Europe to fast growth in Asia and North America.

Earnings risks

Price volatility, overcapacities, cyclical fluctuations, current developments in the markets and competition, geopolitical changes and unpredictable events with a global impact all create earnings risks for the entire Lufthansa Group. Earnings performance is monitored continuously. Sales, product, capacity and cost-cutting measures are taken as needed. Unit costs are improved systematically and sustainably by continuous efficiency gains and as the result of segment-specific restructuring projects.

Risks of irregularities in flight operations

If aircraft cannot take off or land on time due to the weather or infrastructure bottlenecks, for example, this may result in higher costs for irregularities in the form of direct and indirect compensation payments, quite apart from the impact on customer satisfaction. Following the problems last year in terms of operational stability, with changes to flight timetables, flight cancellations and delays which had an adverse impact on the result, a large number of steps was taken throughout the Group to improve operational stability in 2019. ↗ **Combined non-financial report, p. 206ff.** A substantial risk remains even in 2019, however, since external circumstances, especially regarding the ongoing capacity bottlenecks in air traffic control, will remain challenging.

Developments and competition in the supply market

Digital platforms are becoming increasingly important for the planning, management and awarding of physical maintenance, repair and overhaul (MRO) fulfilment and jeopardise the direct contractual and customer relations between the MRO provider and the airline. As part of this digital transformation, new competitors are trying to enter the market with data-based services and digital capabilities. Access to and control over this data plays an overarching role for gaining control over costs and competence in the MRO award process.

Furthermore, there is a persistent trend towards a smaller and smaller number of manufacturers of original parts for each aircraft and engine type. The market position of OEMs results in barriers to entry for independent providers of aircraft MRO services, especially for new aircraft models, and makes it more difficult to gain access to licences and intellectual property. Expanding and maintaining their market position in this environment is a key challenge for MRO providers.

Lufthansa Technik counters these risks through strategic partnerships, joint ventures and the establishment of the AVIATAR digital platform.

Opportunities and risks from the regulatory environment

Political decisions at national and European level continue to have a strong influence on the international aviation sector. This is particularly the case when countries or supranational organisations unilaterally intervene in the competition within a submarket, for example, by way of regional or national taxes, emissions trading, fees and charges, restrictions or subsidies. The Lufthansa Group campaigns actively to influence these developments in the appropriate boards and forums and in cooperation with other companies and industry associations.

Increased noise legislation

Stricter noise standards may apply to airlines or airports. They may cause, for example, higher costs for retrofitting aircraft, bans on specific aircraft models, higher charges or higher monitoring expenses. The still outstanding revision of the directive on environmental noise at European level is relevant here. The limits set in the Aircraft Noise Abatement Act were reviewed at the federal level as scheduled in 2017. Any changes to the Act are expected to be made in the current legislative period. Although the latest results of noise research do not show any significant changes in health risks, the way in which noise is perceived as a nuisance by those affected has changed radically, even when noise levels at airports are stable. Further lobbying in this area is therefore expected to result in more restrictive noise legislation.

In November 2017, the Lufthansa Group, Fraport, Condor, the Board of Airline Representatives in Germany (BARIG) and the government of Hesse came to a voluntary agreement on noise limits at Frankfurt Airport. This framework still allows for growth and does not provide for any interference with operating licences as long as the limits are respected. Introducing a voluntary noise limit in Frankfurt could have an effect on other sites in Germany.

The Lufthansa Group develops coordinated strategies by means of targeted communications in collaboration with trade associations and other industry stakeholders. It is involved in research projects looking at active noise abatement measures ↗ **Combined non-financial report, p. 206ff.**, and closely monitors research into the effects of noise.

Financial opportunities and risks

System of financial risk management for fuel prices, exchange rates and interest rates

Financial and commodity risks are managed systematically. Derivative financial instruments are used exclusively for hedging underlying transactions. Prices are averaged by means of layered hedging. Financial liabilities are either at floating rates from the outset or are swapped into floating rates using derivatives. This enables the Lufthansa Group to minimise the average long-term interest expense. Foreign currency risks from financing are always hedged to 100%.

Here, the Lufthansa Group works with partners that have at least an investment grade rating equal to Standard & Poor's BBB rating or a similar long-term rating. All hedged items and hedging transactions are tracked in treasury systems so that they can be valued at any time.

Appropriate management and control systems are used to manage financial and commodity risks, which measure, manage and monitor risks. They cannot be eliminated altogether, however. The functions of trading, settlement and controlling of financial risk are strictly separated at an organisational level, which the Lufthansa Group achieves through the use of internal guidelines that are continuously developed. The executive departments, Group Financial Risk Controlling and Corporate Audit departments ensure compliance with these guidelines. Furthermore, the current hedging policies are also discussed regularly in management board meetings across the business areas. The Supervisory Board is regularly informed of the amounts of risk. ↗ **Note 44, p. 164ff.**

Fuel price movements

Oil prices were higher in 2018 than in 2017 altogether. There has been no year-on-year change in the risk of price fluctuations.

In the reporting year, the Lufthansa Group consumed around 10.8 million tonnes of kerosene. At around EUR 6.1bn, fuel expenses constituted a major item of expense for the Lufthansa Group in 2018. Severe fluctuations in fuel prices can have a significant effect on the operating result. A change in the fuel price of +10% (–10%) at year-end 2019 would increase (reduce) fuel costs for the Lufthansa Group by EUR 343m (EUR –319m) after hedging. The Lufthansa Group therefore hedges fuel prices with a time horizon of up to 24 months. This is aimed at reducing fluctuations in fuel prices. Limited protection against higher prices is accepted in exchange for maximising the benefits derived from any fall in prices.

The hedging level and hedging horizon depend on the risk profile, which is derived from the business model of the Group company concerned. The hedging policy and structure shown in chart ↗ C25 are applied to Lufthansa German Airlines, SWISS and the scheduled operations of Austrian Airlines. Transactions for some other Group companies are hedged to a lesser extent, and are therefore more exposed to the risk of a price increase. Conversely, they also profit more if prices go down. Charter business is hedged in full using forward transactions as soon as the contract has been signed. This largely eliminates the risk of fuel price increases. On the other hand, this also eliminates the chance of benefiting from a fall in prices.

The Lufthansa Group uses standard market instruments in the form of option combinations for its fuel hedging. Hedges are mainly in crude oil for reasons of market liquidity. The hedging transactions are based on fixed rules and map the average of crude oil prices over time. Depending on the company in the Group, the amounts hedged each month result in a hedging level of up to 85%.

As of 22 February 2019, there were crude oil and kerosene hedges for circa 76% of the forecast Group fuel requirement for 2019, in the form of futures and options. For 2020, around 29% of the forecast fuel requirement was hedged at that time.

In the context of fuel supplies, there are opportunities in the development of new production techniques, both for crude oil and for other energy sources. This could have a direct or indirect effect on the Lufthansa Group's kerosene expenses, by reducing both prices and volatility.

As fuel is priced in US dollars, fluctuations in the euro/US dollar exchange rate can have a positive or a negative effect on reported fuel prices. US dollar exposure from planned fuel requirements is included in currency hedging.

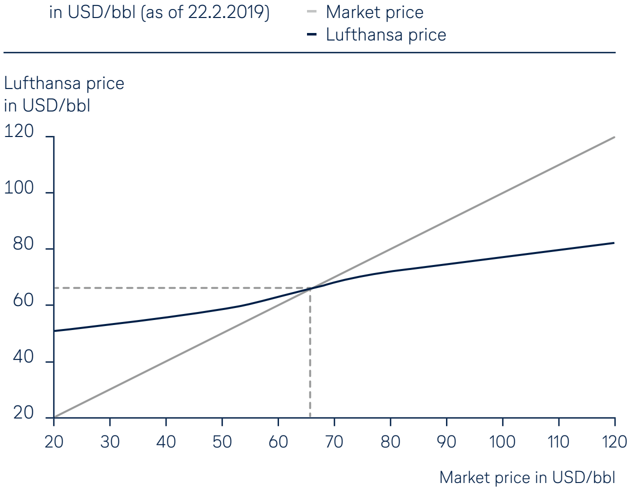
Exchange rate movements

Foreign exchange risks for the Lufthansa Group arise in particular from international ticket sales and the purchasing of fuel, aircraft and spare parts. All subsidiaries report their planned currency exposure over a timeframe of at least 24 months. At Group level, a net position is aggregated for each currency to take advantage of "natural hedging". 23 of the 64 foreign currencies in total are hedged because their exposure is particularly relevant to the Lufthansa Group. ↗ **Note 44, p. 164ff.**

Financial developments also represent opportunities for the Lufthansa Group. Volatility in fuel prices, exchange rates and interest rates can result in lower costs and/or higher income if the direction taken is better than the assumptions used for planning and forecasting. There were no significant changes to this estimate compared with the previous year.

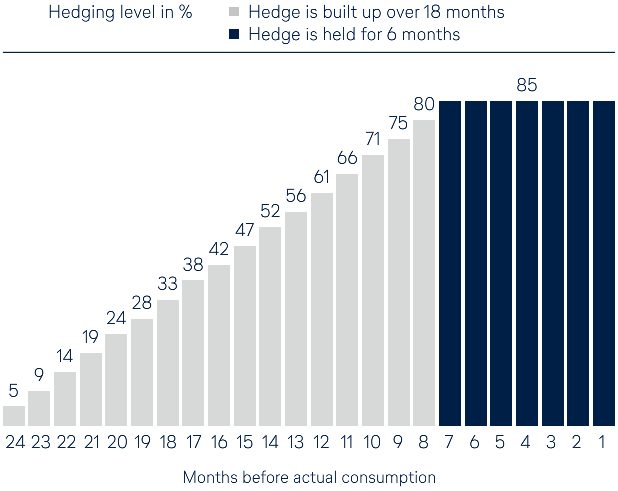
C24 HEDGED OIL PRICE LUFTHANSA GROUP 2019

in USD/bbl (as of 22.2.2019)



C25 HEDGING STRATEGY LUFTHANSA GROUP

Hedging level in %



Loss of the investment grade rating

Deutsche Lufthansa AG has an investment grade rating from Standard & Poor's (BBB –) with a positive outlook and Moody's (Baa3) with a stable outlook. Since November 2016, Deutsche Lufthansa AG has also had a third investment grade rating of BBB – with a positive outlook from the agency Scope Ratings. A downgrade in the credit rating to non-investment grade could lead to a significant deterioration in funding terms and financial risk management and restrict access to new funding and hedging instruments.

The financial indicators relevant to the rating have stabilised in the investment grade range for all three rating agencies. The measures included in the planning are all aimed at strengthening the financial profile by means of investment discipline and earnings improvement, and provide the opportunity to further reduce the Group's debt. Accounting standard IFRS 16, which is applicable from 2019 onwards, means that lease liabilities must be recognised in the statement of financial positions.

Capital investments and liquidity risks

Capital investments at the Lufthansa Group are managed from the point of view of operating and strategic liquidity. Investments are also made by the Lufthansa Pension Trust and other pension funds in the Lufthansa Group. The risks mainly consist of potential price changes for shares, fixed-income securities and interest rates, as well as credit risks.

Capital investments to ensure the Lufthansa Group's operating liquidity are generally made in accordance with the Group's financial guidelines. The investment period is limited to a maximum of 24 months, whereby at least EUR 300m should be in investments that can be liquidated on a daily basis. For its operating liquidity, the Lufthansa Group mainly uses money market funds that can be liquidated daily, overnight deposits, fixed-term deposits and short-term securities, especially commercial papers, from creditworthy issuers.

The investment structure of the strategic minimum liquidity was developed using a stochastic allocation study. During its development, the Lufthansa Group's high liquidity requirements and conservative investment principles were taken into account. These investments are largely made in money markets and fixed-income securities. A mixture of European shares is also included. Active risk management restricts the absolute share price risk to 2% per annum. Asset management and management of hedges is undertaken by external service providers, taking into consideration the need for instant liquidability, i.e. within a maximum of four weeks.

Exchange rate losses on pension fund investments

Pension fund investments are subject to price fluctuations on international capital markets. However, the broad diversification across many asset classes (including global equities and fixed-income securities) does reduce the overall investment risk to capital investments. An investment manager also monitors and manages risk using a stop-loss system. Significant market volatility is expected to continue in view of persistent uncertainties such as the US trade war with China, the Italian debt crisis and the impending Brexit. The likelihood of increased volatility is higher than in the previous year, while the risk of significant exchange rate losses is still considered to be low. ↗ **Financial strategy and value-based management, p. 16ff.** Further information on opportunities from changes to retirement benefits ↗ **Human resources, p. 70.**

Counterparty risks

The transactions completed in the course of financial management give rise to default risks. The counterparty default risk is continuously assessed using a system of counterparty limits.

In times of broad economic swings, the default risk for trade receivables also increases. Here, too, their performance is tracked constantly at the level of the Group and the individual segments. Preventive measures are also taken. ↗ **Note 38, p. 153ff.**

Company-specific opportunities and risks

Broader process-based organisation creates potential

Expanding the process-oriented matrix organisational structure is a key element of the Group's continuous improvement initiatives. This step has already been taken at the Network Airlines and has been implemented in administrative areas and in other operating segments from 2018 onwards, which will create additional potential for efficiency gains and cost reductions.

Potential opportunities and risks to forecast economic developments, in the form of unforeseen internal and external factors, both positive and negative, must be identified and managed during the course of the year.

Human resources

INTERNAL AND EXTERNAL LABOUR DISPUTES

The risk of strikes by cockpit staff has been resolved by means of long-term tariff agreements between Deutsche Lufthansa AG, Lufthansa Cargo, Germanwings and the Vereinigung Cockpit pilots' union, which remain in force until mid 2022. Long-term tariff agreements for ground staff were also signed in January 2018 by Deutsche Lufthansa AG, Lufthansa Technik AG, Lufthansa Cargo AG and LSG for the period until the end of September 2020. The risk of strikes at these companies can therefore be classed as low. In fact, the year 2018 was marked by the implementation of measures to encourage social partnership. The same applies to cabin staff. Indeed a round of wage bargaining is due here at Deutsche Lufthansa AG in mid 2019, and the trade union has announced that it will raise demands for the framework agreement. However, there is still no direct and immediate strike risk, since an agreement was reached with UFO in 2016 to apply binding solution mechanisms in the event of a conflict, before any industrial action is taken. Discussions on the wage agreements for ground staff at Eurowings Technik are nearing their end. As such, all wage agreements for ground staff will be signed by the end of 2019. The wage agreements for cockpit crew were agreed for the long term and apply until 2021. For cabin crew, the competition between different trade unions until wage settlements are reached means there is a medium risk of industrial action.

REDUCED EMPLOYEE COMMITMENT

Implementing structural changes may reduce the commitment of employees and their loyalty to the Lufthansa Group. Change management initiatives are therefore increasingly being implemented and communications activities initiated to improve employees' commitment. The Lufthansa Group also continues to strive to offer attractive employment terms. This includes continuing to develop the pay structure, fringe benefits and non-monetary remuneration components, including flights at reduced prices, in different ways depending on the employee group.

STAFF STRUCTURE

Differences between strategic HR requirements, the existing competences of employees and how they are distributed across the companies in the Lufthansa Group constitute a structural HR risk. The Lufthansa Group addresses this risk by means of strategic human resources planning, drawing up a skills model and offering training courses for all the employees in the Group.

NEW LABOUR LEGISLATION

Depending on the way it is drafted and structured, new labour legislation may affect operating workflows and entrepreneurial freedom of action. This depends on the way the contents of the coalition agreement (such as changes concerning temporary contracts) are reflected in specific legislation and implemented. Here, too, the Lufthansa Group works to ensure that its interests are taken into account by policymakers.

Overall, human resources risks are largely unchanged compared with last year.

Flight operations risks

The airlines in the Lufthansa Group are exposed to potential flight and technical operating risks. One of these is the risk of not being able to carry out regular flight operations for technical or external reasons.

Another flight and technical risk is the risk of an accident, with the possibility of damage to people and property; it is divided into environmental factors (for example, weather or bird strike), technical factors (for example, engine failure), organisational factors (such as contradictory instructions) and the human factor.

The companies in the Lufthansa Group search for these dangers systematically and in a forward-looking manner in order to manage the resulting risk by means of suitable countermeasures and to increase the level of flight safety further. This takes place in the course of the safety management system, which is focused on proactively addressing any threats to the organisation, identifying risks, defining mitigation measures and thus minimising risks. For example, every single flight made by an airline in the Lufthansa Group is routinely analysed using the parameters recorded in the flight recorder (black box) in order to identify any peculiarities at an early stage and to act on them, such as in the context of training courses, for example. Other sources of information, e.g. accidents and hazardous situations around the world that come to light, are also analysed and the results are integrated into prevention measures, such as training courses, where relevant. The safety management systems are continuously improved and refined.

The networking of the airlines in the Lufthansa Group in terms of flight safety made further progress. A Group Safety Management Manual has now been established that aims to define process standards applicable throughout the Lufthansa Group. The sustained implementation of uniform flight safety standards across the entire Lufthansa Group is also supported by further progress on harmonising the IT environment in the course of safety management. Ongoing dialogue between the airlines in the Lufthansa Group provides an opportunity to consolidate information gained in an operational setting and factor it into the development of the corresponding standards.

The organisational structure continues to evolve, since the demands made with regard to risk identification have increased and there is much greater public awareness of topics relating to safety. Reorganising the “Corporate Safety & Security” process underlines this importance and raises its visibility inside and outside of the Lufthansa Group.

Other operating risks

In the Catering segment, it is vital that food is produced to the highest quality and in accordance with all hygiene and food safety standards. Standardised quality management systems are used to identify potential quality defects at an early stage. Furthermore, the LSG group invests continuously in its production facilities and equipment as well as in modern technology. The modernisation process is supported by intensive training courses as well as learning and problem-solving workshops in the individual companies.

Cyber- and IT risks

Cyber-risks are all risks to which computer and information networks, ground and flight infrastructure as well as all IT-enabled commercial and production processes are exposed from sabotage, espionage or other criminal acts. If established security measures fail, the Lufthansa Group may suffer reputational damage and be obliged to make payment on the basis of contractual and statutory claims by customers, contract partners and public authorities. A loss of income is also conceivable if operating systems should fail.

The business processes in the Lufthansa Group are supported by IT components in virtually all areas. The use of IT inevitably entails risks for the stability of business processes and for the availability, confidentiality and integrity of information and data, and such risks ultimately cannot be fully eliminated.

The dimensions of cyberattacks are increasing drastically worldwide in terms of their quantity and professionalism. This is borne out by the Group’s own experience of security incidents and by information from other companies and public agencies. At the same time, the digitalisation of business processes in the Lufthansa Group is increasing, meaning that the potential effects of cyberattacks may continue to escalate. As a result, cyber-risks will become a greater and greater potential risk for the Lufthansa Group in the foreseeable future.

In recent years, the Executive Board has adopted measures to strengthen the IT security of the Lufthansa Group, which have been implemented in numerous projects. Technological tools have been introduced to prevent cyberattacks, processes have been adapted to changing risk scenarios, organisational changes have been made and awareness campaigns have been carried out. Increasing threats prompted the Lufthansa Group to evaluate the IT security situation again in 2018 and launch a comprehensive programme aimed at increasing the cyber-resilience of the Lufthansa Group. The three-year cybersecurity programme adopted by the Executive Board implements measures in various core areas across the Group in a large number of projects. This also includes the area that prepares the airlines in the Lufthansa Group for the next generation of e-enabled aircraft. The measures focus on risk-oriented implementation in IT systems and processes, taking the partners and providers of the Lufthansa Group into account.

IT risk and IT security processes are organised across segments. The status of IT risks and security is compiled annually, consolidated at Group level and discussed by the Risk Management Committee for the Lufthansa Group. The risk and security management systems and selected other measures are also reviewed regularly by the Internal Audit department.

The Lufthansa Group sources most of its IT infrastructure from external service providers. The operational and commercial risks that by nature accompany this kind of outsourcing are assessed and managed on a continuous basis. The transition to the new provider is taking place within an independent wide-ranging programme.

Protecting the privacy of its customers, employees, shareholders and suppliers has always been an important and self-evident concern for the Lufthansa Group. Data protection became significantly more important on 25 May 2018 when the General Data Protection Regulation (GDPR) took effect, establishing extensive documentation and reporting obligations. A large number of customers exercised their rights, especially to access and erasure of data. All the Group companies subject to the GDPR have adapted to the new requirements and implemented the corresponding governance structures and processes. Data protection was strengthened in organisational terms in order to identify and manage potential risks from the stricter requirements.

Precautions against compliance risks

Compliance refers to the observance of legally binding requirements, and is intended to ensure that the Company, its executive bodies and its employees act in accordance with the law. The effectiveness of its compliance programme is therefore vital to the Lufthansa Group. ↗ **Corporate governance report, p. 82ff.**

The Lufthansa Group is active in many countries and is therefore subject to various legal norms and jurisdictions with different, and sometimes hard to interpret, legal frameworks, including for criminal law on corruption. Furthermore, its activities must not only be measured against domestic criminal law, the law applicable in its sales areas and the local cultural customs and social conventions; commonly used extraterritorial legislation, such as the US Foreign Corrupt Practices Act (FCPA) and the UK Bribery Act, must also be taken into account. Any infringements are investigated rigorously; they may result in criminal prosecution for the individuals involved and could expose the Company to hefty fines. There would also be reputational damage that is difficult to measure and the Company would be put at a distinct disadvantage when competing for public tenders. The Lufthansa Group has put processes in place that are intended to identify specific compliance risks and, in particular, to prevent corruption.

The Lufthansa Group is also exposed to risks arising from competition and antitrust law. They stem, in particular, from the fact that the Lufthansa Group operates in highly oligopolistic markets, cooperates with competitors in alliances, may have to deal with changes in the legal parameters for certain flight routes and that in some of its segments the suppliers, competitors and clients are the same legal person. The Lufthansa Group's Competition-Compliance function addresses the risks of collusive behaviour and provides employees with extensive training.

The Lufthansa Group, in particular Deutsche Lufthansa AG as a publicly listed company, is also exposed to risks from capital market compliance. Since July 2016, the EU Market Abuse Regulation (MAR) and many other national and European regulations have codified bans on insider trading and market manipulation, the obligation to make ad hoc announcements as well as other obligations relating to capital markets. These regulations are directly applicable in Germany. At times, it can be difficult to predict how these new European regulations will be interpreted and administered by the public authorities. The Lufthansa Group takes many organisational precautions to comply with the provisions of the MAR. It uses a specific software solution, for example, and has corresponding guidelines, information circulars and process descriptions. In addition, the Group Compliance Office conducts training courses for individuals specifically affected by the laws applicable to insider trading and market abuse.

Despite the existence of a compliance management system and its risk-mitigating activities, individual breaches, the related investigations by public authorities and penalties cannot be ruled out completely, particularly in the fields of integrity, competition and capital market compliance.

Litigation, administrative proceedings and arbitration

The Lufthansa Group is exposed to risks from legal, administrative and arbitration proceedings in which it is currently involved or which may take place in the future. Due to the possible restricting effect, the risks have not been quantified in accordance with DRS 20 No. 154. It cannot be ruled out that the outcome of these proceedings may cause significant damage to the business of the Lufthansa Group or to its net assets, financial and earnings position. Appropriate provisions have been made for any financial losses that may be incurred as a result of legal disputes. More information on provisions for litigation risks and contingent liabilities can be found in the Notes to the consolidated financial statements ↗ **Note 34, p. 149f.** and **Note 45, p. 176ff.**

Furthermore, the Lufthansa Group has taken out liability insurance for an amount that the management considers appropriate and reasonable for the industry in order to defend itself against unjustified private third-party claims and to settle such claims it considers justified. Even in such cases, however, this insurance cover does not protect the Lufthansa Group against possible damage to its reputation. Such legal disputes and proceedings may also give rise to expenses in excess of the insured amount, expenses not covered by the insurance or those which exceed any provisions previously recognised. Finally – and depending on the type and extent of future losses – it cannot be guaranteed that the Lufthansa Group will continue to obtain adequate insurance cover on commercially acceptable terms in the future.

There are insurance contracts in place for Germanwings and Deutsche Lufthansa AG as well as for other Lufthansa Group companies, covering various liability claims in connection with the Germanwings accident on 24 March 2015. This also applies to lawsuits filed in the USA against Germanwings, Lufthansa German Airlines and other Group companies. The Lufthansa flying school in Arizona (formerly Airline Training Center Arizona, Inc. (ATCA), now Lufthansa Aviation Training USA, Inc. (LAT US)), has also been sued for material and non-material damages. In the lawsuit, the claimants are arguing, among other things, that the flying school doubted the co-pilot's mental stability but still trained him nonetheless. Overall, the US lawsuits are estimated as having little chance of success, if indeed they do result in a court ruling in the US. Companies in the Lufthansa Group may still be faced with costs, however, since in France at least, public prosecution and judicial investigations into the case are still under way. ↗ **Note 45, Legal risks, p. 177f.** Costs for legal defence cannot be ruled out. Costs for investigations and voluntary payments to the victims' dependants have already been incurred and there is a risk that there are more to come.

The Lufthansa Group is subject to tax legislation in many countries. Changes in tax laws and case law, as well as different interpretations as part of tax audits, can result in risks and opportunities affecting tax expenses, income, claims and liabilities. The Corporate Taxation department identifies, evaluates and monitors tax risks and opportunities systematically and at the earliest stage possible, and initiates steps to mitigate the risks as necessary.

OVERALL STATEMENT ON OPPORTUNITIES AND RISKS

In a dynamic environment, the Lufthansa Group relies on adjusting its capacities and resources flexibly to changing market conditions. To compete successfully over the long term, the Lufthansa Group focuses on promising product strategies, a solid financial position and a competitive cost structure, and also participates in the consolidation of the industry.

Continuous efficiency improvements are established as a permanent task in the Company. In order to seize opportunities for making lasting, structural improvements to efficiency, productivity and competitiveness, a process-oriented organisation has been implemented in the Network Airlines, in the administrative areas and in other operating segments. The development of the Lufthansa Group is driven by focused consolidation, increased flexibility and digitalisation. Operational stability is another key area of action.

The implementation risks for projects aimed at increasing efficiency and factors countervailing this, among them higher costs for fuel or fees and charges and declining yields particularly at the airlines, are mitigated by means of systematic risk management.

The current assessment of individual risks in financial year 2018 revealed that the overall risk situation for the Lufthansa Group is virtually unchanged compared with the previous year. The airline industry is under pressure to change and is subject to competitive pressure, even though the economic environment continues to be good.

The Executive Board of the Lufthansa Group is convinced of the effectiveness of the opportunity and risk management system and continues to strive for a balance of opportunity and risk. The Executive Board does not currently consider that the continued existence of the Company is at risk.

DESCRIPTION OF THE ACCOUNTING-RELATED INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT SYSTEM IN ACCORDANCE WITH SECTION 289 PARAGRAPH 4 AND SECTION 315 PARAGRAPH 4 HGB

The Lufthansa Group's Internal Control System (ICS) covers all the principles, procedures and steps intended to ensure effective, economical and accurate accounting and compliance with the relevant legal regulations. It is based on the COSO framework (Committee of the Sponsoring Organizations of the Treadway Commission).

Overall responsibility for the Internal Control System required to manage risk lies with the Executive Board of Deutsche Lufthansa AG, which defines the scope and the format of the systems in place based on the specific requirements of the Lufthansa Group.

The Corporate Audit department of Deutsche Lufthansa AG as well as the decentralised internal audit departments at Delvag and AirPlus are embedded in the internal monitoring system for the Lufthansa Group and act independently of business processes. In addition, the effectiveness of those areas of the Internal Control System relevant to financial reporting are reviewed by the auditors as part of a risk-oriented approach to their audit.

The Audit Committee of the Deutsche Lufthansa AG Supervisory Board monitors the effectiveness of the Internal Control System and risk management system on the basis of Section 107 Paragraph 3 German Stock Corporation Act (AktG).

The objective of the Internal Control System for accounting processes is, by making checks, to provide a reasonable degree of certainty that the financial statements and the consolidated financial statements of Deutsche Lufthansa AG comply with the rules, despite the risks identified.

The following preventative and investigative checks are embedded in the accounting process:

- IT-supported and manual cross-checks,
- functional separation,
- dual signatures and
- monitoring checks.

Operational accounting processes are carried out locally at the Group companies and increasingly also using the Group's own and external Shared Service centres. Expert opinions for determining the amount of pension provisions are prepared by external consultants.

Corporate Accounting is functionally responsible for preparing the consolidated financial statements and draws up binding regulations for the Group companies that pertain to form, content and deadlines. The Lufthansa Group's accounting guidelines are updated regularly and define uniform accounting standards for the domestic and foreign companies included in the Lufthansa consolidated financial statements in accordance with International Financial Reporting Standards (IFRS). For Deutsche Lufthansa AG and other German companies in the Group, a guideline defines rules for drawing up individual financial statements in line with the German Commercial Code (HGB). This ensures that standardised Group accounting practices are applied to the recognition, measurement and presentation of balance sheet items, with as little room for discretion as possible. The formal requirements relate to the mandatory use of a standardised and complete set of reporting forms and a uniform account framework for the Group. Individual financial statements that contain errors are selected and restated as necessary at company or Group level on the basis of control mechanisms already defined in the SAP SEM-BCS consolidation software and/or by systematic plausibility checks. The consolidation system dictates the different deadlines for various elements of the reporting package and verifies centrally that they are adhered to during the preparation process.

The IT systems used for accounting are protected against unauthorised access by special security precautions.

By means of the organisational, control and monitoring structures defined for the Lufthansa Group, the Internal Control System and risk management system as it relates to accounting ensures that all matters affecting the Company are captured, processed and evaluated, and are presented adequately in the Group's financial reporting. In particular, the use of individual discretion, faulty checks, criminal acts by those involved and other circumstances may compromise the effectiveness and reliability of the Internal Control System and risk management system in place. This means that even the Group-wide application of these systems cannot guarantee with complete certainty that facts are presented correctly, fully and promptly in the consolidated financial statements. These statements only relate to Deutsche Lufthansa AG and the major subsidiaries included in the consolidated financial statements of Deutsche Lufthansa AG.

Forecast

Global economic growth set to slow further. | IATA projects growth of 6% in global revenue passenger-kilometres. | Lufthansa Group expects an Adjusted EBIT margin of 6.5% to 8.0% in 2019.

MACROECONOMIC OUTLOOK

Economic and sector-specific developments can have a significant influence on the operating and financial performance of the Lufthansa Group. The forecasts for the course of business as follows are therefore based on assumptions for the development of the wider economy and the sector. These assumptions are described below. The Lufthansa Group continually monitors the development of this operating environment so that it can respond as quickly and comprehensively as possible to any changes.

T056 GDP DEVELOPMENT[1)]
Forecast 2018 to 2022 compared with previous year

in %	2018	2019	2020	2021	2022
World	3.2	2.9	2.8	2.8	2.8
Europe	2.0	1.5	1.4	1.4	1.6
Germany	1.5	1.4	1.2	1.2	1.4
North America	2.8	2.4	2.0	1.5	1.5
South America	1.5	1.9	2.1	2.2	2.4
Asia/Pacific	4.9	4.7	4.6	4.6	4.6
China	6.6	6.3	6.0	5.9	5.8
Middle East	2.4	1.6	2.8	3.2	3.2
Africa	3.2	3.7	3.6	3.7	3.8

Source: Global Insight World Overview as of 15.1.2019.
[1)] Forecast.

Slower economic growth expected

Global economic growth is expected to slow from 3.2% in the previous year to 2.9% in 2019. This outlook is nonetheless subject to considerable uncertainties, especially in connection with increasing protectionism worldwide, Brexit negotiations and the effects of volatile oil prices on the global economy.

The Asia/Pacific region is expected to see the fastest economic growth in 2019 with 4.7% (previous year: 4.9%). China remains one of the fastest growing countries in the world with an economic growth rate of 6.3%, despite again experiencing a slower pace of expansion than in recent years. The North America region is expected to expand by 2.4% (previous year: 2.8%). Higher employment figures and positive developments on US property and stock markets will contribute to this forecast. Factors that may slow US growth include the effects of protectionist measures, ongoing budgetary disputes and higher interest rates.

A growth rate of 1.5% is forecast for Europe as a whole in 2019, which is more modest than in the previous year (previous year: 2.0%). The effects of punitive tariffs, resurgent conflicts about sovereign debt within the euro area and the effects of Brexit are all expected to hamper growth.

Positive development of interest and exchange rates expected, but political risks persist

Analyst consensus expects the euro to strengthen against other key currencies in 2019. Its future performance nonetheless depends on how various risk factors evolve. In addition to the risk of a no-deal Brexit, the main focus in 2019 will be on trade relations between the USA and China.

In 2018, the European Central Bank took the first steps towards normalising its interest rate policy. Euro interest rates will again depend largely on monetary policy in the current year. No major changes in interest rates are currently expected for 2019, however.

Slight fall in oil prices expected

Overall, market participants are anticipating a slight fall in oil prices over the medium term. With prices just over USD 67/barrel as of 22 February 2019, futures contracts for delivery in December 2019 were trading at USD 66.14/barrel, and for December 2020 at USD 64.24/barrel.

SECTOR OUTLOOK

Positive trend in passenger traffic expected for 2019

Following growth of 7% in global revenue passenger-kilometres in 2018, the International Air Transport Association (IATA) is forecasting growth of 6% for 2019. Growth is expected to vary from one region to another. The fastest growth of 8% is projected for the Asia/Pacific region, followed by Latin America, Europe and the Middle East, each with 6%. Growth of 5% is expected for the Africa and North America regions.

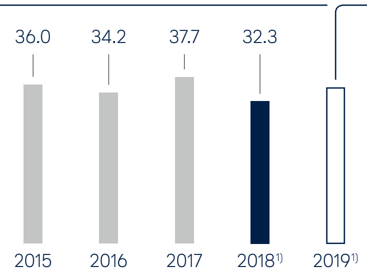
Experts expect that continued growth in demand will prompt airlines to keep expanding their capacities. Market-wide capacity growth should nevertheless slow over the course of the year. In the summer flight timetable the increase should already be significantly lower than in the preceding winter. An analysis of published flight timetables indicates that capacity growth in Europe in the summer will now only be very slight.

This trend should support the IATA forecast for yield growth of 1.4% in 2019, following a sector-wide decline of 0.9% in 2018. This would enable the industry's profits to recover in 2019 after the declines last year.

C26 DEVELOPMENT OF SECTOR NET RESULT

in USD billion

2019[1] **35.5**



[1] Forecast.
Source: IATA Airline Industry Economic Performance (12/2018).

Airfreight also set to increase in 2019

For global airfreight traffic, the IATA forecasts 4% growth in revenue cargo tonne-kilometres in 2019, similar to the previous year.

Yields in the cargo business are expected to go up by 2% (previous year: 10%).

Further growth expected for Aviation Services

The MRO market is forecast to grow by an average of 7% per annum in the period up to 2027. It is the Asia/Pacific region that should see the fastest growth, so this is also where demand for MRO services is expected to rise the most.

New engine models will require fewer maintenance sessions in future, but engine services will still account for the largest proportion of MRO business. The expectation is that by 2025, the new generation of aircraft will account for half of the global fleet. Narrow-bodied aircraft, such as the Airbus A320neo and the Boeing 737MAX, will make up most of the new fleet.

Demand for in-flight service will also continue to go up in line with global passenger numbers. However, classic in-flight service will increasingly be replaced by in-flight sales programmes, even at network carriers. Increasingly attractive catering options at airports are competing with in-flight sales. Creating digital opportunities to preselect and order are therefore key requirements for future growth.

CHANGES IN BUSINESS AND ORGANISATION

The Lufthansa Group regularly reviews its organisational structure and adapts it to any changes in the business environment. Opportunities to increase efficiency are seized in all of the Lufthansa Group's segments and are reflected in the planning.

To improve the operating stability and increase the quality of Lufthansa Group airlines, the Executive Board position Airline Resources & Operations Standards was created as of 1 January 2019. It includes the functions of flight operations standards, ground operations standards, infrastructure, system partners and Group safety.

In 2018, the Supervisory Board also adopted wide-ranging changes to the internal regulations for the Executive Board, bringing it in line with the latest Corporate Governance Code and updating the rules on decisions requiring approval and on performance reviews by the Supervisory Board.

OUTLOOK FOR THE LUFTHANSA GROUP

On the basis of expectations for the overall economy and the sector as described above, the Lufthansa Group assumes that it will be able to continue its positive performance of the past two years.

The financial outlook is nevertheless subject to significant risks, which are described in detail in the risk report. Fluctuations in the oil price in particular can have a significant impact, both positive and negative, on the earnings outlook.

The foreseeable capacity trend for the sector, i.e. available capacity at the various airlines, and demand for air travel suggest that pressure on unit revenues should ease over the course of the year, especially in European traffic. The Lufthansa Group's year-on-year earnings performance should improve accordingly over the course of the year.

Lufthansa Group expects Adjusted EBIT margin of 6.5% to 8.0% in 2019

The Lufthansa Group expects continued revenue growth in 2019. Growth in all segments, with the exception of Catering, where revenue is expected to remain stable, means that Group revenue should increase at a mid-single digit percentage rate. Cost reductions will make an important contribution to compensating for the adverse impact of higher fuel costs at the airlines. Altogether the Group expects the Adjusted EBIT margin to be between 6.5% and 8.0% in 2019.

Continued unit cost reduction supports earnings performance at Network Airlines

The network airlines Lufthansa German Airlines, SWISS and Austrian Airlines will expand their capacity by around 4% in 2019. This is a significant reduction in growth compared with the previous year, especially in the summer flight plan that applies from April. Slower growth reflects capacity bottlenecks in the European air traffic system and is intended to bolster the performance of unit revenues. Persistent pricing pressure on short-haul routes, especially at the start of the year, and greater competition for Austrian Airlines in Vienna will weigh on prices, however. Overall the Company assumes that unit revenues at Network Airlines will be stable or decline at a low-single digit percentage rate on a currency-adjusted basis.

Cost cuts will partly compensate for this. Unit costs at the Network Airlines, adjusted for exchange rates and excluding fuel, should fall by 0.5% to 1.5%, mainly due to further crew productivity gains, improved conditions with system partners such as airports, and efficiency improvements resulting from the renewal of the fleet. Despite this, the Adjusted EBIT margin for Network Airlines is expected to fall to between 7.5% and 9.5%, largely due to higher fuel costs, which will be around EUR 550m over last year due to the expiry of cost-effective hedging contracts.

Significant improvement in operating result expected at Eurowings

For Eurowings, the focus in 2019 is on increasing customer satisfaction by improving operational stability, and increasing profitability. Now that more than a year has passed since the takeover of significant portions of the Air Berlin fleet, capacity growth for the full year will moderate to around 2%. Supported by improvements on long-haul routes, unit revenues should remain stable or rise at a low-single digit percentage rate on a currency-adjusted basis. Unit costs excluding fuel and currency effects are expected to fall by between 7% and 9%. The non-recurrence of arround EUR 170m in integration expenses will play an important role here. Taking into account higher fuel costs, which are expected to be up by around EUR 100m on the previous year due to the expiry of cost-effective hedging contracts, Eurowings is therefore forecast to generate an Adjusted EBIT margin of around 0%, i.e. to more or less break even.

Logistics segment intends to confirm good performance of prior years

The Logistics segment expects to match its positive earnings performance of the past two years. Capacity-driven, high-single digit revenue growth is expected for 2019. This will generate economies of scale, especially with regard to staff costs. The renewal of the fleet will also increase fuel efficiency, and should largely compensate for higher expenses for IT and infrastructure. The Adjusted EBIT margin should therefore be between 7% and 9% in 2019.

MRO business segment expects operating margin on par with previous year

The MRO business segment is planning to expand at a mid-single digit percentage rate in 2019, driven by the ongoing positive performance in its component business and improvements in its engine business, which suffered from long throughput times last year. Therefore, despite the expense of investing in various growth projects – including the continuous development of the AVIATAR product, the platform for digital MRO products and services – an Adjusted EBIT margin of 7% to 8% should be achieved.

Catering segment drives restructuring of European business

The Catering segment expects revenue to be approximately on the previous year's level in 2019. Growth in the retail business will offset declines in the catering sector. However, restructuring expenses for the transformation of the European business, including the development of two production centres, will adversely affect the earnings performance. The Adjusted EBIT margin for the segment is therefore expected to be between 2% and 4%.

Investments in future growth burden Additional Businesses and Group Functions

The Group is expecting Adjusted EBIT for Additional Businesses and Group Functions to be around EUR 150m lower than last year. This largely reflects the significant renewal of the IT system landscape and the resulting process optimisation at AirPlus, as well as further capacity growth at Lufthansa Aviation Training. Furthermore, the Group is also investing in IT modernisation in the central functions.

C27 FINANCIAL OUTLOOK 2019

	Passenger Airlines	
	Network Airlines	Eurowings
Capacity growth (ASK)	c. + 4%	c. + 2%
Unit revenues (RASK, at constant currency)	stable to down low-single digit	stable to up low-single digit
Unit cost (CASK, at constant currency and excl. fuel)	– 0.5% to – 1.5%	– 7% to – 9%
Fuel (year-on-year change)	+ EUR 550m	+ EUR 100m
Adjusted EBIT margin	**7.5% to 9.5%**	**around 0%**

	Non-PAX			
	Logistics	MRO	Catering	Other
Revenue growth	up high-single digit	up mid-single digit	stable	
Adjusted EBIT margin	7% to 9%	7% to 8%	2% to 4%	
Adjusted EBIT (year-on-year change)				– EUR 150m

	Lufthansa Group
Revenue growth	up mid-single digit
Adjusted EBIT margin	6.5% to 8.0%

Capital expenditure roughly on par with last year

The Group expects to make investments of around EUR 3.6bn in 2019. This is approximately the same level as the previous year and includes capital expenditure on engine overhauls amounting to around EUR 450m. These have been capitalised since the financial year 2018. The bulk of the capital expenditure will be incurred for around 32 aircraft due to be delivered in 2019 and for advance payments on later deliveries. The return on capital (Adjusted ROCE) will be slightly lower than last year on a like-for-like basis. The capitalisation of lease agreements in accordance with IFRS 16 will also have a negative effect on the return on capital. The ratio of net indebtedness, including the effect of pension provisions, to Adjusted EBITDA should remain significantly below the threshold of 3.5.

OVERALL STATEMENT BY THE EXECUTIVE BOARD ON THE EXPECTED DEVELOPMENT OF THE LUFTHANSA GROUP

The market environment for the Lufthansa Group will remain challenging in 2019. Global economic growth is expected to slow. At the same time; the impact of protectionist trade policies and the outcome of the Brexit negotiations are extremely uncertain. Despite this, the Lufthansa Group should still benefit from the fact that forecast demand growth is only slightly lower than last year.

Since capacity growth across the sector should also slow over the course of the year, the Lufthansa Group Executive Board is confident that the positive performance of recent years will continue. In the process, the Group will rely chiefly on the strength of its brands and its product, which will continue to be upgraded with ongoing investments, particularly in digitalisation. Eurowings will also see significant improvements in profitability in 2019. Consistent reductions in unit costs will help offset the adverse impact of higher fuel costs. To this extent, the Adjusted EBIT and the Adjusted EBIT margin for the Group should again be clearly positive.

Looking ahead beyond 2019, the Executive Board sees the Lufthansa Group in a strong position to defend and keep building on its market position. The Group's strong balance sheet is an important prerequisite for this. It enables the Group to invest continuously in the strength of its products and services. At the same time, the market as a whole is reaching the limits of its capacity, making it difficult for smaller market participants to expand and new competitors to enter the market. As the leading company in Europe's strongest markets, the Lufthansa Group therefore has excellent prospects for long-term profitable growth.

Corporate Governance

Executive Board and Supervisory Board work together closely to sustainably increase Company value. | The recommendations of the German Corporate Governance Code were complied with, with one exception. | Comprehensive management system helps ensure compliance.

SUPERVISORY BOARD AND EXECUTIVE BOARD

Supervisory Board

Dipl.-Ing. Jürgen Weber
Former Chairman of the Supervisory Board Deutsche Lufthansa AG
Honorary Chairman

Voting members

Karl-Ludwig Kley
Chairman of the Supervisory Board
E.ON SE
Chairman

Christine Behle
Member of the National Executive Board of the trade union ver.di
Employee representative [1]
Deputy Chairwoman

Nicoley Baublies
Purser and Member of the Executive Board of the trade union UFO e. V. and Chairman of the Executive Board Industriegewerkschaft Luftverkehr (IGL)
Employee representative [1]
(until 8 May 2018)

Alexander Behrens
Flight attendant and Member of the trade union UFO e. V.
Employee representative [1]
(since 8 May 2018)

Jörg Cebulla
Flight captain
Employee representative

Herbert Hainer
Former Chairman of the Executive Board adidas AG

Christian Hirsch
Commercial employee
Employee representative
(since 8 May 2018)

Robert Kimmitt
Senior International Counsel
Wilmer Cutler Pickering Hale and Dorr LLP, USA
(until 8 May 2018)

Carsten Knobel
Member of the Executive Board and CFO Henkel AG & Co. KGaA
(since 9 January 2018)

Holger Benjamin Koch
Senior Director Airport/Industry Charges LH Group & Commercial Provider Management
Employee representative
(since 8 May 2018)

Martin Koehler
Independent management consultant and former head of the Aviation Competence Center at The Boston Consulting Group

Doris Krüger
Senior Director Future Innovation Strategy, Lufthansa Group
Employee representative
(until 8 May 2018)

Eckhard Lieb
Training Coordinator
Employee representative
(until 8 May 2018)

Jan-Willem Marquardt
Flight captain and member of the Cockpit pilots' union
Employee representative [1]
(until 8 May 2018)

Martina Merz
Former CEO Chassis Brakes International, Netherlands

Ralf Müller
State certified technician
Employee representative
(until 8 May 2018)

Michael Nilles
Executive member of the Board of Directors and CDO
Schindler Group, Switzerland
(since 8 May 2018)

Monika Ribar
President of Board of Directors (VRP)
Schweizerische Bundesbahnen SBB AG, Switzerland

Birgit Rohleder
Group head IT
Employee representative
(since 8 May 2018)

Miriam Sapiro
Director & Vice Chairwoman (Public Affairs),
Sard Verbinnen & Co., USA

Ilja Schulz
Flight captain and member of the Cockpit pilots' union [1]
Employee representative
(since 8 May 2018)

Olivia Stelz
Purser
Employee representative
(since 8 May 2018)

Andreas Strache
Flightmanager
Employee representative
(until 8 May 2018)

Stephan Sturm
Chairman of the Executive Board
Fresenius Management SE

[1] Trade union representative in accordance with Section 7 Paragraph 2 Co-determination Act (MitbestG).

Christina Weber
Administrative staff member
Employee representative

Birgit Weinreich
Flight attendant
Employee representative
(until 8 May 2018)

Klaus Winkler
Engine mechanic
Employee representative
(since 8 May 2018)

Matthias Wissmann
President of the International Organization of Motor Vehicle Manufacturers (OICA)

Executive Board
(Structure since 1 January 2019)

Carsten Spohr
Chairman of the Executive Board and CEO

Thorsten Dirks
Member of the Executive Board
Eurowings

Harry Hohmeister
Member of the Executive Board
Chief Commercial Officer Network Airlines

Detlef Kayser
Member of the Executive Board
Airline Resources & Operations Standards
(since 1 January 2019)

Ulrik Svensson
Member of the Executive Board
Finances

Bettina Volkens
Member of the Executive Board
Corporate Human Resources and Legal Affairs

MANDATES

Other mandates of the Suervisory Board members of Deutsche Lufthansa AG
(As of 31 December 2018)

Karl-Ludwig Kley
a) BMW AG [3] (Deputy Chairman)
E.ON SE [3] (Chairman)

Christine Behle
a) Bochum-Gelsenkirchener Bahngesellschaft mbH
Bochum-Gelsenkirchener Straßenbahnen AG
BREMER LAGERHAUS-GESELLSCHAFT [3] – Aktiengesellschaft von 1877 – (Deputy Chairwoman)
Dortmunder Stadtwerke AG (DSW21)/Dortmunder Stadtwerke Holding GmbH

Jörg Cebulla
a) Sparda-Bank Hessen eG
b) Albatros Versicherungs-dienste GmbH

Herbert Hainer
a) Allianz SE [3]
FC Bayern München AG (Deputy Chairman)
b) Accenture plc., Ireland [3]

Carsten Knobel
b) Henkel Central Eastern Europe GmbH, Austria [2] (Chairman)
Henkel (China) Investment Co. Ltd., China [2]
Henkel & Cie. AG, Switzerland [2] (Deputy Chairman)
Henkel Ltd., Great Britain [2]
Henkel of America Inc., USA [2] (Chairman)

Martin Koehler
a) Delton AG (until 31 December 2018)
Delton Technology SE (Deputy Chairman)
b) American Funds Investment-Fonds, managed by the Capital Group, USA
FlixMobility GmbH

Eckhard Lieb
(As of the date of departure on 8 May 2018)
b) Albatros Versicherungs-dienste GmbH

Martina Merz
a) Thyssenkrupp AG [3] (Chairwoman since 1 February 2019)
b) AB Volvo, Sweden [3]
Imerys SA, France [3]
NV Bekaert SA, Belgium [3] (until 8 May 2019)
SAF-HOLLAND SA, Luxembourg [3] (Chairwoman)

Michael Nilles
a) Lufthansa Technik AG
b) Schindler Digital Group AG, Switzerland [2] (Chairman)
Schindler Holding AG, Switzerland [3] (Board of Directors)
Schindler IT Services AG, Switzerland [2] (Chairman)

Monika Ribar
b) Chain IQ Group AG, Chairwoman
Schweizerische Bundesbahnen SBB AG, Chairwoman (President of the Board of Directors, VRP)
Sika AG, Chairwoman [3]

Miriam Sapiro
b) Project HOPE, USA

Stephan Sturm
a) Fresenius Kabi AG [1] (Chairman)
Fresenius Medical Care Management AG [1] (Chairman)
b) VAMED AG, Austria (Deputy Chairman)

Christina Weber
a) LSG Lufthansa Service Holding AG

Mandates of the Executive Board members of Deutsche Lufthansa AG
(As of 31 December 2018)

Carsten Spohr
a) Lufthansa Technik AG [1] (Chairman)
Thyssenkrupp AG [3]
b) SN Airholding SA/NV, Belgium

Thorsten Dirks
a) Eurowings GmbH [1] (Chairman)
Germanwings GmbH [1] (Chairman)
b) Eurowings Europe GmbH (Chairman)
Günes Ekspres Havacilik A.S. (SunExpress), Turkey
SN Airholding SA/NV, Belgium

Harry Hohmeister
a) Lufthansa Cargo AG [1] (Chairman)
b) Aircraft Maintenance and Engineering Corporation (AMECO), China
Austrian Airlines AG, Austria (Chairman)
Miles & More GmbH (Chairman)
Swiss International Air Lines AG, Switzerland

Detlef Kayser
(Member of the Executive Board since 1 January 2019)
a) Aerodata AG
Lufthansa Technik AG [1]
b) Günes Ekspres Havacilik A.S. (SunExpress), Turkey
Iumics GmbH & Co. KG
Miles & More GmbH

Ulrik Svensson
a) LSG Lufthansa Service Holding AG [1]
Lufthansa Cargo AG [1]
Lufthansa Technik AG [1]
b) Austrian Airlines AG, Austria (Deputy Chairman)
Lufthansa AirPlus Servicekarten GmbH (Chairman)
Miles & More GmbH (Deputy Chairman)
ÖLH Österreichische Luftverkehrs-Holding GmbH, Austria (Deputy Chairman)
SN Airholding SA/NV, Belgium
Swiss International Air Lines AG, Switzerland

Bettina Volkens
a) LSG Lufthansa Service Holding AG [1] (Chairwoman)

C28 SUPERVISORY BOARD COMMITTEES

Steering Committee	Audit Committee	Nomination Committee	Arbitration Committee in accordance with Section 27 Paragraph 3 Co-determination Act (MitbestG)
Karl-Ludwig Kley, Chairman	**Stephan Sturm,** Chairman	**Karl-Ludwig Kley,** Chairman	**Karl-Ludwig Kley,** Chairman
Christine Behle, Deputy Chairwoman	**Alexander Behrens**	**Herbert Hainer**	**Christine Behle,** Deputy Chairwoman
Herbert Hainer	**Jörg Cebulla**	**Martin Koehler**	**Herbert Hainer**
Ilja Schulz	**Carsten Knobel**		**Ilja Schulz**
	Monika Ribar		
	Christina Weber		
Four meetings in 2018	Five meetings in 2018	No meetings in 2018	No meetings in 2018

a) Membership of supervisory boards required by law.
b) Membership of comparable supervisory bodies at companies in Germany and abroad.
[1] Group mandate in accordance with Section 100 Paragraph 2 Sentence 2 AktG.
[2] Other group mandate.
[3] Publicly listed company.

CORPORATE GOVERNANCE REPORT

The Executive Board and Supervisory Board have a close and trusting working relationship

The common aim of the Executive Board and the Supervisory Board is to achieve lasting increases in the value of the Company. To this end, they cultivate a close and trusting working relationship in the interests of the Company.

The Supervisory Board has adopted internal regulations governing the work of the Executive Board and the Supervisory Board as well as the cooperation between them. The six members of the Executive Board are jointly responsible for the management of the entire Company and inform each other of all significant activities and transactions. The Executive Board reports regularly to the Supervisory Board, which is made up of equal numbers of shareholder and employee representatives. The Executive Board informs the Supervisory Board on the course of the Group's business and that of its associated companies at least four times a year. Every year, the Supervisory Board approves the Company strategy, the KPIs for the following year and the Group's medium-term financial planning. The Executive Board presents the Company's quarterly reports to the Supervisory Board. Furthermore, the Chairman of the Executive Board informs the Chairman of the Supervisory Board and the Supervisory Board of important matters.

The Executive Board makes decisions by a simple majority of votes cast. There are a number of transactions for which the Executive Board requires the approval of the Supervisory Board. These include (above a certain value threshold) borrowing, capital expenditure on aircraft and other non-current assets, long-term leasing of aircraft, establishing companies and the acquisition or disposal of shares.

The Supervisory Board has formed a Steering Committee from among its members made up of equal numbers of shareholder and employee representatives, consisting of the Chairman of the Supervisory Board and his deputy, each exercising their equivalent function, as well as two other Supervisory Board members to be elected by the Supervisory Board. The Steering Committee prepares the Supervisory Board meetings and makes recommendations to the Supervisory Board on appointing Executive Board members, nominating the Chairman of the Executive Board, setting total remuneration for individual Executive Board members, including salary and all other benefits, on any capital reductions in accordance with Section 87 German Stock Corporation Act (AktG) and on determining objectives and deadlines for the ratio of female Executive Board members. Furthermore, the Steering Committee is responsible for all other human resources matters involving Executive Board members not reserved for the full Supervisory Board. It is also responsible for contracts with Supervisory Board members (including loans). In the event of an equal number of votes, the Chairman of the Supervisory Board has the deciding vote.

The Supervisory Board has elected an Audit Committee from among its members made up of equal numbers of shareholder and employee representatives, which has six members. The Supervisory Board elects the Committee Chair, who nominates a deputy to represent them in case of absence. The members of the Audit Committee should have specialist knowledge in the area of accounting, management and financial management. The task of the Audit Committee is in particular to monitor the accounting, the financial reporting process and non-financial reporting on corporate social responsibility, risk management, the Internal Control System, the compliance management system and the audit, to discuss the necessary independence of the external auditors, the appointment of external auditors, the focus of audits and the remuneration agreement, and to make a recommendation to the Supervisory Board, particularly in respect of the auditors to be put forward for election at the Annual General Meeting and on approval of the annual and consolidated financial statements. The Audit Committee also discusses the quarterly interim reports with the Executive Board before they are published. The Audit Committee is authorised to lay down the internal organisation of its work in its own internal regulations, which it submits to the Supervisory Board for approval.

The Supervisory Board has elected a Nomination Committee from among its shareholder representatives, consisting of the Chairman of the Supervisory Board, who chairs the committee, and two other members. The Committee nominates suitable candidates for the Supervisory Board before Supervisory Board elections take place; the Supervisory Board can then propose these candidates at the Annual General Meeting. The selection process carried out by the Nomination Committee is based on the requirements profile for Supervisory Board members, as adopted by the Supervisory Board. **www.lufthansagroup.com/en/corporate_governance_declaration.**

The Arbitration Committee required under Section 27 Paragraph 3 of the Co-determination Act and formed in line with Section 9 Paragraph 3 of the Company's Articles of Association is only convened when the necessary two-thirds majority for appointing or revoking the appointment of a member of the Executive Board has not been reached. In accordance with Section 31 Paragraph 3 Sentence 1 of the Co-determination Act, the Committee then has one month to make a corresponding proposal to the Supervisory Board.

Members of the Executive Board and Supervisory Board are personally liable to the Company for damages resulting from a culpable breach of their fiduciary responsibilities. Lufthansa has taken out a D&O (directors' and officers' liability insurance) policy for both Boards, with an excess in line with the requirements of the German Stock Corporation Act and the German Corporate Governance Code.

The names of Executive Board and Supervisory Board members and their responsibilities, as well as members and duties of committees set up by the Supervisory Board can be found on ↗ **p. 79ff.**

Compliance with the German Corporate Governance Code with one exception

As of 4 December 2018, the Executive Board and Supervisory Board issued the following declaration of compliance with the German Corporate Governance Code:

"In accordance with Section 161 AktG, the Executive Board and the Supervisory Board of Deutsche Lufthansa AG declare that since the last declaration of compliance, the recommendations of the German Corporate Governance Code as amended have, with the following exception, been complied with and, with the following exception, will continue to be complied with in the future.

In accordance with Clause 4.2.3 Paragraph 2 of the Code, the total remuneration of the Executive Board members and the variable bonus components are to be capped. The service contracts with Board members cap all the main elements of remuneration, including the fixed salary, the variable bonus and the retirement benefit commitment. Ancillary benefits at Deutsche Lufthansa AG are not subject to an overall cap, however. In particular, private flights in line with IATA regulations and with restricted booking status due to full-paying passengers should not be capped for members of the Executive Board of Deutsche Lufthansa AG. Since the booking status is restricted, the related ancillary benefit is small. The members of the Executive Board should be able to use the Company's main product and the opportunity to meet employees and passengers on board as widely as possible in line with international practice, including for private travel."

Shareholders and Annual General Meeting have wide-ranging rights

Lufthansa shares are registered shares with transfer restrictions. Every share has identical voting rights. A peculiarity at Deutsche Lufthansa AG is that in addition to the German Stock Corporation Act, the registration requirements of the German Aviation Compliance Documentation Act (LuftNaSiG) must also be met. This relates in particular to the disclosure of nationality for people and of domicile for companies and for entities with disclosure obligations under the German Securities Trading Act (WpHG) of any majority stake or controlling interest held by a non-German owner.

All shareholders listed in the shareholders' register can exercise their voting rights at the Annual General Meeting. The electronic service for the registration process required under stock corporation law includes the option of appointing proxies, banks and shareholder associations to exercise these voting rights via the internet and by postal vote. Shareholders can also follow the speeches made at the Annual General Meeting by the Chairmen of the Supervisory and Executive Boards online.

Transparent accounting and financial communications conform with international standards

The Lufthansa Group prepares its consolidated financial statements and interim reports in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), taking into account interpretations by the IFRS Interpretations Committee as applicable in the European Union (EU).

The individual financial statements for Deutsche Lufthansa AG, which are required by law and are relevant for the dividend payment, are prepared according to the German Commercial Code (HGB). PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft in Dusseldorf has been appointed to audit the financial statements for 2018. Eckhard Sprinkmeier is the auditor responsible for the audit as of financial year 2018. The auditors' fees for the 2018 financial year are summarised in the Notes to the consolidated financial statements. ↗ **Note 47, p. 178.**

In view of the change of auditors required by law, the Audit Committee worked hard in 2018 to prepare for the appointment of new auditors from financial year 2020 onwards. The Audit Committee conducted a competitive bidding process in line with the statutory requirements and formulated a recommendation for the full Supervisory Board after a careful review of the candidates. More information can be found in the ↗ **Report of the Supervisory Board, p. 5ff.**

Trading in Lufthansa shares or in financial instruments based on them, in particular options or derivatives, by members of the Executive Board or Supervisory Board – known as directors' dealings – are announced immediately as soon as a threshold of EUR 5,000 is exceeded in the calendar year. This also applies to people and companies closely related to the group mentioned above. **https://investor-relations.lufthansagroup.com/en/news/directors-dealings.html.**

As of 31 December 2018, the value of all shares, options or derivatives held by members of the Executive and Supervisory Boards did not exceed that of 1% of all shares issued by the Company. The Lufthansa Group informs shareholders, analysts and the general public in a timely and equitable manner. More information on these activities can be found in the chapter ↗ **Lufthansa share, p. 9ff.**, and on the website **www.lufthansagroup.com/en/investor-relations.**

Comprehensive management system helps ensure compliance

Compliance describes all measures taken to ensure the correct conduct of companies, their management and their employees with respect to statutory and the Company's own obligations and prohibitions. The Lufthansa Group Compliance Management System is intended to prevent employees and the Company from coming into conflict with the law and at the same time to help them to apply statutory regulations correctly. The Lufthansa Compliance Programme is made up of the following elements: Competition, Capital Markets, Integrity, Embargo and Corporate Compliance. An ombudsman system gives employees the opportunity to report any suspicion of criminal activity or breaches of the compliance regulations. The contact details of the ombudsman are available on the website **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/ombudsman-system.html.** The central Compliance Office, which reports to the Executive Board member responsible for Corporate Human Resources and Legal Affairs, the various central and local compliance committees in the Lufthansa Group and the Compliance Officers in Group companies are to ensure that the Lufthansa Compliance Management System is enforced throughout all companies in the Lufthansa Group. The effectiveness of the Compliance Management System is monitored by means of regular independent reviews by the internal audit department. The Audit Committee of the Supervisory Board is notified semi-annually of incidents and progress concerning compliance. **http://investor-relations.lufthansagroup.com/en/corporate-governance.html.**

REMUNERATION REPORT

The complexity of the presentation in this remuneration report of the principles of the remuneration system for the Executive Board and Supervisory Board of Deutsche Lufthansa AG, as well as the structure and amount of benefits, is required to comply with all statutory requirements and the recommendations of the German Corporate Governance Code, with the exception presented in the declaration of compliance. The remuneration report forms part of the combined management report.

Structure of Executive Board remuneration

Executive Board remuneration consists of a basic salary, variable remuneration components, other benefits and a retirement pension. In December 2018 the Supervisory Board adopted a new remuneration structure for members of the Executive Board. It applies to new appointments and contract renewals as of 1 January 2019. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compensation.html.** The existing remuneration structure continued to apply to all Executive Board members in the financial year 2018. It consists of the following components:

- **Fixed annual salary.** Basic remuneration, paid monthly as a salary.

- **Variable annual remuneration.** The variable remuneration is based on the EBIT margin for the Lufthansa Group. As of 2017, 50% of the remuneration is multiplied by an individual performance factor, which varies from 0.8 to 1.2. It is paid the following year and so on an annual basis. The remaining 50% are carried forward for another two years. At the end of the full three-year assessment period, the amount carried forward is multiplied by a factor determined on the basis of objective indicators, of which cumulative three-year EACC accounts for 70% and the sustainability parameters of environmental protection, customer satisfaction and staff commitment account for 30%. The factor can vary between 0.0 and 2.0 and is applied uniformly for the entire Executive Board to the amount carried forward before it is paid out. The multiplier based on EACC increases on a linear basis from a value of 0.0, which corresponds to EACC of EUR –1,000m or lower, to a maximum value of 2.0, which is attained when EACC reaches EUR 1,000m. The sustainability factor, which can also vary between 0.0 and 2.0, is determined by the Supervisory Board on the basis of a recommendation from the Steering Committee and represents a discretionary assessment of changes in the figures "Reduction of CO_2 emissions", "Customer satisfaction at Lufthansa German Airlines (CPI)" and "Employee survey indices in the Group". The total amount of variable remuneration that can be paid for a given financial year is capped at 175% of fixed annual salary.

- **Share-based remuneration.** Executive Board members are also required to participate in the share programmes for managers (with their own parameters, which are structured differently from those of the general managers' programme). ↗ Note 38, p. 153ff. The Act on Appropriate Executive Board Remuneration (VorstAG) defines a vesting period of at least four years for stock option programmes; this period is also considered to be a general orientation and recommendation for long-term incentive models. The duration of the LH-Performance programme is therefore set at four years, even though it is not a stock option programme within the meaning of the Act.

- **Other benefits.** Other benefits include, in particular, the non-cash benefit of using company cars, the discount granted in connection with share programme issues (↗ Note 38, p. 153ff.), benefits from concessionary travel in accordance with the relevant IATA regulations and attendance fees for work on the supervisory boards of affiliated companies.

End-of-service benefits

- **Retirement benefits.** Since 2006, each Executive Board member has had a personal pension account into which, for the duration of their employment, Deutsche Lufthansa AG pays contributions amounting to 25% of the annual salary and the bonus. The investment guidelines for the pension account are based on the investment concept for the Lufthansa Pension Trust, which also applies to staff members of Deutsche Lufthansa AG.

  If employment ends before an Executive Board member reaches retirement age, he or she retains the pension entitlement from the pension account, which is continued without further contributions. On reaching retirement age (65 or early retirement between 60 and 65 or in the event of disability or death), the account holder or the surviving dependants will acquire a pension credit equivalent to the balance of the pension account at that time. Deutsche Lufthansa AG guarantees the amounts paid in retirement benefits.

  A supplementary risk capital sum will be added to the pension credit in the event of a claim for a disability pension or a pension for surviving dependants. This sum will consist of the average contributions paid into the pension account over the past three years multiplied by the number of full years by which the claimant is short of the age of 60 from the time a disability pension entitlement arises.

  The pension credit is paid out in ten instalments. On application by the Executive Board member or his/her surviving dependants, a payment as a lump sum or in fewer than ten instalments or as an annuity may also be made, subject to approval by the Company.

  The dependant's pension is 60% of the deceased's pension entitlement. If the Board member dies while in the Company's employment, his/her surviving dependants will be paid his/her full salary until the end of the financial year for a period of at least six months.

  Under his contract as a pilot, which is currently not active, Carsten Spohr is entitled to a transitional pension in accordance with the wage agreement "Transitional pensions for cockpit staff". If Carsten Spohr leaves the Executive Board before he becomes 60 and resumes his employment as a pilot, he is entitled to draw a "Transitional pension for cockpit staff at Lufthansa" once he becomes 60 or on request once he becomes 55, in accordance with the provisions of the wage agreement. This additional benefit is paid if certain conditions of eligibility are met and provides for a monthly pension of up to 60% of the last modified salary until the beneficiary reaches the age of 63.

- **Cap on severance pay.** If a contract is terminated early for reasons other than good cause or a change of control, the Company will not remunerate more than the value of outstanding entitlements for the remainder of the contract, as recommended by the German Corporate Governance Code, whereby these payments including ancillary benefits may not exceed annual remuneration for two years (maximum compensation). Maximum compensation is calculated by reference to total remuneration for the last full financial year before departure from the Executive Board, as shown in the remuneration report, and including expected total remuneration for the current financial year.

- **Change of control.** If the contract between an Executive Board member and Deutsche Lufthansa AG is terminated in connection with a change of control at the Company, the Executive Board member is entitled to compensation for remuneration outstanding for the remainder of the contract. In accordance with the relevant recommendation of the German Corporate Governance Code, compensation may not exceed 150% of the maximum compensation agreed in the contract and described above.

Amount of Executive Board remuneration

Executive Board remuneration in the financial year. Total remuneration paid to the active members of the Executive Board for their work in 2018 came to EUR 13,015k (previous year: EUR 14,731k). EUR 5,259k of the total (previous year: EUR 5,280k) was paid as fixed salary and EUR 7,756k (previous year: EUR 9,451k) was paid as performance-related remuneration. The current service costs for pension commitments came to EUR 3,191k (previous year: EUR 3,119k).

The following remuneration was paid to the individual active members of the Executive Board in 2018:

T057 TOTAL REMUNERATION OF THE EXECUTIVE BOARD (HGB) 2018

In € thousands	Basic remuneration	Other[1]	One-year variable remuneration	Long-term variable remuneration	Option programme[2]	**Total remuneration**
Carsten Spohr	1,380	115	1,385	436	517	3,833
Thorsten Dirks	863	73	865	–	344	2,145
Harry Hohmeister	863	86	865	291	344	2,449
Ulrik Svensson	863	76	865	–	344	2,148
Bettina Volkens	863	77	865	291	344	2,440
Total (HGB)	**4,832**	**427**	**4,845**	**1,018**	**1,893**	**13,015**

[1] Other remuneration includes in particular the non-cash benefit of using company cars, the discount granted in connection with option programme issues (↗ **Notes to the consolidated financial statements, Note 38, p. 153ff.**) and benefits from concessionary travel in accordance with the relevant IATA regulations.
[2] Fair value of the option programme 2018 at the time the options are granted.

The following remuneration was paid to the individual active members of the Executive Board in 2017:

T057 TOTAL REMUNERATION OF THE EXECUTIVE BOARD (HGB) 2017

In € thousands	Basic remuneration	Other[1]	One-year variable remuneration	Long-term variable remuneration	Option programme[2]	**Total remuneration**
Carsten Spohr	1,380	117	1,551	318	827	4,193
Thorsten Dirks[3]	575	68	646	–	551	1,840
Karl Ulrich Garnadt[4]	287	20	323	224	–	854
Harry Hohmeister	863	87	970	224	551	2,695
Ulrik Svensson	863	78	970	–	551	2,462
Bettina Volkens	863	79	970	224	551	2,687
Total (HGB)	**4,831**	**449**	**5,430**	**990**	**3,031**	**14,731**

[1] Other remuneration includes in particular the non-cash benefit of using company cars, the discount granted in connection with option programme issues (↗ **Notes to the consolidated financial statements, Note 38, p. 153ff.**), benefits from concessionary travel in accordance with the relevant IATA regulations and attendance fees and daily allowances for work on the supervisory boards of subsidiaries.
[2] Fair value of the option programme 2017 at the time the options are granted.
[3] Pro rata temporis since 1.5.2017.
[4] Pro rata temporis until 30.4.2017.

As of 31 December 2018 (2017), the members of the Executive Board held the following shares and option packages from current share programmes:

T058 SHARE PROGRAMMES

	2015 programme		2016 programme		2017 programme		**2018 programme**	
Number of shares	Number of shares purchased from own funds	Number of option packages	Number of shares purchased from own funds	Number of option packages	Number of shares purchased from own funds	Number of option packages	**Number of shares purchased from own funds**	**Number of option packages**
Thorsten Dirks (Executive Board member since 1.5.2017)	– (–)	– (–)	– (–)	– (–)	4,350 (4,350)	30 (30)	6,750 (–)	30 (–)
Harry Hohmeister	8,910 (8,910)	30 (30)	10,080 (10,080)	30 (30)	4,350 (4,350)	30 (30)	6,750 (–)	30 (–)
Carsten Spohr	13,365 (13,365)	45 (45)	15,120 (15,120)	45 (45)	6,525 (6,525)	45 (45)	10,125 (–)	45 (–)
Ulrik Svensson (Executive Board member since 1.1.2017)	– (–)	– (–)	– (–)	– (–)	4,350 (4,350)	30 (30)	6,750 (–)	30 (–)
Bettina Volkens	8,910 (8,910)	30 (30)	10,080 (10,080)	30 (30)	4,350 (4,350)	30 (30)	6,750 (–)	30 (–)

In accordance with the terms of the share programmes, payments are only made under the options if the respective Executive Board member is still an active member of the Executive Board of Deutsche Lufthansa AG at the end of the programme. If the Executive Board member has retired, the options are paid out pro rata temporis for the portion of the programme during which they were still an active member of the Executive Board.

The current share programmes performed as follows in the financial year:

T059 PERFORMANCE SHARE PROGRAMMES

	Financial year 2018			Financial year 2017		
in €	Payments from maturing share programmes	Change in fair value of ongoing share programmes	**Total**	Payments from maturing share programmes	Change in fair value of ongoing share programmes	**Total**
Carsten Spohr	-1,800,000	1,302,422	-497,578	-1,110,000	3,320,063	2,210,063
Thorsten Dirks	–	96,625	96,625	–	22,980	22,980
Harry Hohmeister	-1,200,000	868,281	-331,719	-1,110,000	2,552,849	1,442,849
Ulrik Svensson	–	96,625	96,625	–	22,980	22,980
Bettina Volkens	-1,200,000	868,281	-331,719	-1,110,000	2,552,849	1,442,849
	-4,200,000	**3,232,234**	**-967,766**	**-3,330,000**	**8,471,721**	**5,141,721**

More information on payment caps can be found in the Notes to the consolidated financial statements. ↗ **Note 38, p. 153ff.**

The total amount of pension entitlements earned by Executive Board members in the financial year 2018 was EUR 3.2m (previous year: EUR 3.1m) according to HGB and EUR 3.5m (previous year: EUR 3.2m) according to IFRS and was recognised in staff costs (current service cost). The individual current service cost and present values of pension entitlements are as follows:

T060 PENSION ENTITLEMENTS ACCORDING TO HGB AND IFRS

	HGB		HGB		IFRS		IFRS	
	Current service costs		Settlement amount of pension obligations		Current service costs		Present value of pension obligations	
in € thousands	**2018**	2017	**31.12.2018**	31.12.2017	**2018**	2017	**31.12.2018**	31.12.2017
Carsten Spohr	899	841	5,758	5,126	1,001	890	5,505	4,837
Thorsten Dirks (Executive Board member since 1.5.2017)	584	455	1,023	455	637	395	970	395
Karl Ulrich Garnadt (Executive Board member until 30.4.2017)	–	159	–	1,240	–	159	–	1,240
Harry Hohmeister	558	514	2,462	2,005	627	555	2,375	1,888
Ulrik Svensson (Executive Board member since 1.1.2017)	569	637	1,180	637	629	620	1,158	593
Bettina Volkens	581	513	2,431	1,953	616	547	2,375	1,888
	3,191	**3,119**	**12,854**	**11,416**	**3,510**	**3,166**	**12,383**	**10,841**

Benefits paid to former Executive Board members
Current payments and other benefits for former members of the Executive Board and their surviving dependants came to EUR 6.8m (previous year: EUR 5.2m). This includes payments by subsidiaries as well as benefits in kind and concessionary travel. Pension obligations towards former Executive Board members and their surviving dependants amount to EUR 68.3m (previous year: EUR 71.0m).

Recommendations of the German Corporate Governance Code
The following tables show the individual payments, allocations and retirement benefit commitments granted to each individual member of the Executive Board in line with the recommendations of 4.2.5 Paragraph 3 of the German Corporate Governance Code.

The figures for benefits granted and allocated are divided into fixed and variable components and supplemented by the figures for retirement benefit commitments. This corresponds to the current service cost as defined in IAS 19 for pensions and other retirement benefit commitments. The fixed remuneration components include the fixed salary and ancillary benefits that are not performance-related. The variable, performance-related remuneration components are divided into the one-year variable remuneration and the two long-term components, variable remuneration and option programmes.

The figure shown for “Benefits granted” is the value of the variable remuneration at the time it was granted (for a performance against targets of 100%). For share-based remuneration, the figure shown is the value of the shares when they are granted. Individual caps and floors for these remuneration elements are also shown.

The figure shown for “Allocations” in the reporting year comprises the fixed remuneration components actually paid in the reporting year, plus the amounts of the one-year and long-term variable remuneration that have been determined at the time the remuneration report is prepared and that are to be paid out in the following year. The figures for the option programmes relate to programmes ending in the reporting period; these correspond to the amount paid. Total remuneration also includes the annual current service cost of pension commitments, although it is not strictly speaking an allocation.

In 2018, the members of the Executive Board received no benefits or promises of benefits from third parties relating to their work on the Executive Board.

T061 BENEFITS GRANTED

in € thousands	Carsten Spohr, Chairman of the Executive Board Chairman since 1.5.2014; Member of the Executive Board since 1.1.2011				Thorsten Dirks Member of the Executive Board since 1.5.2017			
	2018	2017	**2018** (min)	**2018** (max)	**2018**	2017	**2018** (min)	**2018** (max)
Fixed salary	1,380	1,380	1,380	1,380	863	575	863	863
Ancillary benefits	115	117	115	115	73	68	73	73
Total	**1,495**	**1,497**	**1,495**	**1,495**	**936**	**643**	**936**	**936**
One-year variable remuneration [1]	679	679	0	2,415	424	283	0	1,509
Long-term variable remuneration								
Three-year variable remuneration [2]	679	679	0	0 – 1,610	424	283	0	0 – 1,006
Option programme (4 years)	517	827	0	1,800	344	551	0	1,200
Total	**1,875**	**2,185**	**0**	**4,215**	**1,192**	**1,117**	**0**	**2,709**
Service cost	1,001	890	1,001	1,001	637	395	637	637
Total remuneration	**4,371**	**4,572**	**2,496**	**6,711**	**2,765**	**2,155**	**1,573**	**4,282**

in € thousands	Karl Ulrich Garnadt Member of the Executive Board until 30.4.2017				Harry Hohmeister Member of the Executive Board since 1.7.2013			
	2018	2017	**2018** (min)	**2018** (max)	**2018**	2017	**2018** (min)	**2018** (max)
Fixed salary	0	287	0	0	863	863	863	863
Ancillary benefits	0	20	0	0	86	87	86	86
Total	**0**	**307**	**0**	**0**	**949**	**950**	**949**	**949**
One-year variable remuneration [1]	0	141	0	0	424	424	0	1,509
Long-term variable remuneration								
Three-year variable remuneration [2]	0	141	0	0	424	424	0	0 – 1,006
Option programme (4 years)	0	0	0	0	344	551	0	1,200
Total	**0**	**282**	**0**	**0**	**1,192**	**1,399**	**0**	**2,709**
Service cost	0	159	0	0	627	555	627	627
Total remuneration	**0**	**748**	**0**	**0**	**2,768**	**2,904**	**1,576**	**4,285**

in € thousands	Ulrik Svensson Member of the Executive Board since 1.1.2017				Bettina Volkens Member of the Executive Board since 1.7.2013			
	2018	2017	**2018** (min)	**2018** (max)	**2018**	2017	**2018** (min)	**2018** (max)
Fixed salary	863	863	863	863	863	863	863	863
Ancillary benefits	76	78	76	76	77	79	77	77
Total	**939**	**941**	**939**	**939**	**940**	**942**	**940**	**940**
One-year variable remuneration [1]	424	424	0	1,509	424	424	0	1,509
Long-term variable remuneration								
Three-year variable remuneration [2]	424	424	0	0– 1,006	424	424	0	0– 1,006
Option programme (4 years)	344	551	0	1,200	344	551	0	1,200
Total	**1,192**	**1,399**	**0**	**2,709**	**1,192**	**1,399**	**0**	**2,709**
Service cost	629	620	629	629	616	547	616	616
Total remuneration	**2,760**	**2,960**	**1,568**	**4,277**	**2,748**	**2,888**	**1,556**	**4,265**

[1] The maximum amount shown here corresponds to the maximum amount of total variable remuneration payable for a financial year (175% of the annual basic salary).
[2] The maximum amount of three-year variable remuneration depends on the effect of the bonus cap (175% of the annual basic salary) on the one-year variable remuneration and on the weighting applied to the three-year variable remuneration.

T062 ALLOCATIONS

	Carsten Spohr, Chairman of the Executive Board Chairman since 1.5.2014; Member of the Executive Board since 1.1.2011		Thorsten Dirks Member of the Executive Board since 1.5.2017		Karl Ulrich Garnadt Member of the Executive Board until 30.4.2017		Harry Hohmeister Member of the Executive Board since 1.7.2013	
in € thousands	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Fixed salary	1,380	1,380	863	575	–	287	863	863
Ancillary benefits	115	117	73	68	–	20	86	87
Total	**1,495**	**1,497**	**936**	**643**	**–**	**307**	**949**	**950**
One-year variable remuneration	1,385	1,551	865	646	–	323	865	970
Long-term variable remuneration								
Three-year variable remuneration	436	318	–	–	–	224	291	224
Option programme (4 years)	1,800	1,110	–	–	–	–	1,200	1,110
Total	**3,621**	**2,979**	**865**	**646**	**–**	**547**	**2,356**	**2,304**
Service cost	1,001	890	637	395	–	159	627	555
Total remuneration	**6,117**	**5,366**	**2,438**	**1,684**	**–**	**1,013**	**3,932**	**3,809**

	Ulrik Svensson Member of the Executive Board since 1.1.2017		Bettina Volkens Member of the Executive Board since 1.7.2013	
in € thousands	**2018**	2017	**2018**	2017
Fixed salary	863	863	863	863
Ancillary benefits	76	78	77	79
Total	**939**	**941**	**940**	**942**
One-year variable remuneration	865	970	865	970
Long-term variable remuneration				
Three-year variable remuneration	–	–	291	224
Option programme (4 years)	–	–	1,200	1,110
Total	**865**	**970**	**2,356**	**2,304**
Service cost	629	620	616	547
Total remuneration	**2,433**	**2,531**	**3,912**	**3,793**

Structure of Supervisory Board remuneration

In accordance with the resolution taken at the Annual General Meeting on 8 May 2012, the members of the Supervisory Board have received only fixed remuneration since the financial year 2013.

Ordinary Supervisory Board members receive remuneration of EUR 80k for each financial year in accordance with Section 13 Paragraph 1 of the Articles of Association. The Chairman receives EUR 240k and the Deputy Chairman EUR 120k. The Chairman of the Audit Committee receives an additional EUR 60k; other members of the Audit Committee receive an additional EUR 30k. Chairs of other committees receive an additional EUR 40k and other members of other committees receive an additional EUR 20k. Remuneration for committee work is subject to the proviso that the committee must have met at least once in the financial year.

If Supervisory Board members leave the Supervisory Board or a post in one of its committees for which additional remuneration is paid during the course of a financial year, they receive their remuneration pro rata temporis. Pro rata temporis remuneration for committee work is subject to the proviso that the committee must have met at least once before their departure.

Amount of Supervisory Board remuneration

Expenses for fixed remuneration and remuneration for committee work for the Supervisory Board amounted to EUR 2,107k in 2018 (previous year: EUR 2,164k).

The figures for the individual Supervisory Board members are shown in the following table.

Other remuneration, mainly attendance fees, amounted to EUR 68k (previous year: EUR 89k). The Deutsche Lufthansa AG Supervisory Board members were also paid EUR 27k for the work on supervisory boards of Group companies (previous year: EUR 17k).

T063 REMUNERATION SUPERVISORY BOARD

in € thousands	2018 Fixed remuneration	2018 Remuneration for committee work	2018 Total Supervisory Board remuneration	2017 Fixed remuneration	2017 Remuneration for committee work	2017 Total Supervisory Board remuneration
Wolfgang Mayrhuber (until 24.9.2017)	–	–	–	176	33	209
Karl-Ludwig Kley	240	40	280	123	45	168
Christine Behle	120	20	140	120	20	140
Nicoley Baublies (until 8.5.2018)	28	–	28	80	–	80
Alexander Behrens (since 8.5.2018)	52	20	72	–	–	–
Werner Brandt (until 31.12.2017)	–	–	–	80	64	144
Jörg Cebulla	80	20	100	80	–	80
Herbert Hainer	80	20	100	80	21	101
Christian Hirsch (since 8.5.2018)	52	–	52	–	–	–
Robert Kimmitt (until 8.5.2018)	28	–	28	80	–	80
Carsten Knobel (since 9.1.2018)	78	29	107	–	–	–
Holger Benjamin Koch (since 8.5.2018)	52	–	52	–	–	–
Martin Koehler	80	–	80	80	22	102
Doris Krüger	28	10	38	80	30	110
Michael Nilles (since 8.5.2018)	52	–	52	–	–	–
Eckhard Lieb (until 8.5.2018)	28	10	38	80	30	110
Jan-Willem Marquardt (until 8.5.2018)	28	10	38	80	30	110
Martina Merz	80	–	80	80	–	80
Ralf Müller (until 8.5.2018)	28	–	28	80	–	80
Monika Ribar	80	30	110	80	30	110
Birgit Rohleder (since 8.5.2018)	52	–	52	–	–	–
Ilja Schulz (since 8.5.2018)	52	13	65	–	–	–
Olivia Stelz (since 8.5.2018)	52	–	52	–	–	–
Miriam Sapiro	80	–	80	15	–	15
Andreas Strache (until 8.5.2018)	28	–	28	80	–	80
Stephan Sturm	80	60	140	80	24	104
Christina Weber	80	20	100	80	–	80
Birgit Weinreich (until 8.5.2018)	28	7	35	80	20	100
Klaus Winkler (since 8.5.2018)	52	–	52	–	–	–
Matthias Wissmann	80	–	80	80	–	80
Total	**1,798**	**309**	**2,107**	**1,794**	**370**	**2,164**

DISCLOSURES IN ACCORDANCE WITH SECTION 289A PARAGRAPH 1 HGB AND SECTION 315A PARAGRAPH 1 HGB

Composition of issued capital, types of shares, rights and duties

Deutsche Lufthansa AG's issued capital amounts to EUR 1,216,539,466.24 and is divided into 475,210,729 registered shares. Each share corresponds to EUR 2.56 of the issued capital. The transfer of shares requires the Company's authorisation (restriction of transferability). The Company may only withhold authorisation if registering the new shareholder in the share register could jeopardise the maintenance of air traffic rights. This did not occur in financial year 2018, however. Shareholders exercise their rights and cast their votes at the Annual General Meeting in accordance with statutory regulations and the Company's Articles of Association. Each share is entitled to one vote.

Voting and share transfer restrictions

To preserve international air traffic rights and air traffic rights to fly to various international destinations, the proportion of German/European shareholders must be at least 50% of the Company's issued capital. If the proportion of foreign shareholders reaches 40%, Deutsche Lufthansa AG is granted special permission under Section 4 Paragraph 1 German Aviation Compliance Documentation Act (LuftNaSiG) together with Section 71 Paragraph 1 No. 1 German Stock Corporation Act (AktG) to buy back its own shares. If the proportion of foreign shareholders in the share register reaches 45%, the Company is authorised, subject to Supervisory Board approval, to increase issued capital by up to 10% by issuing new shares for payment in cash without subscription rights for existing shareholders (Section 4 Paragraphs 2 and 3 LuftNaSiG together with Section 4 Paragraph 3 of the Articles of Association). If the proportion of foreign shareholders approaches the 50% threshold, the Company is entitled to withhold authorisation to register new foreign shareholders in the share register (Section 5 Paragraph 1 of the Articles of Association). Furthermore, the Company is authorised, according to Section 5 Paragraph 2 LuftNaSiG and subject to the approval of the Supervisory Board, to require the most recently registered shareholders to sell their shares. From the fourth day after this requirement has been published, the shareholders concerned can no longer exercise the rights conferred by the shares concerned. If they do not comply with the requirement within four weeks, the Company is entitled after a further notice period of three weeks to declare the shares to be forfeited and to compensate the shareholders accordingly. On 31 December 2018, foreign shareholders held 27.9% of the shares in the shareholders' register of the Company. In 2018 it was therefore not necessary to take steps to limit the percentage of foreign shareholders. Detailed information on the German Aviation Compliance Documentation Act (LuftNaSiG) and the quarterly update on our shareholder structure can be found at ↗ **www.lufthansagroup.com/en/investor-relations.**

The annual share investment programmes for employees, managers and Executive Board members have time-based restrictions on trading in shares, particularly lock-up periods of up to four years.

Direct or indirect shareholdings with more than 10% of voting rights

As of 31 December 2018, the Company had received no notification of direct or indirect shareholdings with more than 10% of voting rights.

Holders of shares with special controlling rights

The Company has no shares that confer special controlling rights.

Control of voting rights for employee shares when control rights are exercised indirectly

Where the Company issues shares to its staff as part of its employee programmes, these shares are transferred to the employees directly. The staff beneficiaries can exercise the controlling rights that accrue to them from the employee shares directly in the same way as other shareholders, in accordance with statutory regulations and the provisions of the Articles of Association.

Statutory regulations and provisions of the Company's Articles of Association on the appointment and dismissal of members of the Executive Board and amendments to the Company's Articles of Association

The Supervisory Board appoints the members of the Executive Board and decides how many members there should be. The Supervisory Board can revoke appointments for membership and to the position of Chairman of the Executive Board for good reason. All amendments to the Articles of Association must be approved by resolution of an Annual General Meeting, with a majority of at least three quarters of the issued capital present. The Supervisory Board is authorised to adopt changes to the Articles of Association that only relate to wording (Section 11 Paragraph 4 of the Articles of Association). Furthermore, the Supervisory Board is entitled to amend Section 4 of the Articles of Association if authorised capital is exercised or expires.

Rights of the Executive Board to issue or repurchase shares

As of 31 December 2018, Deutsche Lufthansa AG had Authorised Capital A amounting to EUR 547,180,702.56 and Authorised Capital B amounting to EUR 6,791,923.20.

A resolution passed at the Annual General Meeting on 29 April 2015 authorised the Executive Board until 28 April 2020, subject to approval by the Supervisory Board, to increase the Company's issued capital by up to EUR 561,160,092 by issuing new registered shares on one or more occasions for payment in cash or in kind (Authorised Capital A). According to this resolution, EUR 6,130,027.52 was used in the reporting period to issue 2,394,542 new shares and thus, in total, EUR 13,979,389.44 was used to issue 5,460,699 new shares, each as part of a share dividend.

A resolution passed by the Annual General Meeting on 29 April 2014 authorised the Executive Board until 28 April 2019, subject to approval by the Supervisory Board, to increase the Company's issued capital on one or more occasions by up to EUR 29,000,000 by issuing new registered shares to employees (Authorised Capital B) for payment in cash. Existing shareholders' subscription rights are excluded. In the reporting period, the Company used EUR 3,984,750.08 of this authorised amount to issue 1,556,543 new shares to employees and thus, in total, EUR 22,208,076.80 of this amount was used to issue 8,675,030 new shares to employees.

A resolution passed at the Annual General Meeting on 28 April 2016 authorised the Executive Board until 27 April 2021, subject to approval by the Supervisory Board, to issue bearer or registered convertible bonds, bond/warrant packages, profit sharing rights or participating bonds (or combinations of these instruments) for a total nominal value of up to EUR 1,500,000,000. To grant shares to the holders or creditors of the bonds mentioned above, the Company's contingent capital was increased by up to EUR 237,843,840 by issuing up to 92,907,750 new registered shares. The contingent capital increase will only be carried out to the extent that the holders or creditors of conversion and/or option rights from convertible bonds, bond/warrant packages, profit-sharing rights or participating bonds (or any combination of these instruments) issued by the Company or its Group companies for cash pursuant to the authorisation given at the Annual General Meeting for the period 28 April 2016 to 27 April 2021 exercise their conversion or option rights or that the holders or creditors of convertible bonds issued by the Company or its Group companies pursuant to the authorisation given at the Annual General Meeting for the period 28 April 2016 to 27 April 2021 (or of profit-sharing rights or other forms of mezzanine capital with obligatory conversion) meet their conversion obligations or shares are delivered and to the extent that the debt is not settled using treasury shares or other rights. The Executive Board is authorised to determine the further details of the way in which the contingent capital increase is to be carried out.

Deutsche Lufthansa AG is entitled to repurchase shares and to sell repurchased shares in those cases defined in Section 71 AktG. In addition, the Company is authorised by resolutions of the Annual General Meeting on 29 April 2015 to buy back its own shares until 28 April 2020. The resolutions can be used, among other things, to expand the financing alternatives in the event that another company or an equity stake in a company is acquired. The proportion of shares acquired on the basis of this authorisation, along with any other Lufthansa shares that the Company has already acquired and still holds, must at no time amount to more than 10% of issued capital.

Further information on authorised capital, contingent capital and share buy-backs ↗ **Note 31, p. 140f.**

Important Company agreements subject to a change-of-control clause in the event of a takeover offer

The EMTN programme operated by the Company to issue bonds includes a change-of-control clause, according to which holders of bonds issued thereunder can demand redemption of the bond in the event of a change of control. The change of control is tied to the concepts of control, which are defined in detail in the EMTN programme, and of a rating downgrade resulting from the change of control within a change-of-control period. A bond for EUR 500m maturing on 12 September 2019 is currently outstanding under this programme.

In August 2015, Deutsche Lufthansa AG issued a hybrid bond for EUR 500m, due on 12 August 2075, which also includes the change-of-control clause described above. In addition, Deutsche Lufthansa AG issued borrower's note loans for EUR 475m and EUR 1.2bn, with terms of three, five, seven and ten years, in April and December 2016 respectively, which also include similar change-of-control clauses. As of 31 December 2018, a total of EUR 1,358 was still outstanding.

Compensation agreements with Executive Board members or employees in the event of a takeover offer

In the event of a change of control at Deutsche Lufthansa AG defined more precisely in the employment contract, the Executive Board members and the Company are entitled to terminate the contract within twelve months of this change of control.

If the contract ends because the special termination right is exercised or the contract is revoked amicably within twelve months of and in connection with the change of control, the Executive Board member is entitled to compensation for remuneration outstanding for the remainder of the contract. In accordance with the relevant recommendation of the German Corporate Governance Code, compensation may not exceed 150% of the maximum compensation of two annual salaries agreed in the contract (including fringe benefits). ↗ **Remuneration report, p. 84ff.**

DECLARATION ON CORPORATE GOVERNANCE IN ACCORDANCE WITH SECTION 289F HGB AND SECTION 315D HGB

The declaration on corporate governance required for listed companies in accordance with Section 289f HGB and Section 315d HGB has been issued and made publicly available on the Company's website at **www.lufthansagroup.com/en/corporate_governance_declaration.**

Notes to the individual financial statements of Deutsche Lufthansa AG (HGB)

Revenue of Deutsche Lufthansa AG matches last year's at EUR 16,083m. | Net profit for the year of EUR 339m. | Total assets down to EUR 27,463m.

The financial statements of Deutsche Lufthansa AG have been prepared in accordance with the German Commercial Code (HGB), the supplementary provisions of the German Stock Corporation Act (AktG) and the Articles of Association, and have been audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Dusseldorf. They are published in the electronic Federal Gazette. The financial statements are permanently available online. **http://investor-relations.lufthansagroup.com/en/publications.html.**

In this annual report, the management report for Deutsche Lufthansa AG has been combined with the management report for the Lufthansa Group. Deutsche Lufthansa AG and its results also include the Group headquarters with the central functions for Corporate Development, Finance and Controlling, Communications, Public Affairs, Human Resources, Legal and Compliance, as well as Data Security, Safety and Procurement. The economic environment for Deutsche Lufthansa AG is essentially the same as for the Group. ↗ **Macroeconomic situation, p. 24f.; Sector developments, p. 25f.; Course of business, p. 27ff.**

EARNINGS POSITION

The earnings position of Deutsche Lufthansa AG in financial year 2018 was defined by the significant fall in the financial result, in addition to the much higher fuel costs than the previous year, mainly due to pricing. The negative market performance of the pension assets held to fund retirement benefit obligations and the higher contribution to pension provisions as a result of prevailing interest rates combined to reduce the net profit for the year significantly.

Revenue and income

69 million passengers transported
The number of passengers in 2018 was 6% up on the previous year at 69 million (previous year: 65 million). Capacity increased by 5% and sales were up by 4%. The passenger load factor sank as a result by 1 percentage point to 81%. Yields climbed by 2% compared with a year ago.

Operating income down by 3%
The development of operating income is largely defined by a change in the accounting method for revenue. Airport fees and charges directly connected to the transportation of passengers were netted on a uniform basis for the first time in the financial year. This led to a curtailment of the income statement by EUR 1,033m. Adjusted for this netting, revenue rose by 6% to EUR 17,116m (previous year: EUR 16,184m). The decline in other operating income by 24% to EUR 1,158m (previous year: EUR 1,521m) is principally due to lower exchange rate gains.

Expenses

Expenses slightly below previous year
Operating expenses came to EUR 16,482m and were therefore EUR 102m lower than in the previous year (EUR 16,584m). The fall of 3% in the cost of materials and services to EUR 10,002m was mainly the result of accounting changes, which meant that all airport fees and charges directly connected to the transportation of passengers were netted (EUR 1,033m).

T064 TRENDS IN TRAFFIC REGIONS OF DEUTSCHE LUFTHANSA AG

	Traffic revenue		Number of passengers		Available seat-kilometres		Revenue seat-kilometres		Passenger load factor	
	2018 in €m	Change in %	**2018** in thousands	Change in %	**2018** in millions	Change in %	**2018** in millions	Change in %	**2018** in %	Change in pts
Europe	5,689	-3	52,322	7	53,543	9	41,002	9	77	1
America	5,178	-1	8,566	3	78,424	3	65,753	3	84	0
Asia/Pacific	2,780	-1	4,964	2	47,141	4	39,673	3	84	-1
Middle East/Africa	1,030	-6	3,179	0	16,905	2	13,141	1	78	-1
Total	**14,677**	**-2**	**69,031**	**6**	**196,013**	**5**	**159,569**	**4**	**81**	**-1**

This was mainly offset by the 12% rise in fuel expenses compared with the previous year. Most of the increase is due to a significant price increase compared with the previous year (29% before hedging) as well as larger volumes (3%).

Price changes were partially mitigated by the significant year-on-year improvement in the result of price hedging, which amounted to EUR 416m (previous year: EUR –40m).

The costs of purchased services fell by 9% to EUR 6,653m. Adjusted for the netting of passenger-related fees and charges, the cost of services purchased rose by 2%. Despite the netting, fees and charges, at EUR 1,946m, still constitute the largest expense item under services purchased. They were 4% higher than a year ago on an adjusted basis, principally due to volumes. Higher air traffic control charges (3%) and handling charges (6%) were offset by the decline of 4% in landing fees.

The costs of external MRO services went up by 4% on the previous year to EUR 1,781m. Charter expenses were up year-on-year by 8% at EUR 675m. This increase stems from higher conversion rates for flight services from the regional airline Lufthansa CityLine and year-on-year increases in extra flying hours by external providers. Operating lease expenses of EUR 815m were at the same level as the previous year. Five leases with the Maltese sale-and-lease-back company came to an end and new leases were taken out for various aircraft models used by Eurowings.

Staff costs increased by 11% to EUR 3,134m. With a 3% increase in the average number of employees compared with the previous year, expenses for wages and salaries rose by 1%. Social security contributions also rose by 1%. The largest increase in staff costs was for retirement benefit expenses, which rose from EUR 90m in the previous year to EUR 372m in the reporting year. In the previous year, this item was reduced by the change in the Company retirement and transitional pensions for cockpit staff.

Depreciation and amortisation rose compared with the previous year (EUR 482m) by 11% to EUR 534m. This is a delayed effect of acquiring planes from the Air Berlin group fleet, which were only received in the second half of 2017.

At EUR 2,812m, other operating expenses were lower than the previous year's figure of EUR 2,995m by 6%. The decrease results mainly from lower expenses from foreign currency translation.

Earnings performance

Result from operating activities down by EUR 362m

The result from operating activities fell by 32% to EUR 759m in the financial year 2018 (previous year: EUR 1,121m). Whereas operating income dropped by 3% to EUR 17,241m, operating expenses also declined by 1% to EUR 16,482m. Adjusted EBIT, calculated as for the Group, came to EUR 1,621m in the financial year (previous year: EUR 1,755m). Material reconciliation items include write-backs and write-downs on investment valuations as well as impairment losses on non-current financial assets.

Financial result drops by EUR 2,116m

The financial result decreased by EUR 2,116m to EUR –437m (previous year: EUR 1,679m). It was made up of the result from equity investments of EUR 942m (previous year: EUR 1,845m), net interest of EUR –1,333m (previous year: EUR –128m) and other financial items of EUR –46m (previous year: EUR –38m).

The result from equity investments includes profit and loss transfers of EUR 242m (previous year: EUR 1,132m) and other investment income of EUR 700m (previous year: EUR 713m). Lower year-on-year profit and loss transfers are mainly due to the profit transferred by Lufthansa Commercial Holding in the previous year (EUR 882m). This is due in particular to the dividend of EUR 862m paid in 2017 by Lufthansa Malta Aircraft-Leasing. Earnings varied year-on-year at the other companies with profit and loss transfer agreements. Whereas the results of Eurowings GmbH (EUR –292m), Lufthansa Technik AG (EUR 230m) and Lufthansa Aviation Training GmbH (EUR 5m) were down on the previous year, Lufthansa Cargo AG (EUR 263m), Lufthansa CityLine GmbH (EUR –61m), Miles & More GmbH (EUR 101m) and Delvag GmbH (EUR 12m) all exceeded their results for the previous year, sometimes significantly. The positive impact on other investment income of the Air Trust dividend (EUR 429m) was offset by lower dividends from the Austrian leasing companies (EUR –50m). Crane Strategic Investment S.C.S. did not distribute any dividend to Deutsche Lufthansa AG in the reporting year.

T065 INCOME STATEMENT FOR DEUTSCHE LUFTHANSA AG IN ACCORDANCE WITH HGB

in €m	2018	2017
Traffic revenue	14,677	15,012
Other revenue	1,406	1,172
Total revenue	**16,083**	**16,184**
Other operating income	1,158	1,521
Cost of materials and services	-10,002	-10,289
Staff costs	-3,134	-2,818
Depreciation, amortisation and impairment	-534	-482
Other operating expenses	-2,812	-2,995
Result from operating activities	**759**	**1,121**
Result from other equity investments	942	1,845
Net interest	-1,333	-128
Impairment on investments and current securities	-46	-38
Financial result	**-437**	**1,679**
Result from ordinary activities	**322**	**2,800**
Current income taxes	-363	-650
Deferred income taxes	421	353
Earnings after taxes	**380**	**2,503**
Other taxes	-41	-48
Net profit/loss for the year	**339**	**2,455**
Transfers to retained earnings	–	-1,228
Transfers from retained earnings	41	–
Distributable earnings	**380**	**1,227**

The significant fall is partly due to the further decline in the discount rate used to measure the pension provisions. The discount rate used in the reporting year was 3.21% (previous year: 3.68%). Interest expense was therefore slightly down on the year at EUR 719m (previous year: EUR 729m). The result was exacerbated by the significantly lower year-on-year market valuation of EUR -566m for the pension assets used to fund retirement benefit obligations (previous year: EUR +733m).

Impairment losses on investments and current securities were included in other financial items and came to EUR 46m, EUR 8m more than in the previous year. This stems largely from the write-down of EUR 35m on the carrying amount of Crane Strategic Investment S.C.S.

Net profit for the year drops by EUR 2,116m

Operating result and financial result add up to EUR 322m (previous year: EUR 2,800m). In the financial year, a saving of EUR 421m from deferred taxes more than made up for the income and earnings tax expenses of EUR 363m. Other tax expenses in the financial year came to EUR 41m. In total, net profit for the year 2018 was EUR 339m (previous year: EUR 2,455m).

FINANCIAL POSITION

Cash flow from operating activities

Cash flow from operating activities down by EUR 1,257m

Cash flow from operating activities declined by EUR 1,257m to EUR 653m (previous year: EUR 1,910m). Deutsche Lufthansa AG invested EUR 1,288m (previous year: EUR 1,747m) in aircraft and advance payments for aircraft in the reporting year. Of the total, EUR 266m (previous year: EUR 180m) was for down payments. To finance future payment of retirement benefit obligations to its employees, Deutsche Lufthansa AG transferred a total of EUR 276m in 2018 (previous year: EUR 1,697m) to various ring-fenced funds. The investments in non-current assets were overcompensated by dividends received and the purchase of previously held securities, resulting in a cash outflow of EUR 162m as of the reporting date. Cash flow for financing activities came to EUR 424m in the financial year.

NET ASSETS

Total assets fell by EUR 1,008m or 4% to EUR 27,463m (previous year: EUR 28,471m). Non-current assets account for 82% of total assets (previous year: 77%).

T066 BALANCE SHEET FOR DEUTSCHE LUFTHANSA AG IN ACCORDANCE WITH HGB

in €m	**31.12.2018**	31.12.2017
Assets		
Intangible assets	323	326
Aircraft	6,429	6,043
Property, plant and other equipment	89	101
Financial investments	15,588	15,319
Non-current assets	**22,429**	**21,789**
Inventories	78	67
Trade receivables	601	416
Other receivables	1,718	2,383
Securities	–	685
Cash and cash equivalents	755	763
Current assets	**3,152**	**4,314**
Prepaid expenses	**31**	**53**
Deferred tax assets	**1,851**	**1,430**
Excess of plan assets over provisions for pensions	**–**	**885**
Total assets	**27,463**	**28,471**
Shareholders' equity and liabilities		
Issued capital	1,217	1,206
Capital reserve	343	263
Retained earnings	5,902	5,094
Distributable earnings	380	1,227
Shareholders' equity	**7,842**	**7,790**
Provisions	**6,769**	**6,858**
Bonds	1,000	1,000
Liabilities to banks	1,967	2,024
Payables to affiliated companies	5,512	6,359
Other liabilities	4,366	4,435
Liabilities	**12,845**	**13,818**
Deferred income	**7**	**5**
Total shareholders' equity and liabilities	**27,463**	**28,471**

Assets

Non-current assets up by EUR 640m

Non-current assets increased by EUR 640m to EUR 22,429m. Purchases of new aircraft and down payments for aircraft account for EUR 386m of the total. Non-current financial assets rose year-on-year by EUR 269m. This is partly due to the contribution of aircraft to an Austrian leasing company and a capital increase at Lufthansa Commercial Holding. Write-backs on the carrying amounts of the investments in Air Dolomiti S.p.A. (EUR 51m) and Brussels Airlines NV/SA (EUR 13m) also increased non-current financial assets, whereas the write-down on the carrying amount of Crane Strategic Investment S.C.S. (EUR 35m) had the opposite effect. New and increased loans to affiliated companies (EUR 1,569m) were offset in the financial year 2018 by repayments of almost the same amount.

Current assets down by EUR 1,162m

Current assets contracted by EUR 1,162m to EUR 3,152m (previous year: EUR 4,314m). The decrease is due partly to receivables from affiliated companies, which went down year-on-year by EUR 729m to EUR 846m. The main reason for the decline is the significantly lower profit transferred in the reporting year by Lufthansa Commercial Holding GmbH. The other reason is that the entire securities portfolio was sold over the course of the financial year 2018, which resulted in a year-on-year decline of EUR 685m. An increase of EUR 62m in other assets stemmed largely from higher tax assets. Cash-in-hand of EUR 755m was roughly the same as the previous year (EUR 763m).

In view of the negative market performance of the pension assets held to fund retirement benefit obligations, the excess of plan assets over provisions for pensions was dissolved as of year-end (EUR 885m).

Shareholders' equity and liabilities

Equity up by EUR 52m
Shareholders' equity rose by EUR 52m year-on-year and came to EUR 7,842m as of the reporting date (previous year: EUR 7,790m). The significantly lower net profit for the year was offset by a transfer to retained earnings of EUR 850m during the year. Since total assets also declined, the equity ratio improved by 2 percentage points to 29% (previous year: 27%). The information required according to Section 160 Paragraph 1 No. 2 AktG on the portfolio development of treasury shares is provided in the Notes ↗ **Note 11, p. 124.**

Non-current liabilities down by EUR 1,184m
The Company's non-current liabilities sank by EUR 1,184m in the reporting year to EUR 5,730m (previous year: EUR 6,914m). This is largely due to to the reclassification of a bond and to liabilities due to banks in the short term.

The combination of higher equity and lower non-current provisions and liabilities caused non-current funds to fall as a percentage of total assets to 49% (previous year: 52%). Non-current funds cover 61% of non-current assets (previous year: 68%).

Net debt up by EUR 445m
Net indebtedness rose by EUR 445m to EUR 3,553m, largely due to the sale of securities during the year (previous year: EUR 3,108m).

OTHER DISCLOSURES

Risk report

Business at Deutsche Lufthansa AG is subject to essentially the same risks and opportunities as business at the Network Airlines segment as presented in the consolidated financial statements. Deutsche Lufthansa AG is exposed to the risks of its equity investments and subsidiaries in proportion to its respective equity stakes. ↗ **Network Airlines business segment, p. 41ff.**

Forecast

Future business performance at Deutsche Lufthansa AG is subject to essentially the same factors as Lufthansa German Airlines as presented in the consolidated financial statements.

Further information on anticipated macroeconomic developments and the performance of the segments, as well as the assumptions on which the Group forecast is based, can be found in the ↗ **Forecast, p. 75ff.**

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated income statement
for the financial year 2018

T067 CONSOLIDATED INCOME STATEMENT

in €m	Notes	2018	2017[1]
Traffic revenue	3	28,103	28,399
Other revenue	4	7,741	7,180
Total revenue		**35,844**	**35,579**
Changes in inventories and work performed by entity and capitalised	5	531	438
Other operating income[2]	6	1,818	2,276
Cost of materials and services	7	-18,669	-19,028
Staff costs	8	-8,811	-8,172
Depreciation, amortisation and impairment[3]	9	-2,205	-2,382
Other operating expenses[4]	10	-5,708	-5,571
Profit/loss from operating activities		**2,800**	**3,140**
Result of equity investments accounted for using the equity method	11	114	118
Result of other equity investments	11	60	39
Interest income	12	68	178
Interest expenses	12	-212	-373
Other financial items	13	-46	56
Financial result		**-16**	**18**
Profit/loss before income taxes		**2,784**	**3,158**
Income taxes	14	-588	-784
Profit/loss after income taxes		**2,196**	**2,374**
Profit/loss attributable to minority interests		-33	-34
Net profit/loss attributable to shareholders of Deutsche Lufthansa AG		**2,163**	**2,340**
Basic/diluted earnings per share in €	15	**4.58**	**4.98**

[1] Previous year's figures have been adjusted.
[2] This includes EUR 61m (previous year: EUR 46m) from the reversal of write-downs on receivables.
[3] This includes EUR 13m (previous year: EUR 83m) for the recognition of write-downs on receivables.
[4] This includes EUR 100m (previous year: EUR 98m) for the recognition of loss allowances on receivables.

Statement of comprehensive income
for the financial year 2018

T068 STATEMENT OF COMPREHENSIVE INCOME

in €m	2018	2017[1]
Profit/loss after income taxes	**2,196**	**2,374**
Other comprehensive income		
Other comprehensive income with subsequent reclassification to the income statement		
Differences from currency translation	124	–406
Subsequent measurement of financial assets at fair value without effect on profit and loss	–10	21
Subsequent measurement of hedges – cash flow hedge reserve	434	–546
Subsequent measurement of hedges – costs of hedging	–90	13
Other comprehensive income from investments accounted for using the equity method	–2	3
Other expenses and income recognised directly in equity	1	–3
Income taxes on items in other comprehensive income	–87	137
	370	**–781**
Other comprehensive income without subsequent reclassification to the income statement		
Revaluation of defined-benefit pension plans	–974	1,186
Other comprehensive income from investments accounted for using the equity method	–	–
Subsequent measurement of financial assets at fair value	5	–
Income taxes on items in other comprehensive income	117	–136
	–852	**1,050**
Other comprehensive income after income taxes	**–482**	**269**
Total comprehensive income	**1,714**	**2,643**
Comprehensive income attributable to minority interests	–34	–34
Comprehensive income attributable to shareholders of Deutsche Lufthansa AG	**1,680**	**2,609**

[1] Previous year's figures have been adjusted.

Consolidated balance sheet
as of 31 December 2018

T069 CONSOLIDATED BALANCE SHEET – ASSETS

in €m	Notes	31.12.2018	31.12.2017[1]	1.1.2017[1]
Intangible assets with an indefinite useful life[2]	16	1,381	1,343	1,265
Other intangible assets	17	512	492	472
Aircraft and reserve engines	18, 20	16,776	15,333	14,189
Repairable spare parts for aircraft		2,133	1,758	1,604
Property, plant and other equipment	19, 20	2,221	2,186	2,199
Investments accounted for using the equity method	21	650	585	516
Other equity investments	22, 44	246	221	212
Non-current securities	22, 44	41	32	23
Loans and receivables	23, 44	512	475	513
Derivative financial instruments	44	828	642	1,474
Deferred charges and prepaid expenses	27	118	9	11
Effective income tax receivables		10	12	4
Deferred tax assets	14	2,131	1,661	1,547
Non-current assets		**27,559**	**24,749**	**24,029**
Inventories	24	968	907	816
Contract assets[3]	25	234	–	–
Trade receivables and other receivables	26, 44	5,576	5,313	4,570
Derivative financial instruments	44	357	600	534
Deferred charges and prepaid expenses	27	217	197	167
Effective income tax receivables		58	58	37
Securities	28, 44	1,735	2,551	2,681
Cash and cash equivalents	29, 44	1,500	1,397	1,256
Assets held for sale	30	9	6	132
Current assets		**10,654**	**11,029**	**10,193**
Total assets		**38,213**	**35,778**	**34,222**

[1] Previous year's figures have been adjusted.
[2] Including Goodwill.
[3] Recognised separately for the first time from the 2018 financial year in accordance with IFRS 15.

T070 CONSOLIDATED BALANCE SHEET – SHAREHOLDERS' EQUITY AND LIABILITIES

in €m	Notes	31.12.2018	31.12.2017[1]	1.1.2017[1]
Issued capital	31	1,217	1,206	1,200
Capital reserve	32	343	263	222
Retained earnings	32	4,555	3,724	2,908
Other neutral reserves	32	1,185	1,474	2,255
Net profit/loss		2,163	2,340	–
Equity attributable to shareholders of Deutsche Lufthansa AG		**9,463**	**9,007**	**6,585**
Minority interests		110	103	89
Shareholders' equity		**9,573**	**9,110**	**6,674**
Pension provisions	33	5,865	5,116	8,364
Other provisions	34	537	601	503
Borrowings	35 44	5,008	6,142	5,811
Contract liabilities[2]	36	22	–	–
Other financial liabilities	37	137	243	124
Advance payments received, deferred income and other non-financial liabilities	38	51	1,289	1,246
Derivative financial instruments	44	222	190	54
Deferred tax liabilities	14	583	449	437
Non-current provisions and liabilities		**12,425**	**14,030**	**16,539**
Other provisions	34	925	990	1,066
Borrowings	35 44	1,677	672	764
Trade payables and other financial liabilities	40 44	5,764	5,249	4,689
Liabilities from unused flight documents	39	3,969	3,773	3,040
Other contract liabilities[2]	39	2,316	–	–
Advance payments received, deferred income and other non-financial liabilities	41	388	992	875
Derivative financial instruments	44	393	124	185
Effective income tax obligations		783	838	390
Current provisions and liabilities		**16,215**	**12,638**	**11,009**
Total shareholders' equity and liabilities		**38,213**	**35,778**	**34,222**

[1] Previous year's figures have been adjusted.
[2] Recognised separately for the first time from the 2018 financial year in accordance with IFRS 15.

Consolidated statement of changes in shareholders' equity
as of 31 December 2018

T071 CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

in €m	Issued capital	Capital reserve	Fair value measurement of financial instruments	Currency differences	Revaluation reserve (due to business combinations)	Other neutral reserves	**Total other neutral reserves**	Retained earnings	Net profit/loss	**Equity attributable to shareholders of Deutsche Lufthansa AG**	Minority interests	**Total shareholders' equity**
As of 31.12.2016	1,200	222	1,081	670	236	326	2,313	1,549	1,776	7,060	89	7,149
Amendments to accounting policies and valuation methods	–	–	–	–	–	–	–	-475	–	-475	–	-475
Restatement IFRS 9	–	–	-58	–	–	–	-58	58	–	–	–	–
Adjusted as of 31.12.2016	**1,200**	**222**	**1,023**	**670**	**236**	**326**	**2,255**	**1,132**	**1,776**	**6,585**	**89**	**6,674**
Capital increases/reductions	6	41	–	–	–	–	–	–	–	47	1	48
Reclassifications	–	–	–	–	–	–	–	1,542	-1,542	–	–	–
Dividends to Lufthansa shareholders/minority interests	–	–	–	–	–	–	–	–	-234	-234	-21	-255
Transactions with minority interests	–	–	–	–	–	–	–	–	–	–	–	–
Consolidated net profit/loss attributable to Lufthansa shareholders/minority interests	–	–	–	–	–	–	–	–	2,340	2,340	34	2,374
Other expenses and income recognised directly in equity	–	–	-375	-406	–	–	-781	1,050	–	269	–	269
As of 31.12.2017	**1,206**	**263**	**648**	**264**	**236**	**326**	**1,474**	**3,724**	**2,340**	**9,007**	**103**	**9,110**
Amendments to accounting policies and valuation methods	–	–	–	–	–	–	–	–	–	–	–	–
Restatement IFRS 9	–	–	-43	–	–	–	-43	35	–	-8	–	-8
Restatement IFRS 15	–	–	–	–	–	–	–	-310	–	-310	–	-310
Adjusted as of 31.12.2017	**1,206**	**263**	**605**	**264**	**236**	**326**	**1,431**	**3,449**	**2,340**	**8,689**	**103**	**8,792**
Capital increases/reductions	11	80	–	–	–	–	–	–	–	91	1	92
Reclassifications	–	–	–	–	–	–	–	1,963	-1,963	–	–	–
Dividends to Lufthansa shareholders/minority interests	–	–	–	–	–	–	–	–	-377	-377	-28	-405
Transactions with minority interests	–	–	–	–	–	–	–	–	–	–	–	–
Consolidated net profit/loss attributable to Lufthansa shareholders/minority interests	–	–	–	–	–	–	–	–	2,163	2,163	33	2,196
Other expenses and income recognised directly in equity	–	–	252	124	–	-2	374	-857	–	-483	1	-482
Hedging results reclassified from non-financial assets to acquisition costs	–	–	-620	–	–	–	-620	–	–	-620	1	-620
As of 31.12.2018	**1,217**	**343**	**237**	**388**	**236**	**324**	**1,185**	**4,555**	**2,163**	**9,463**	**110**	**9,573**

Consolidated cash flow statement
for the financial year 2018

T072 CONSOLIDATED CASH FLOW STATEMENT

in €m	Notes	2018	2017[1]
Cash and cash equivalents 1.1.		**1,218**	**1,138**
Net profit/loss before income taxes		2,784	3,158
Depreciation, amortisation and impairment losses on non-current assets (net of reversals)		2,178	2,300
Depreciation, amortisation and impairment losses on current assets (net of reversals)		23	39
Net proceeds on disposal of non-current assets	6 10	-34	-37
Result of equity investments	11	-174	-157
Net interest	12	144	195
Income tax payments/reimbursements		-670	-385
Significant non-cash-relevant expenses/income		-276	-705
Change in trade working capital		410	259
Change in other assets/shareholders' equity and liabilities		-276	701
Cash flow from operating activities		**4,109**	**5,368**
Capital expenditure for property, plant and equipment and intangible assets	16 17 18 19	-3,709	-3,338
Capital expenditure for financial investments	22 23	-48	-136
Additions/loss to repairable spare parts for aircraft		-388	-210
Proceeds from disposal of non-consolidated equity investments		2	7
Proceeds from disposal of consolidated equity investments		4	–
Cash outflows for acquisitions of non-consolidated equity investments	21 22 44	-48	-55
Cash outflows for acquisitions of consolidated equity investments	48	-12	191
Proceeds from disposal of intangible assets, property, plant and equipment and other financial investments		146	142
Interest income[2]		51	61
Dividends received		143	87
Net cash from/used in investing activities		**-3,859**	**-3,251**
Purchase of securities/fund investments		-3,289	-2,660
Disposal of securities/fund investments		3,879	905
Net cash from/used in investing and cash management activities		**-3,269**	**-5,006**
Capital increase	31 32	–	–
Transactions by minority interests		1	1
Non-current borrowing		987	1,106
Repayment of non-current borrowing		-1,196	-967
Dividends paid		-349	-232
Interest paid		-69	-153
Net cash from/used in financing activities		**-626**	**-245**
Net increase/decrease in cash and cash equivalents		**214**	**117**
Changes due to currency translation differences		2	-37
Cash and cash equivalents 31.12.[3]	29	**1,434**	**1,218**
Securities	28	1,735	2,551
Liquidity		**3,169**	**3,769**
Net increase/decrease in liquidity		-600	-50

[1] Previous year's figures have been adjusted.
[2] Cash inflows from interest hedges (EUR 152m) are netted with the corresponding interest payments as of 2018. The figure for the previous year (EUR 136m) was adjusted accordingly.
[3] The difference between the bank balances and cash-in-hand shown in the statement of financial position comes from fixed-term deposits of EUR 66m with terms of four to twelve months (previous year: EUR 179m).

Further details can be found in the section ↗ **Notes to the consolidated cash flow statement, p. 162f.**

Notes to the consolidated financial statements
Deutsche Lufthansa AG 2018

GENERAL REMARKS

1 Company information

The Lufthansa Group is a global aviation group whose subsidiaries and equity investments were organised into five operating segments in the financial year 2018: Network Airlines, Eurowings, Logistics, MRO and Catering.

Deutsche Lufthansa AG has its headquarters in Cologne, Germany, and is filed in the Commercial Register of Cologne District Court under HRB 2168.

The declaration on the German Corporate Governance Code required by Section 161 of the German Stock Corporation Act (AktG) was issued and made available to shareholders on the internet at **www.lufthansagroup.com/declaration-of-compliance.**

The consolidated financial statements of Deutsche Lufthansa AG, Cologne, and its subsidiaries have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), taking account of interpretations by the IFRS Interpretations Committee as applicable in the European Union (EU).

The commercial law provisions of Section 315e Paragraph 1 of the German Commercial Code (HGB) have also been applied. All IFRSs issued by the IASB and in effect at the time that these financial statements were prepared and applied by Deutsche Lufthansa AG have been adopted by the European Commission for application in the EU. The consolidated financial statements of Deutsche Lufthansa AG are prepared in millions of euros. Its financial year is the calendar year.

The accounting policies used in the previous year have been retained, with the exception of changes due to new or amended standards and the capitalisation of engine overhaul expenses, see ↗ **Note 2, p. 106ff.**

The Executive Board of Deutsche Lufthansa AG prepared the consolidated financial statements for 2018 on 5 March 2019. The consolidated financial statements for 2018 were examined and approved for publication by the Supervisory Board of Deutsche Lufthansa AG in its meeting on 13 March 2019.

2 New international accounting standards in accordance with IFRS and interpretations and summary of the significant accounting policies and valuation methods

INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) AND INTERPRETATIONS (IFRIC) TO BE APPLIED FOR THE FIRST TIME IN THE FINANCIAL YEAR AND AMENDMENTS TO STANDARDS AND INTERPRETATIONS

T073 IFRS-PRONOUNCEMENT (APPLICABLE FROM FINANCIAL YEAR 2018)

IFRS 9, Financial instruments
IFRS 15, Revenue from Contracts with Customers
Clarification of IFRS 15, Revenue from Contracts with Customers
Amendments to IFRS 2, Share-based Payment
Amendments to IFRS 4, Insurance Contracts
Amendments to IAS 40, Transfers from Investment Property
IFRIC 22, Foreign Currency Transactions and Advance Consideration
Annual Improvements to IFRS, 2014 – 2016, Cycle for amendments to IFRS 1, First-time application of the International Financial Reporting Standards, and IAS 28, Investments in associated companies and joint ventures

The standards, clarifications and interpretations mandatory from 1 January 2018 onwards, particularly IFRS 9 (Financial Instruments) and IFRS 15 (Revenue from Contracts with Customers), had the following effects on the Group's net assets, financial and earnings position. The first-time application of all of the other amended accounting standards listed below had no or no material effect on the presentation of the net assets, financial and earnings position or on earnings per share.

IFRS 9
In accordance with the transitional provisions of IFRS 9, Financial Instruments, the Lufthansa Group has not adjusted the figures for the previous year, except for hedging relationships containing options, and recognised the cumulative transitional effects as of 1 January 2018 in retained earnings. The amendments to the accounting for hedging relationships including options were applied retrospectively and the figures for the previous year were adjusted accordingly.

In phase I ("classification"), the transition of share items held as securities from the IAS 39 category "available for sale" (AfS) to the IFRS 9 category "fair value through profit or loss"

(FVTPL) only leads to a transfer within reserves, between the cumulative market value reserve and retained earnings. Share items with a cumulative market value reserve of EUR 12m are also reclassified from AfS to at fair value through other comprehensive income (without recycling).

Debt instruments are still generally classified as at fair value through other comprehensive income. There are no reclassification effects in phase I for loans and receivables either, since they are still held at amortised cost.

As part of phase II ("Impairment standards"), the first-time application of the expected loss model required under IFRS 9 resulted in additional impairment of trade receivables, which is recognised in equity without effect on profit and loss as of 1 January 2018. The effects of this on income as of 31 December 2018 were immaterial.

For fuel hedging transactions, the Group uses the component approach, with crude oil as the designated component and regular rebalancing. This leads to a reduction in volatility in the income statement from changes in the market value of derivatives. The Lufthansa Group uses options as hedging instruments for fuel hedging, with the intrinsic value of the option designated as the hedging instrument in a cash flow hedge. IFRS 9 stipulates that changes in the time values of options are recognised as a cost of hedging in equity without effect on profit and loss. With the retrospective recognition of the time values of options without effect on profit and loss, the changes in time values previously recognised through profit or loss were reclassified within equity to the market valuation reserve as of 1 January 2017. This was also carried out for changes in time values of options in 2017, which were retrospectively reclassified from retained earnings to the market value reserve as a cost of hedging. Comparative figures and results for 2017 have been adjusted accordingly in the financial reporting.

In the area of exchange rate hedging with forward contracts, the Lufthansa Group has been using the spot-to-spot method since 1 January 2018. This involves the spot component of a forward contract being designated as a hedging instrument. The other components of the forward – the scheduling components and the basis spread – are recognised as the forward component and the cross currency basis spread within the market value reserve. This does not have any material impact on the statement of financial position, the income statement or the statement of comprehensive income.

Detailed information can be found in the corresponding chapters of the Notes. ↗ **Note 44, p. 164ff.**

The following table summarises the changes made following the first-time application of IFRS 9.

T074 EFFECTS OF RESTATEMENT FROM IFRS 9 CHANGES

	1.1.2017		
in €m	reported	adjusted	difference
Statement of financial position			
Other comprehensive income – subsequent measurement of cash flow hedges – cost of hedging	–	–76	–76
Income taxes on items in other comprehensive income	–337	–319	18
Retained earnings	1,549	1,607	58

	31.12.2017		
in €m	reported	adjusted	difference
Statement of financial position			
Other comprehensive income – subsequent measurement of cash flow hedges – cost of hedging	–	16	16
Income taxes on items in other comprehensive income	137	134	–3
Income statement			
Profit/loss before income taxes	3,187	3,171	–16
Income taxes	–789	–786	3
Profit/loss after income taxes	2,398	2,385	–13
Earnings per share in €	5.00	5.00	–
Cash flow statement			
Profit/loss before income taxes	3,187	3,171	–16
Significant non-cash-relevant expenses/income	–721	–705	16
Cash flow from operating activities	5,035	5,035	–

	1.1.2018		
in €m	reported	adjusted	difference
Statement of financial position			
Trade receivables and other current receivables	5,283	5,273	–10
Other comprehensive income – subsequent measurement of financial assets at fair value through other comprehensive income (with recycling)	62	19	–43
Retained earnings	4,141	4,174	33
of which reclassification of equity instruments at fair value through other comprehensive income (with recycling)	–	43	43
of which reclassification of equity instruments to at fair value through profit or loss	–	–10	–10
Income taxes on items in other comprehensive income	137	139	2

IFRS 15

Based on the modified retrospective method, the cumulative effects of the changes were recognised in retained earnings as of 1 January 2018. The comparative information for 2017 was therefore not adjusted. Furthermore, the disclosures required by IFRS 15 were generally not made for comparative information. The following table summarises the adjustment effects of the first-time adoption of IFRS 15 on retained earnings as of 1 January 2018:

T075 RETAINED EARNINGS

in €m	Effect of adopting IFRS 15 at 1 Jan 2018
Shift in timing of recognition for fees	29
Customer loyalty programmes	385
Related taxes	-104
Effect at 1 Jan 2018	**310**

IFRS 15 resulted in a shifting of the recognition date for certain items of other revenue (particularly rebooking fees) from the transaction date to the date of use. The shifting of the recognition date also has an impact on the recognition of expired miles in the miles programme. These will no longer be recognised directly through profit or loss in the year of collection, but rather recognised as collected pro rata. The sum continues to include adjustments due to the introduction of a redesigned data model for the total amount of miles outstanding in relation to the introduction of IFRS 15.

Contractual items that have not been performed in full have to be presented in the balance sheet as contract assets or liabilities (current and non-current, in each case).

Obligations in respect of unused flight documents are still presented separately. As of 1 January 2018, liabilities relating to customer loyalty programmes are recognised under other current contract liabilities. They were previously reported under other non-financial liabilities and deferred items (non-current and current). Since the timing of the fulfilment of these obligations is beyond the control of the Company, they are all presented as current, in accordance with IFRS 15. In addition, the short-term component of the customer loyalty programmes, which was previously recognised under received advance payments and deferred income, was reclassified as other contract liabilities. Also included are obligations from works in progress in connection with long-term production and/or service contracts. This was reclassified from advance payments received and other provisions to other contract liabilities.

From 2018 onwards, for ticket revenue, the airport fees received and the corresponding airport invoices will no longer be recognised in the income statement. Applied as of 31 December 2018, this approach reduced revenue and expenses by EUR 2,257m. Otherwise, there were no material differences between revenue recognition under IFRS 15 and revenue recognition under IAS 11 or IAS 18. In connection with IFRS 15, income from training and travel management was reclassified from other operating income to revenue. This had the effect of increasing revenue by EUR 359m as of 31 December 2018. In the prior-year period, EUR 342m was reported under other operating income.

The following tables summarise the effects of applying IFRS 15 to the relevant items of the consolidated statement of financial position as of 31 December 2018 and the consolidated income statement for financial year 2018.

T076 RECONCILIATION FROM IFRS 15 TO IAS 11/18 – STATEMENT OF FINANCIAL POSITION

in €m	**31.12.2018 as reported**	Adjustments	31.12.2018 IAS 11/18
Contract assets	234	-234	–
Trade receivables and other receivables	5,576	234	5,810
Deferred tax assets	2,131	104	2,235
Retained earnings	4,555	317	4,872
Other provisions (non-current)	537	22	559
Contract liabilities (non-current)	22	-22	–
Advance payments received, deferred income (non-current) and other non-financial liabilities	51	1,238	1,289
Other provisions (current)	925	59	984
Trade payables (current) and other financial liabilities	5,764	20	5,784
Contract liabilities from unused flight documents (current)	3,969	-19	3,950
Other contract liabilities (current)	2,316	-2,316	–
Advance payments received, deferred income and other non-financial liabilities (current)	388	597	985
Total assets	**38,213**		**38,317**

T077 RECONCILIATION FROM IFRS 15 TO IAS 11/18 – INCOME STATEMENT

in €m	31.12.2018 as reported	Adjustments	31.12.2018 IAS 11/18
Total revenue	35,844	1,898	37,742
Traffic revenue	28,103	2,257	30,360
Other revenue	7,741	-359	7,382
Other operating income	1,818	359	2,177
Cost of materials and services	-18,669	-2,257	-20,926

Detailed information can be found in the corresponding chapters of the Notes. ↗ **Notes 3 and 4, p. 121f.**

PUBLISHED INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) AND INTERPRETATIONS (IFRIC) NOT YET APPLIED/APPLICABLE AND AMENDMENTS TO STANDARDS AND INTERPRETATIONS

The following standards and amendments have already been adopted by the European Union but are only mandatory for financial statements after 31 December 2018:

T078 IFRS-PRONOUNCEMENT (ADOPTED BY THE EU)

	Mandatory application for financial years beginning on or after
IFRS 16, Leases	1.1.2019
IFRIC 23, Uncertainty over Income Tax Treatments	1.1.2019
Amendments to IAS 28, Non-current equity investments in associated companies and joint ventures	1.1.2019
Amendments to IFRS 9, Prepayment Features with Negative Compensation	1.1.2019

IFRS 16, Leases, must be applied from 1 January 2019. Currently, the payment obligations arising from operating leases only have to be disclosed in the Notes. In the future, the rights and obligations related to such leases are required to be recognised as assets (right-of-use asset) and liabilities (lease liability) in the statement of financial position. The Lufthansa Group will adopt the modified retrospective approach for the introduction of this standard. Under this approach, the comparable figures for the previous year are not adjusted and all adjustment effects as of 1 January 2019 have therefore to be presented as adjustments to retained earnings. In addition, the Lufthansa Group will recognise the right-of-use assets on the basis of the corresponding lease liabilities upon first-time application and not in the amount of the carrying amounts of the lease liabilities at the start of the contract, such that IFRS 16 has no impact on equity as of 1 January 2019. Short-term leases with a term of less than twelve months (and containing no purchase options) and leases where the underlying asset has a low value will not be recognised. The same applies to contracts with a remaining term of less than a year upon first-time application.

In view of the contracts concluded as of the reporting date, the Group is anticipating an increase in total assets of approximately EUR 2.0bn. Material contracts are still under negotiation, which will result in additional right of uses and lease liabilities of EUR 0.4bn if they are signed, so that total assets are currently expected to go up by EUR 2.4bn in total. Based on the total assets as of 31 December 2018, the first-time application of IFRS 16 would result in a decrease of approximately 1.5 percentage points in the equity ratio.

The expenses related to operating leases are currently shown in the income statement under cost of materials and services and other operating expenses. The current volume of operating leases is shown in ↗ **Note 20, p. 134ff.**

From 2019 onwards the item is expected to include additional amortisation on the right of uses of around EUR 360m and interest expenses on the lease liability of around EUR 50m. These changes in presentation are expected to impact operating earnings (EBIT) by around EUR 25m.

In addition, the change in the presentation of the expenses related to operating leases will result in a transfer from cash flow from financing activities to cash flow from operating activities as the lease payments no longer affect the operating cash flow and are instead recognised as interest and redemption payments within cash flow from financing activities. This effect will amount to around EUR 385m in 2019.

The Lufthansa Group has decided to recognise the right-of-use assets as property, plant and equipment and the lease liabilities as other liabilities in the statement of financial position. The relevant detailed disclosures will be made separately in the Notes from 2019.

IFRIC 23, Uncertainty over Income Tax Treatments, was published by the IASB in June 2017. IFRIC 23 is applicable to financial years beginning on or after 1 January 2019; early adoption is permitted. The interpretation supplements the provisions of IAS 12 on accounting for effective and deferred taxes with regard to uncertainties over the treatment of particular circumstances and transactions by the tax authorities and courts pertaining to income tax.

In the past, the Lufthansa Group has only recognised claims against tax authorities when a cash inflow was considered to be as good as definite. Following the transition to IFRIC 23, the claims will be recognised as soon as the cash inflow is deemed to be probable. When IFRIC 23 takes effect, the Lufthansa Group expects to transfer a low two-figure million euro amount to retained earnings as a result.

The IASB and the IFRS Interpretations Committee have adopted other standards and interpretations whose application is not mandatory for the financial year 2018.

T079 IFRS-PRONOUNCEMENT (NOT YET ENDORSED BY THE EU)

	Mandatory application for financial years beginning on or after
Annual Improvements to IFRS, 2015–2017 Cycle	1.1.2019
Amendments to IAS 19, Plan amendments, curtailments and settlements	1.1.2019
Changes to conceptual framework	1.1.2020
Amendments to IFRS 3, Business combinations	1.1.2020
Amendments to IAS 1 and IAS 8: Definition of materiality	1.1.2020
IFRS 17, Insurance Contracts	1.1.2021

Currently, the new or amended IFRS pronouncements listed in the table are not considered to have a material effect on the presentation of the net assets, financial and earnings position.

The Group has not voluntarily applied any of the new or amended regulations mentioned above before their binding date of application. If the effective dates of the standards and interpretations mentioned above fall within the year, they are applied as of 1 January of the following financial year. This is subject to the endorsement of the standards by the EU.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND VALUATION METHODS

The companies included in the consolidated financial statements use uniform accounting policies to prepare their financial statements.

The application of the accounting policies prescribed by IFRS and IFRIC requires making a large number of estimates and assumptions with regard to the future that may, naturally, not coincide with actual future conditions. All of these estimates and assumptions are, however, reviewed continuously and are based either on past experience and/or expectations of future events that seem reasonable in the circumstances on the basis of sound business judgement. Estimates and assumptions that are of material importance in determining the carrying amounts for assets and liabilities are explained in the following description of the accounting policies applied to material items in the statement of financial position.

The fundamental valuation method applied in the consolidated financial statements is the acquisition cost principle. Where IFRSs stipulate that other methods of measurement should be applied, these are used instead, and are referred to specifically in the following comments on measuring assets and liabilities.

Amendments to accounting policies as a result of revised and new standards are applied retrospectively unless provided otherwise for a specific standard. The income statement for the previous year and the opening balance sheet for the comparable period are adjusted as if the new accounting policies had always been applied.

Recognition of income and expenses

Revenue and other operating income are recognised when the service has been provided.

Passenger transport and ancillary services

The Lufthansa Group sells flight tickets and related ancillary services primarily via agents, its own websites or other airlines in the course of interlining. The payments are received by the Lufthansa Group via credit card billing companies, agents or other airlines, generally before the corresponding service is provided. Receivables from the sale of flight tickets and related ancillary services are only amounts payable by credit card billing companies, agents or other airlines.

The Group initially recognises all ticket sales as liabilities from unused flight documents. These are presented as contract liabilities as of the intital application of IFRS 15. Depending on the terms of the selected fare, the contract liabilities will reflect a range of possibilities for refunding services that have not yet been provided. Liabilities include both the deferred income for future flights and ancillary services that are recognised as revenue when the flight documents are used, and the liabilities for award miles credited to the passenger when the flight documents are used. The Lufthansa Group allocates the transaction price to all of the performance obligations identified on the flight ticket on the basis of their individual transaction prices. The individual transaction prices for flight segments are determined using the IATA procedure. The total price payable is allocated to individual flight segments using what is known as a prorate calculation, which meets the IFRS 15 definition of a relative individual transaction price. The individual transaction prices for ancillary services that are not included in the fare are directly observable prices within the meaning of IFRS 15. On average, it takes 2.5 months for a flight coupon to be realised.

The Lufthansa Group reduces liabilities from unused flight documents and recognises revenue for each flight segment (including the related ancillary revenue) when the respective document is used. For tickets that cover more than one flight segment, the Lufthansa Group identifies each flight segment as a distinct performance obligation, since each flight segment is independent and can be distinguished in the context of the contract.

Interlining means that the passenger is carried by another airline for one (or more) flight segments. As soon as a third party is involved in providing the service, a distinction must be made between the principal and the agent. When Lufthansa acts as the principal, the gross amount of revenue is recognised. If Lufthansa acts as a agent, the net amount is recognised instead. The transaction price for this specific service is limited to the amount of the commission received. The performance obligation is fulfilled when the respective flight document for the flight segment is used.

Generally speaking, the Lufthansa Group does not expect to receive any amount if a flight document is not used (or if the amount is significant) and for this reason does not anticipate the possibility that documents for a flight segment are not used. The expected amount if flight documents are not used is only recognised as revenue if the probability that the passengers (in accordance with the portfolios) exercise their remaining rights is low, and no later than when the expiry of flight documents is certain and known. This accounting practice was not changed by the implementation of IFRS 15.

Logistics

Lufthansa Cargo markets the freight capacities of passenger aircraft at Lufthansa German Airlines, Austrian Airlines, Eurowings and Brussels Airlines and operates a fleet of cargo aircraft. In addition to income from standard cargo services, Lufthansa Cargo generates part of its revenue from ancillary services that are closely connected to the freight service.

In its cargo business, the Lufthansa Group has identified the entire freight service as a distinct performance obligation. The final customer receives the benefit of the transport service and at the same time uses the service as is provided with each transport segment. In this case, the customer takes control of the company's output while the carrier provides its service. The customer receives the benefit of the service as each transport segment is fulfilled. The corresponding cargo revenue is therefore recognised at the prorate value when the documents for each individual segment are used.

Lufthansa Cargo typically receives the consideration for performing its service once the transport has been carried out.

MRO

The performance obligations in the MRO segment are the provision of maintenance and aircraft and engine overhaul services, which are recognised over time since the condition of IFRS 15.35 (b) is generally met. These performance obligations involve estimating the proportion of the total contract already completed and the profit on the whole contract, so that an input-orientated measurement of the percentage of completion can be made. Contract assets and contract liabilities are therefore both recognised.

Access to Lufthansa Technik's pool of spare parts and components is another key performance obligation, which is satisfied either over time or at a point in time, depending on the contract model agreed.

In some cases, the contracts in the MRO segment make it necessary not to recognise distinct services as individual performance obligations but rather as a series, as described in IFRS 15.22 (b). Furthermore, some of the contracts include standby obligations that require the recognition of revenue over time. This is particularly the case when remuneration is paid in the form of a fixed rate per hour of flying time. In this case, the percentage of completion is primarily measured on the basis of the hours invoiced monthly to the customer. Revenue for component supply contracts is realised taking into consideration the margin shown in the business plans, which are updated annually.

A significant portion of the contracts in the MRO business segment run for several years and so have indexation clauses, but which only impact the transaction price when the index event (e.g. a wage increase) has occurred.

Catering
The LSG group offers products and services related to in-flight service. These include catering, in-flight sales and entertainment, in-flight service equipment and the associated logistics as well as consultancy services and the operation of lounges.

Airline catering is the main business of the LSG group as far as revenue is concerned. Taking the business model and the value chain for airline catering into account, the preparation of meals and the logistics related to this catering have been identified as distinct performance obligations. The performance obligation to prepare meals is generally fulfilled when the meals are delivered to the customers. The catering logistics performance obligation is fulfilled over time between the transport of the meals to the airport and the disposal of the waste, depending on the services ordered by the customer. For performance obligations satisfied over time the percentage of completion is measured on an output basis in accordance with IFRS 15.B15 in conjunction with IFRS 15.B16.

Billing and payment in the Catering segment generally takes place one to two months after the performance obligation has been fulfilled. This gives rise to trade receivables, but no significant contract liabilities or assets from catering contracts.

Variable consideration (e.g. volume discounts) has to be taken into account when determining the transaction price in the catering business. The majority of the variable consideration is estimated using the expected value method on the basis of historic data and current developments. The LSG group updates the estimated transaction price at the end of each reporting period and accounts for the resulting changes in accordance with IFRS 15.87-90.

Operating expenses are recognised when the product or service is used or the expense arises. Provisions for warranties are generally accounted for when the corresponding revenue is recognised, while provisions for onerous contracts are generally set up when they are identified.

Further disclosures on the Group's revenue from contracts with customers can be found in ↗ **Notes 3 and 4, p. 121f.**

Interest income and expenses are accrued in the appropriate period. Dividends from shareholdings not accounted for using the equity method are recognised when a legal claim to them arises.

Initial consolidation and goodwill
The initial consolidation of Group companies takes place using the purchase method. This involves measuring the fair value of the assets, liabilities and contingent liabilities identified, in accordance with the provisions of IFRS 3, of the company acquired at the acquisition date, and allocating the acquisition costs to them. The proportion of fair value of assets and liabilities not acquired is shown under minority interests. The ancillary acquisition costs are recognised as expenses in the periods in which they occur.

Any excess of cost over the value of equity acquired is capitalised as goodwill. If the value of the acquirer's interest in the shareholders' equity exceeds the purchase price paid by the acquiring company, the difference is recognised immediately in profit or loss.

Differences from minority interests acquired after control has been gained are set off directly against equity.

Goodwill is not amortised, but is tested annually for impairment. The impairment tests applied to goodwill are carried out using established discounted cash flow methods. This is done on the basis of expected future cash flows from the latest business plan, which are extrapolated on the basis of long-term revenue growth rates and assumptions with regard to margin development and are discounted for the capital costs of the business unit. Tests are performed at the cash generating unit (CGU) level. For the individual premises on which impairment tests were based in the financial year 2018, see ↗ Note 16, p. 127ff.

Additional impairment tests are also applied during the course of the year if events give reason to believe that goodwill could be permanently impaired.

Once an impairment loss has been recognised on goodwill, it is not reversed in subsequent periods.

Notwithstanding the principles described above, Group companies that have no material impact on the Group's net assets, financial and earnings position are not consolidated, but rather recognised in the consolidated financial statements at cost less any impairments.

Currency translation and consolidation methods
The financial statements of the foreign Group companies are prepared in the relevant functional currency and translated into euros before consolidation. The functional currency is mainly the currency of the country in which the company concerned is located. Occasionally, the functional currency differs from the national currency. Assets and liabilities are translated at the middle rates on the balance sheet date. Income statements are translated at the average exchange rates for the year. Any translation differences are recognised directly in equity without effect on profit and loss and are only recognised in profit or loss when control is lost or the equity investment is disposed of.

Goodwill from capital consolidation of foreign subsidiaries prior to 2005 is carried at historical cost net of amortisation accumulated by the end of 2004. Goodwill acquired after 2005 is held in the functional currency of the purchased company and translated at the middle rates on the reporting date.

Transaction differences, however, are recognised in profit or loss. These differences arise in the financial statements of consolidated companies from assets and liabilities based on currency other than the company's functional currency. Any resulting exchange rate differences are included in other operating income as exchange rate gains, or in other operating expenses as exchange rate losses.

Translation differences relating to items whose fair value changes are recognised in equity are also recognised in equity without effect on profit and loss.

The most important exchange rates used in the consolidated financial statements have developed in relation to the euro as follows:

T080 EXCHANGE RATES

	2018		2017	
	Balance sheet exchange rate	**Income statement average rate**	Balance sheet exchange rate	Income statement average rate
AUD	0.61536	0.63223	0.64984	0.67792
CAD	0.64094	0.65241	0.66404	0.68083
CHF	0.88776	0.86633	0.85440	0.90106
CNY	0.12708	0.12787	0.12774	0.13050
GBP	1.11000	1.13057	1.12499	1.13930
HKD	0.11163	0.10771	0.10648	0.11318
INR	0.01250	0.01235	0.01303	0.01356
JPY	0.00792	0.00767	0.00739	0.00788
KRW	0.00078	0.00077	0.00078	0.00078
NOK	0.10014	0.10426	0.10161	0.10740
PLN	0.23234	0.23463	0.23952	0.23505
SEK	0.09747	0.09727	0.10170	0.10382
USD	0.87409	0.84415	0.83184	0.88200

The provisions of IAS 29, Financial Accounting in Hyperinflationary Economies, were applied to two consolidated companies, in Venezuela and Argentina. Gains and losses from adjusting for inflation the carrying amounts of non-monetary assets and liabilities and the income statement were immaterial and were recognised in other operating income.

The effects of intra-Group transactions are completely eliminated in the course of consolidation. Receivables and liabilities between consolidated companies are offset against one another and intra-Group provisions are reversed through profit or loss. Intra-Group profits and losses in non-current assets and inventories are eliminated – mostly in connection with the internal resale of aircraft and maintenance events. Intra-Group income is set off against the corresponding expenses. Tax accruals and deferrals are made as required by IAS 12 for temporary differences arising from consolidation.

Other intangible assets (except goodwill)
Acquired intangible assets are shown at cost, while internally generated intangible assets from which the Group expects to derive future benefit and that can be measured reliably are capitalised at cost of production and amortised regularly using the straight-line method over an estimated useful life. The cost of production includes all costs directly attributable to the production process, including borrowing costs as required under IAS 23, as well as appropriate portions of production-related overhead.

Intangible assets with indefinite useful lives (mainly brands and purchased, resalable take-off and landing rights) are not amortised, but rather subjected to a regular annual impairment test, as is goodwill.

Property, plant and equipment

Tangible assets used in business operations for longer than one year are valued at cost less regular straight-line depreciation. The cost of production includes all costs directly attributable to the manufacturing process as well as appropriate portions of production-related overhead. Borrowing costs in close connection with the financing of the purchase or production of a qualifying asset are also capitalised.

Key components of property, plant and equipment that have different useful lives are recognised and depreciated separately. Seats and in-flight entertainment systems installed in commercial aircraft are recognised separately. If costs are incurred in connection with regular extensive maintenance work (e.g. overhauling aircraft), these costs are recognised as a separate component insofar as they meet the criteria for recognition.

More pronounced investment cycles for aircraft and the better data analytics now available for engine maintenance processes lead to the change that from the beginning of financial year 2018, major engine overhauls are now also carried as separate components with a typical useful life of six years. Expenses for major engine overhauls incurred during the useful life of the aircraft are capitalised and depreciated accordingly. This change improves the presentation of the assets and earnings position because expenses for maintenance work now cause earnings to fluctuate less over time. The effects of this change in the accounting method were applied retrospectively in line with IAS 8 and so the comparative figures for prior years were adjusted accordingly. The following table shows the effects of the change on the relevant items of the statement of financial position, the income statement and the cash flow statement.

T081 EFFECTS OF RESTATEMENT CAPITALISATION ENGINE OVERHAUL EVENTS 2017

	1.1.2017		
in €m	reported	adjusted	difference
Statement of financial position			
Aircraft and reserve engines	14,798	14,189	–609
Deferred tax assets	1,413	1,547	134
Shareholders' equity	7,149	6,674	–475

	31.12.2017		
in €m	reported	adjusted	difference
Statement of financial position			
Aircraft and reserve engines	15,959	15,333	–626
Deferred tax assets	1,523	1,661	138
Shareholders' equity	9,598	9,110	–488
Income statement			
Changes in inventories and work performed by entity and capitalised	106	438	332
Cost of materials and services	–19,013	–19,028	–15
Depreciation, amortisation and impairment	–2,052	–2,382	–330
Profit/loss from operating activities	3,153	3,140	–13
Profit/loss before income taxes	3,187	3,174	–13
Income taxes	–789	–787	2
Profit/loss after income taxes	2,398	2,387	–11
Earnings per share in €	5.03	5.01	–0.02
Cash flow statement			
Net profit/loss before income taxes	3,187	3,174	–13
Depreciation, amortisation and impairment losses on non-current assets (net of reversals)	1,970	2,300	330
Change in other assets/shareholders' equity and liabilities	685	701	16
Cash flow from operating activities	5,035	5,368	333
Net cash from/used in investing activities	–2,782	–3,115	–333

If the accounting change had not taken place, the relevant items would have been affected as follows:

T081 EFFECTS OF RESTATEMENT CAPITALISATION ENGINE OVERHAUL EVENTS 2018

	31.12.2018		
in €m	reported	without accounting change	difference
Statement of financial position			
Aircraft and reserve engines	16,776	17,280	-504
Deferred tax assets	2,131	2,013	118
Shareholders' equity	9,573	9,959	-386
Income statement			
Changes in inventories and work performed by entity and capitalised	531	61	470
Cost of materials and services	-18,669	-18,659	-10
Depreciation, amortisation and impairment	-2,205	-1,867	-338
Profit/loss from operating activities	2,800	2,678	122
Profit/loss before income taxes	2,784	2,662	122
Income taxes	-588	-568	-20
Profit/loss after income taxes	2,196	2,094	102
Earnings per share in €	4.58	4.36	0.22
Cash flow statement			
Net profit/loss before income taxes	2,784	2,662	122
Depreciation, amortisation and impairment losses on non-current assets (net of reversals)	2,178	1,840	338
Change in other assets/shareholders' equity and liabilities	-276	-286	10
Cash flow from operating activities	4,109	3,639	470
Net cash from/used in investing activities	-3,859	-3,389	-470

The following useful lives are applied throughout the Group:

T082 USEFUL LIVES OF PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment	Useful life
Buildings	45 years
New commercial aircraft and reserve engines	20 years to a residual value of 5%
Separable aircraft components	4 to 6 years
Technical equipment and machinery	8 to 20 years
Other equipment, operating and office equipment	3 to 20 years

Buildings, fixtures and fittings on rented premises are depreciated according to the terms of the leases or over a shorter useful life.

Assets acquired second-hand are depreciated over their expected remaining useful life.

When assets are sold or scrapped, the difference between the net proceeds and the net carrying amount of the assets is recognised as a gain or loss in the other operating income or expenses, respectively.

In addition to the impairment tests for goodwill, slots and brands, individual items of property, plant and equipment and intangible assets are also tested for impairment if they are no longer intended for future use, either because they are damaged, retired or due to be sold. In this case, the assets are measured individually in line with the applicable standard (full write-down to scrap value, or disposal proceeds less costs to sell). The lowest level at which assets can form a CGU is a production facility, to the extent that separate product lines or customer (groups) can be assigned to it. When aircraft are held for service in the Group fleet and there is no immediate intention to sell them, they are combined with the assets of the respective operating unit for the purposes of impairment testing.

Impairment losses on intangible assets and property, plant and equipment

In addition to depreciation and amortisation on property, plant and equipment and intangible assets, impairment losses are also recognised on the balance sheet date if the asset's recoverable amount has fallen below its carrying amount. The recoverable amount is determined as the higher of an asset's fair value less costs to sell and the present value of the estimated net future cash flows from continued use of the asset (value in use).

Fair value less costs to sell is derived from recent market transactions, if available.

If it is impossible to forecast expected cash flows for an individual asset, the cash flows for the next larger asset unit are estimated, discounted at a rate reflecting the risk involved, and the recoverable amount allocated to the individual assets in proportion to their respective carrying amounts.

If the reason for an impairment loss recognised in previous years should cease to exist in whole or in part in subsequent periods, the impairment loss is reversed up to the amount of the asset's amortised cost.

Repairable spare parts for aircraft
Initial supply of spare parts for aircraft that can be reused after repair are classified as non-current assets.

Repairable spare parts for aircraft are held at continually adjusted prices based on average acquisition costs. For measurement purposes, spare parts to be allocated to a maintenance pool are assigned to individual aircraft models and depreciated on a straight-line basis depending on the life phase of the fleet models for which they can be used. Other spare parts, mainly intended for replacement, are recognised in the statement of financial position at a discount to their acquisition costs, depending on how common they are.

Finance leases
In accordance with IAS 17, the economic ownership of leased assets is deemed to be transferred to the lessee if the lessee bears all of the risks and rewards associated with ownership of the leased asset. In addition to the duration of the non-terminable initial term of the lease and the present value of the leasing payments as a proportion of the total investment, particular consideration is given to the distribution of risks and rewards relating to the non-amortised residual value of the asset over the term of the lease. Insofar as its economic ownership is deemed to be with the Lufthansa Group, the asset is capitalised at the start of the leasing contract at the lower of the present value of the leasing instalments and the asset's time value, plus any incidental expenses borne by the lessee. Depreciation methods and useful economic lives correspond to those applied to comparable purchased assets.

Operating leases
With an operating lease, the lease payment made by the lessee is recognised as an expense and the payment received by the lessor as income. The leased asset is still recognised in the consolidated statement of financial position as property, plant and equipment.

Equity investments accounted for using the equity method
Equity investments accounted for using the equity method are capitalised at cost at the time of acquisition.

In subsequent periods, the carrying amounts are either increased or reduced annually by changes in the shareholders' equity of the associated company or joint venture that is held by the Lufthansa Group. The principles of purchase price allocation that apply to full consolidation are applied accordingly to the initial measurement of any difference between the acquisition cost of the investment and the pro rata share of shareholders' equity of the company in question. An impairment test is only carried out in subsequent periods if there are indications of a potential impairment in the entire investment valuation.

Financial instruments
Financial assets are classified within the Lufthansa Group in accordance with IFRS 9 as "at amortised cost", "at fair value through profit or loss", "at fair value through other comprehensive income (with and without recycling)" and "derivative financial instruments as an effective part of a hedging relationship".

The category **"at amortised cost"** consists of financial assets that are debt instruments and are intended to be held to maturity on the basis of the company's business model. Furthermore, these instruments have fixed payment terms and meet the criteria for cash flow characteristics, i.e. contractual payments of principal and interest. At Lufthansa this item particularly includes loans and receivables, cash-in-hand and bank balances. They are classified as non-current or current assets according to their remaining maturity.

The category **"at fair value through profit or loss"** comprises debt instruments for which the business model is neither to hold nor to hold and sell them, or which do not pass the cash flow characteristics test. This is generally not the case at Lufthansa. Equity instruments are also allocated to this category as a rule, so Lufthansa generally recognises shares and equity investments that are financial instruments in this category. Derivatives that do not meet the criteria for hedge accounting are also classified in this category.

Debt instruments are classified **"At fair value through other comprehensive income (with recycling)"** when the business model is to hold and sell these instruments and they pass the cash flow characteristics test. At Lufthansa, this applies to securities representing debt instruments.

An option can be exercised to classify specific equity instruments **"At fair value through other comprehensive income (without recycling)".** Lufthansa exercises this option for individual share positions.

Lufthansa uses derivatives for hedging, which are classified as **"derivative financial instruments as an effective part of a hedging relationship"** if all the requirements for hedge accounting are satisfied.

Financial instruments are recognised on the settlement date, i.e. on the date that they are created or transferred. Financial assets are capitalised at fair value plus transaction costs. Unrealised gains and losses are recognised directly in equity, taking deferred taxes into account. Long-term low or non-interest-bearing loans are recognised at net present value using the effective interest method. Subsequent measurement of the financial instrument depends on the classification, either at amortised cost using the effective interest method, or at fair value, through profit or loss or in equity without effect on profit and loss.

Receivables denominated in foreign currencies are measured at the balance sheet date rate.

The fair value of securities is determined by the price quoted on an active market. For unlisted fixed-interest securities, the fair value is determined from the difference between effective and market interest rate at the valuation date.

If there are doubts as to the recoverability of receivables, then impairment losses are recognised and these receivables are recognised at the lower recoverable amount. Subsequent reversals (write-backs) are recognised in profit or loss. IFRS 9 requires that when a receivable is recognised for the first time, an expected loss is provided for that reflects the credit risk of the receivable before a default event occurs. External credit risk exists for the Lufthansa Group especially in its portfolio of trade receivables, for which an expected credit loss allowance is recognised.

Derivative financial instruments are measured at fair value on the basis of published market prices. If there is no quoted price on an active market, other appropriate valuation methods are applied. Appropriate valuation methods take all factors into account that independent, knowledgeable market participants would consider in arriving at a price and that constitute recognised, established economic models for calculating the price of financial instruments.

In accordance with its internal guidelines, the Lufthansa Group uses derivative financial instruments to hedge interest rate and exchange rate risks and to hedge fuel price risks. This is based on the hedging policy defined by the Executive Board and monitored by a committee.

Interest rate swaps and interest rate/currency swaps are used to manage interest rate risks. Interest rate/currency swaps also hedge exchange rate risks arising from borrowing in foreign currencies.

Fuel price hedging takes the form of spread options and other hedging combinations, primarily for crude oil. To a limited extent, hedging may also be undertaken for other products, such as gas oil.

Hedging transactions are used to secure either fair values (fair value hedge) or future cash flows (cash flow hedge).

To the extent that the financial instruments used qualify as effective cash flow hedging instruments within the scope of a hedging relationship, in accordance with the provisions of IFRS 9, the fluctuations in market value will not affect the result for the period during the term of the derivative. They are recognised without effect on profit or loss in the corresponding reserves. If the hedged cash flow is an investment, the result of the hedging transaction that has previously been recognised in equity is set off against the cost of the capital expenditure at the time the underlying transaction matures. In all other cases, the cumulative gain or loss previously stated in equity is included in net profit or loss for the period on maturity of the hedged cash flow.

In the case of effective hedging of fair values that are designated as a fair value hedge, the changes in the market value of the hedged asset or the hedged debt and those of the financial instrument will balance out in the income statement.

Derivatives that do not meet the criteria for hedge accounting are presented in the category "at fair value through profit or loss". Changes in fair value are then recognised directly in profit or loss. At Lufthansa, this generally occurs when the exposure or item being hedged cannot be measured reliably or the exposure ceases to exist prematurely over the course of the hedge.

Embedded derivatives – to the extent that they should, but cannot, be separated from the financial host contract – are also considered with these as trading transactions for measurement purposes. Changes in market value are also recognised directly as profit or loss in the income statement. Both types must be classified as financial assets stated at fair value through profit or loss.

It is the Group's hedging policy (↗ **Note 44, p. 164ff.**) only to acquire effective derivatives for the purpose of hedging interest rate, exchange rate and fuel price risks.

Initial recognition of **financial guarantees** given to third parties is at fair value. Thereafter, financial guarantees are either measured in the category "at fair value through profit or loss" or at the higher of the originally recognised amount, less any cumulative amortisation through profit or loss in line with IFRS 15, and the value of the contractual obligation measured in line with IAS 37.

Emissions certificates
CO_2 emissions certificates are recognised as intangible assets and presented under other receivables. Rights, both those purchased and those allocated free of charge, are measured at cost and not amortised.

Contract assets and receivables
If the customer has fulfilled their contractual obligations. Receivables are recognised if the right to receive the consideration is no longer consideration is no longer subject to conditions. This is generally the case when the Group is contractually entitled to send the customer an invoice. Contract assets mainly relate to construction or service contracts for MRO and IT services.

Inventories
The item "Inventories" comprises non-repairable spare parts and assets used in production or the provision of services (raw materials, consumables and supplies), purchased merchandise, finished and unfinished goods and advance payments for them. They are measured at cost, determined on the basis of average prices, or at production costs. The cost of production includes all costs directly attributable to the production process, including borrowing costs as required under IAS 23, as well as appropriate portions of production-related overheads. Average capacity utilisation of 100% is assumed in determining the costs of production (previous year: 96%). Measurement on the balance sheet date is at the lower of cost and net realisable value. Net realisable value is defined as the estimated selling price less the estimated cost of completion and the estimated costs necessary to make the sale.

Assets held for sale
Individual, formerly non-current assets or groups of assets that are expected to be sold within the next twelve months are measured at the lower of their carrying amount at the time they are reclassified and fair value less costs to sell. Fair value less costs to sell is derived from recent market transactions, if available.

Property, plant and equipment and intangible assets are no longer depreciated or amortised and affiliated companies accounted for using the equity method are no longer accounted for in this way once they are classified as held for sale or held for distribution. While the impairment charge from the last measurement before reclassification is recognised as an impairment loss, all subsequent changes in the measurement of current assets held for sale, e.g. due to exchange rate movements, are shown in other operating expenses or income.

Cash and cash equivalents
Cash and cash equivalents comprise cash-in-hand, cheques received and credit balances at banks. Cash equivalents are financial investments that can be liquidated at short notice. At the time of purchase or investment, they have a maturity of three months or less.

Pension provisions
The pension provisions for defined-benefit plans correspond to the present value of the defined-benefit obligations (DBO) on the reporting date less the fair value of plan assets, if necessary taking the rules on the maximum surplus of plan assets over the obligation (asset ceiling) into account.

The DBO is calculated annually by independent actuaries using the projected unit credit method prescribed in IAS 19 for defined-benefit pension plans. The measurement of pension provisions within the statement of financial position is based on a number of actuarial assumptions.

Capital account plans are measured using the market value of the assets assigned to the individual capital accounts as of the reporting date, whereby the present value of the minimum benefit payable when the beneficiary becomes entitled to the benefit is compared with the amount of contributions already paid in, measured using the assumptions for the benefit plans. Additional risk premiums that the employer contributes to insure against early entitlements are included in current service expense.

They include, in particular, assumptions about long-term salary and pension trends as well as average life expectancy. The assumptions about salary and pension trends are based on developments observed in the past and take into account national interest and inflation rates and labour market trends. Estimates of average life expectancy are based on recognised biometric calculation formulas.

The interest rate used to discount the individual future payment obligations is based on the return from investment grade corporate bonds in the same currency and with a similar term to maturity. The discount rate is determined by reference to high-quality corporate bonds with an issue volume of at least EUR 100m and an AA rating from at least one of the rating agencies Moody's Investor Service, Fitch Ratings or Standard & Poor's Rating Services.

Actuarial gains and losses arising from the regular adjustment of actuarial assumptions are recognised directly in equity in the period in which they arise, taking deferred taxes into account. Also presented without effect on profit and loss are differences between the interest income at the beginning of the period calculated on plan assets based on the interest rate used to discount the pension obligations and the earnings from plan assets actually recorded at the end of the period. The actuarial gains and losses and any difference between the forecast result and the actual result from plan assets form part of the remeasurement.

Past service costs are recognised immediately in profit or loss.

Payments to pension providers for defined contribution retirement benefit commitments for which the pension provider or the beneficiary assumes the financial risks are recognised in staff costs as they fall due.

Other provisions and tax provisions

Other provisions are recognised for present legal and constructive obligations to third parties arising from past events that will probably give rise to a future outflow of resources provided that a reliable estimate can be made of the amount of the obligations as of the reporting date.

The amount of the provision is determined by the best estimate of the amount required to settle the present obligation. Past experience, current cost and price information as well as estimates from internal and external experts are used to determine the amount of provisions.

The management regularly analyses the current information on legal risks and makes provisions for probable obligations. These provisions cover estimated payments to the claimant, court and procedural costs, the costs of lawyers and of any out-of-court settlement. Internal and external lawyers assist with the estimate. When deciding on the necessity of a provision for litigation, the management takes into account the probability of an unfavourable outcome and the chance of making a sufficiently accurate estimate of the amount of the obligation. The commencement of legal proceedings, the formal assertion of a claim against the Group or the disclosure of certain litigation in the Notes does not automatically mean that a provision was made for the risk concerned. A ruling in court proceedings, a decision by a public authority or an out-of-court settlement may cause the Group to incur expenses for which no provision was made because the amount could not be reliably determined or for which the provision made and the insurance coverage is not sufficient.

Provisions for obligations that are not expected to lead to an outflow of resources in the following year are recognised to the amount of the present value of the expected outflow, taking foreseeable price rises into account.

The assigned value of provisions is reviewed on each balance sheet date. Provisions in foreign currencies are translated at reporting date rates.

If no provision could be recognised because one of the stated criteria was not fulfilled, the corresponding obligations are shown as contingent liabilities and discussed in the relevant section.

Obligations towards tax authorities that are uncertain with regard to their occurrence, probability and amount are recorded as **tax provisions** on the basis of reasonable estimates. Existing contingent liabilities in connection with this are addressed separately.

Liabilities

Liabilities arising from finance leases are recognised at the present value of the lease payments at the inception of the lease term. Other financial liabilities are recognised at fair value. Liabilities for which interest is not payable at a market rate are recognised at present values.

Measurement in subsequent periods is at amortised cost using the effective interest rate method.

Liabilities in foreign currencies are measured at the balance sheet date.

Obligations from share programmes were measured at fair value as cash-settled share-based payment transactions in accordance with IFRS 2. Fair value was measured using a Monte Carlo simulation.

The liability is recognised on the basis of the resulting fair value, taking the remaining term of the programme into account. Changes are recognised as staff costs in profit or loss.

Details of the assumptions used for the model and the structure of the share programmes can be found in ↗ **Note 38, p. 153ff.**

Contract liabilities
A contract liability is an obligation on the part of the Group towards a customer to provide goods or services for which the customer has already performed an obligation, e.g. by making an advance payment.

The Group's contract liabilities consist of liabilities from unused flight documents, unredeemed miles from the customer loyalty programmes, construction contracts and other contract liabilities.

Until they are used, sold flight documents are recognised as an **obligation from unused flight documents.** Coupons that are unlikely to be used any more are recognised pro rata temporis as traffic revenue in the income statement at their estimated value. The estimate is based on historical statistical data.

The Lufthansa Group uses various bonus miles programmes with the aim of ensuring long-term **customer loyalty.** Participants in the Miles & More programme, which is the biggest bonus miles programme in the Lufthansa Group, can collect and redeem bonus miles for flights with the airlines in the Lufthansa Group as well as with numerous partners (including other airlines, hotels, global car hire companies, financial and insurance providers, telecommunications companies, retailers, automobile clubs etc.). Miles expire three years after they are collected, in accordance with the terms of membership, unless they are protected by frequent flyer status or credit card use.

Revenue for premium miles is recognised at the point in time or over the time at which the goods and services purchased with the premium miles are transferred.

Experience of passengers' past behaviour is used to measure the premium claims that are collected on flights with the airlines in the Lufthansa Group. Miles that are expected to be used for flights with airlines in the Lufthansa Group are measured with the average price of the premium flight or upgrade for the average number of miles used. The price is calculated on the basis of past redemption patterns, weighted for the various geographic regions and booking classes.

This is then corrected to allow for the reduced flexibility of premium flights and the award miles granted for normal flights. Miles that are expected to be redeemed for other bonuses are measured at the average price for these bonuses and the average number of miles redeemed. The prices for additional miles are recalculated every year and applied to all additions in that year. Consumption of miles is measured using the average rate for total miles at the beginning of the year (same as previous year).

Premium points collected from other partners are measured at the amounts paid by these partners in relation to the average number of miles collected and redeemed.

The previous calculation method for the legal and economic expiry rate can still be applied unchanged under IFRS 15. It entails calculating the expiry rate from the rates observed in prior years, increased or decreased as necessary by reference to past trends or future enhancements to the programme. There are changes to the recognition of income from the expiry of award miles. IFRS 15 requires that income from the expiry of miles is recognised in parallel with revenue from the performance obligations that do not expire. A period of three years is therefore assumed for revenue recognition, and the revenue from miles expected to expire is recognised on a straight-line basis over this time.

Deferred tax items
In accordance with IAS 12, deferred taxes are recognised for all temporary differences between the statements of financial position with regard to tax of individual companies and the consolidated financial statements. Tax loss carry-forwards are recognised to the extent that the deferred tax assets are likely to be used in the future. Company earnings forecasts and specific, realisable tax strategies are used to determine whether deferred tax assets from tax losses carried forward are usable or not, i.e. whether they have a value that can be realised. The planning period used to assess this probability is determined by the individual Group company according to the specific circumstances and lies generally between three and five years.

Effective income taxes
The Lufthansa Group is liable for income taxes in various countries. Material assumptions are necessary to calculate the income tax liabilities. For certain transactions and calculations, the final taxation cannot be assessed definitively in the course of normal business. The amount of the liability for future tax inspections is based on estimates of whether additional income taxes will be owed, and if so, at which amount. Estimates will be corrected as necessary in the period in which taxation is definitively assessed.

NOTES TO THE CONSOLIDATED INCOME STATEMENT

3 Traffic revenue

In the consolidated income statement, the Lufthansa Group attributes revenue to the segments Network Airlines, Eurowings, Logistics, MRO, Catering and Other. The following table provides a breakdown of traffic revenue according to the different business models for the financial year that ended on 31 December 2018:

Traffic revenue of EUR 28,103m (previous year: EUR 28,399m) includes freight and mail revenue of EUR 3,106m (previous year: EUR 2,932m). The Logistics segment accounted for EUR 2,549m (previous year: EUR 2,371m) of this amount. Other freight and mail revenue of EUR 557m (previous year: EUR 561m) stems mainly from marketing belly capacities on passenger flights by SWISS and Brussels Airlines.

T083 TRAFFIC REVENUE BY SECTOR

in €m	**2018**	Europe[1]	North America[1]	Central and South America[1]	Asia/Pacific[1]	Middle East[1]	Africa[1]	2017[2]
Network Airlines	21,371	13,960	3,759	559	2,274	542	277	22,012
Lufthansa German Airlines	14,610							15,242
SWISS[3]	4,776							4,620
Austrian Airlines	1,985							2,150
Eurowings[3]	4,182	3,749	178	12	70	26	147	4,014
Logistics	2,550	1,313	256	103	798	26	54	2,373
Total	**28,103**							**28,399**

[1] Traffic revenue is allocated according to the original location of sale.
[2] Application of the modified retrospective approach; revenue measured for 2017 according to IAS 11 and IAS 18.
[3] Disclosure of traffic revenue, including belly revenue; this is reported in the segment reporting in the reconciliation column.

4 Other revenue

The following table provides a breakdown of other revenue by category (type of service) and geographic distribution for the 2018 financial year:

T084 OTHER OPERATING REVENUE BY AREA OF OPERATIONS

in €m	**2018**	Europe[1]	North America[1]	Central and South America[1]	Asia/Pacific[1]	Middle East[1]	Africa[1]	2017[2]
MRO	3,812	1,718	855	194	757	129	159	3,568
MRO services	3,402							3,042
Other operating revenue	410							526
Catering	2,499	483	1,270	147	495	62	42	2,556
Catering services	2,119							2,193
Revenue from in-flight sales	142							112
Other services	238							251
Network Airlines	621	495	51	7	50	8	10	629
Eurowings	30	25	2	–	1	–	2	33
Logistics	131	73	47	–	4	7	–	125
Additional Businesses and Group Functions	648	489	47	13	76	17	6	269
IT services	291							291
Travel management	276							–
Other	81							–
Total	**7,741**							**7,180**

[1] Traffic revenue is allocated according to the original location of sale.
[2] Application of the modified retrospective approach; revenue measured for 2017 according to IAS 11 and IAS 18.

MRO services make up the majority of external revenue in the MRO segment. Other revenue in the MRO segment from the sale of material and hiring out material and engines, as well as logistics services, are classified as other services.

The revenue listed under catering services originates exclusively in the Catering segment. The Catering segment also generates revenue from other services, particularly in the areas of flight security concepts, in-flight service equipment, transport/warehouse logistics and lounge operations.

Other revenue also includes revenue from customer contracts that are fulfilled over a given period. These are mainly MRO and IT services.

5 Changes in inventories and work performed by entity and capitalised

T085 CHANGES IN INVENTORIES AND WORK PERFORMED BY ENTITY AND CAPITALISED

in €m	2018	2017
Increase/decrease in finished goods and work in progress	2	5
Other internally produced and capitalised assets	529	433
	531	**438**

The increase in other own work capitalised results mainly from greater engine overhaul activity in the Group (EUR 470m, previous year: EUR 332m).

In the course of changing the accounting method for engine maintenance events, the figures for the previous year were adjusted accordingly. ↗ **Note 2, p. 106ff.**

6 Other operating income

T086 OTHER OPERATING INCOME

in €m	2018	2017
Foreign exchange gains	794	885
Income from the reversal of provisions and accruals	260	151
Compensation received for damages	55	64
Income from the disposal of non-current assets	50	38
Reversal of write-downs on receivables	48	46
Income from operating-leasing aircraft	48	44
Rental income	40	33
Services provided by the Group	27	27
Income from staff secondment	19	26
Income from the reversal of impairment losses on fixed assets	15	83
Commission income	14	272
Income from the disposal of non-current available-for-sale financial assets	1	5
Income from sub-leasing aircraft	1	1
Miscellaneous other operating income	446	601
	1,818	**2,276**

Foreign exchange gains (excluding financial liabilities) mainly include gains from differences between the average rate for the month on the transaction date and on the payment date, along with foreign exchange gains from measurement at the closing date rate. Income from exchange rate hedging is also recognised here. Foreign exchange losses from these transactions are reported under other operating expenses. ↗ **Note 10, p. 124.** The foreign currency effects of borrowing are recognised in other financial items, in the context of the net results of exchange rate hedging relationships for borrowing.

Income from the release of provisions relates to a number of provisions recognised in previous years that have not been fully used. In contrast, expenses from insufficient provisions recognised in previous years are recognised together with the primary expense item to which they relate.

Income from the disposal of property, plant and equipment also includes EUR 13m from aircraft sold (previous year: EUR 24m).

In the previous year, commission income included revenue from training and travel management of EUR 342m, which as of 2018 is shown in revenue as a result of the IFRS 15 changes.

Other operating income includes items not attributable to any of the aforementioned categories.

7 Cost of materials and services

T087 COST OF MATERIALS AND SERVICES

in €m	2018	2017
Aircraft fuel and lubricants	6,087	5,232
Other raw materials, consumables and supplies	3,107	3,095
Purchased goods	489	460
Total cost of raw materials, consumables and supplies and of purchased goods	**9,683**	**8,787**
Fees and charges	4,457	6,357
External MRO services	1,848	1,534
Charter expenses	626	651
External IT services	416	381
In-flight services	383	379
Operating lease payments	91	88
Other services	1,165	851
Total cost of purchased services	**8,986**	**10,241**
	18,669	**19,028**

As of 2018, the airport fees collected and the corresponding airport charges are no longer recognised in the income statement following the IFRS 15 changes. This led to a reduction of fees and charges by EUR 2,257m.

The retrospective change in the accounting method for engine overhauls has resulted in an adjustment of the external MRO services reported in the previous year. For a detailed description of the effects, we refer to ↗ **Note 2, p. 106ff.**

8 Staff costs

T088 STAFF COSTS

in €m	2018	2017
Wages and salaries	7,286	7,015
Social security contributions	977	938
Expenses for pension plans and other employee benefits	548	219
	8,811	**8,172**

Expenses for pension plans principally consist of additions to the pension provisions. ↗ **Note 33, p. 142ff.**

In the previous year, the expenses for pension plans and other employee benefits were reduced by EUR 582m because of negative past service expenses resulting from the changes to the retirement benefits system for cockpit staff within the Group's wage agreement for Germany.

T089 EMPLOYEES

	Average for the year 2018	Average for the year 2017	**As of 31.12.2018**	As of 31.12.2017
Ground staff	88,478	86,304	89,278	86,044
Flight staff	44,858	41,496	45,169	42,279
Trainees	994	1,056	1,087	1,101
	134,330	**128,856**	**135,534**	**129,424**

The annual average is calculated pro rata temporis from the time companies are consolidated or deconsolidated.

9 Depreciation, amortisation and impairment

The notes to the individual items show the breakdown of depreciation, amortisation and impairment charges between intangible assets, aircraft and other property, plant and equipment. Total depreciation, amortisation and impairment came to EUR 2,205m (previous year: EUR 2,382m).

T090 DEPRECIATION, AMORTISATION AND IMPAIRMENT

in €m	2018	2017
Amortisation of other intangible assets	98	98
Depreciation of aircraft	1,833	1,702
Depreciation of other tangible assets	250	239
Total amortisation/depreciation	**2,181**	**2,039**
Impairment of goodwill	–	3
Impairment of other intangible assets	2	24
Impairment of aircraft	4	213
Impairment of other tangible assets	5	20
Impairment of financial assets	13	83
Total impairment	**24**	**343**
Total depreciation, amortisation and impairment	**2,205**	**2,382**

The retrospective change in the accounting method for engine overhauls resulted in an adjustment of the depreciation reported in the previous year. For a detailed description of the effects, we refer to ↗ **Note 2, p. 106ff.** EUR 338m of the depreciation of aircraft related to capitalised engine overhaul events (previous year: EUR 330m).

Impairment losses of EUR 24m were recognised in the financial year 2018. EUR 4m of the total was for two Boeing MD-11s from the Logistics segment held for sale. Other impairment losses related to write-downs of loans to trainee pilots (EUR 11m) and LSG Italia (EUR 5m).

In the previous year, impairment losses came to EUR 343m, of which EUR 204m was for aircraft destined to be scrapped. Other significant impairment losses in the previous year related to financial assets written down in the course of the insolvency and the failed takeover of NIKI Luftfahrt GmbH.

As in the previous year, no other impairment losses on assets held for sale were recognised in other operating expenses.

10 Other operating expenses

T091 OTHER OPERATING EXPENSES

in €m	**2018**	2017
Staff-related expenses	1,226	1,114
Rental and maintenance expenses	923	884
Foreign exchange losses	771	758
Expenses for computerised distribution systems	524	505
Advertising and sales promotions	439	400
Sales commission paid to agencies	330	335
Auditing, consulting and legal expenses	252	272
Commissions for credit cards	222	227
Other services	148	137
Write-downs on receivables	100	98
Communications costs	84	77
Other taxes	84	87
Insurance premiums for flight operations	56	56
Losses on disposal of non-current assets	17	6
Miscellaneous other operating expenses	532	615
	5,708	**5,571**

Staff-related expenses also include travel and training costs for Group employees and the costs of outside staff.

Foreign exchange losses (excluding financial liabilities) mainly consist of losses from differences between the monthly average rates on the transaction date and on the payment date, expenses from exchange rate hedges and translation losses from measurement at the exchange rate on the balance sheet date. ↗ **Note 6, p. 122.** The foreign currency effects of borrowing are recognised in other financial items in the context of the net results of exchange rate hedging relationships of borrowing.

11 Result from equity investments

T092 RESULT FROM EQUITY INVESTMENTS

in €m	**2018**	2017
Result of joint ventures accounted for using the equity method	75	79
Result of associated companies accounted for using the equity method	39	39
Result of equity investments accounted for using the equity method	**114**	**118**
Dividends from other joint ventures	13	11
Dividends from other associated companies	6	8
Income from profit transfer agreements	31	24
Expenses from loss transfer agreements	-26	-16
Dividends from other equity investments	36	12
Result of other equity investments	**60**	**39**
	174	**157**

Income and expenses from profit and loss transfer agreements are shown including tax contributions.

12 Net interest

T093 NET INTEREST

in €m	**2018**	2017
Income from other securities and non-current financial loans	5	115
Other interest and similar income	63	63
Interest income	**68**	**178**
Interest expenses on pensions obligations	-97	-159
Interest expenses on other provisions	-8	-6
Interest and other similar expenses	-107	-208
Interest expenses	**-212**	**-373**
	-144	**-195**

Net interest comprises interest income and expenses – calculated using the effective interest method in accordance with IFRS 9 – from financial assets and liabilities not classified as at fair value through profit or loss.

13 Other financial items

T094 OTHER FINANCIAL ITEMS

in €m	2018	2017
Result of fair value hedges – change in time value of hedged transactions	-47	20
Result of fair value hedges – change in time value of hedging instruments	60	-20
Ineffective portion of derivatives used as cash flow hedges	17	18
Result of derivatives held for trading classified as at fair value through profit or loss	-16	-250
Result of measuring securities classified as at fair value through profit or loss	-35	–
Exchange rates effects from financial liabilities	-26	288
	-46	**56**

Cross currency swaps have been designated as hedging instruments for hedge accounting since 1 January 2018 and so in contrast to the previous year are no longer presented as stand-alone derivatives. Furthermore, changes in the time value of options used as hedging instruments have been retrospectively recognised in equity without effect on profit and loss as a cost of hedging, instead of through profit or loss, since 1 January 2017. In 2017, this led to an adjustment in the net result from the valuation of derivatives, which was accounted for at the fair value of EUR -16m (before taxes) ↗ **Note 2, p. 106ff.**

14 Income taxes

T095 INCOME TAXES

in €m	2018	2017
Current income taxes	614	813
Deferred income taxes	-26	-29
	588	**784**

Current income taxes include corporation tax, solidarity surcharge, trade tax and other income taxes paid outside Germany totalling EUR 538m for 2018 (previous year: EUR 629m). Tax expenses of EUR 76m were also incurred for prior years (previous year: EUR 184m).

The tax rates used to calculate deferred taxes abroad ranged from 3.5% to 35.0% in 2018 (previous year: 3.5% to 41.4%). For measuring deferred taxes, the relevant taxation rules in force or adopted at the balance sheet date are used.

The following table reconciles expected and effective tax expenses. Expected tax expense is calculated by multiplying profit before income taxes by a tax rate of 25% for the parent company (previous year: 25%). This is made up of a tax rate of 15.825% (previous year: 15.825%) for corporation tax and solidarity surcharge and 9.175% for trade tax (previous year: 9.175%). The portion of trade income related to the foreign air transport operations of the German-based airlines is deducted when calculating the tax rate for trade tax.

T096 TAX RECONCILIATION

	2018		2017	
in €m	**Basis of assess-ment**	**Tax expenses**	Basis of assess-ment	Tax expenses
Expected income tax expenses/refund	2,784	696	3,158	790
Tax free gains/losses	–	–	–	-2
Non-deductible costs	–	55	–	42
Non-taxable income	–	-61	–	-75
Non-taxable income from equity investments	–	-42	–	-37
Difference between local taxes and the deferred tax rates of the parent company as well as effects of changes in tax rates	–	-23	–	-1
Taxes from other periods [1]	–	–	–	72
Effects from use or deferred tax assets not recognised	–	-37	–	-5
Recognised income tax expenses	**–**	**588**	**–**	**784**

[1] Deferred tax income of EUR 76m for other periods (previous year: EUR 112m) and effective tax expenses of EUR 76m for other periods (previous year: EUR 184m).

Deferred tax liabilities of EUR 47m (previous year: EUR 37m) were not recognised on temporary differences in connection with shares in subsidiaries, as the temporary differences are not expected to reverse in the foreseeable future.

Deferred tax assets and liabilities in 2018 and 2017 were allocable to the following items in the statement of financial position:

T097 DEFERRED TAX ASSETS AND LIABILITIES

	31.12.2018		31.12.2017	
in €m	Assets	Liabilities	Assets	Liabilities
Tax loss carry-forwards and tax credits	121	–	196	–
Pension provisions	2,331	–	1,949	–
Finance leases aircraft	–	36	17	–
Intangible assets, property, plant and equipment	–	887	–	931
Non-current financial assets	–	14	–	4
Fair value measurement of financial instruments	–	126	–	227
Provisions for contingent losses	19	–	34	–
Receivables/liabilities/other provisions	–	110	–	7
Inventories	247	–	173	–
Assets held for sale	–	1	–	–
Other	4	–	12	–
Offset amounts	-591	-591	-720	-720
	2,131	**583**	**1,661**	**449**

The deferred tax assets and liabilities in the category receivables/liabilities/other provisions and inventories are largely expected to reverse within twelve months of the reporting date.

A deferred tax asset of EUR 47m (previous year: EUR 18m) was recognised for companies incurring a net tax loss in the reporting year or in the previous year, because tax and earnings planning indicates that there is a high probability that the tax asset will be realised.

In addition to recognised deferred tax assets from tax loss carry-forwards, non-deductible interest carry-forwards and tax credits, further tax loss carry-forwards and temporary differences totalling EUR 2,423m (previous year: EUR 3,095m) exist for which no deferred tax assets could be recognised. The total amount of deferred tax assets from tax loss carry-forwards that could not be capitalised as of 31 December 2018 was EUR 584m (previous year: EUR 684m).

The usage restrictions for non-capitalised tax loss carry-forwards are distributed as follows:

T098 LIMITS ON THE USE OF NON-CAPITALISED LOSS CARRY-FORWARDS

in €m	Non-capitalised loss carry-forwards	Deferred taxes
Usable		
until 2022	32	7
until 2023	40	8
until 2024	16	4
until 2025	3	1
until 2026	1	–
until 2027	1	–
2028 and beyond	2,221	564
Total	**2,314**	**584**

15 Earnings per share

Basic/diluted earnings per share are calculated by dividing consolidated net profit by the weighted average number of shares in circulation during the financial year. To calculate the average number of shares, the shares bought back and reissued for the employee share programmes are included pro rata temporis.

T099 EARNINGS PER SHARE

		2018	2017
Basic/diluted earnings per share	€	**4.58**	**4.98**
Consolidated net profit/loss	€m	2,163	2,340
Weighted average number of shares		472,553,216	469,820,411

For the effects on earnings per share of the new accounting method for engine maintenance events, we refer to ↗ **Note 2, p. 106ff.**

As the parent company of the Group, Deutsche Lufthansa AG reported a distributable profit according to HGB of EUR 380m for the financial year 2018, including a transfer of EUR 41m from retained earnings. The Executive Board and Supervisory Board will table a proposal at the Annual General Meeting to be held on 7 May 2019 to pay a dividend of EUR 0.80 per share. This represents a total dividend of EUR 380m or 12.8% of EBIT for 2018.

In 2018, EUR 0.80 per share was distributed as a dividend to shareholders from the net profit for 2017.

NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Assets

16 Goodwill and intangible assets with an indefinite useful life

T100 GOODWILL AND INTANGIBLE ASSETS WITH AN INDEFINITE USEFUL LIFE

in €m	Goodwill from consolidation	Intangible assets with an indefinite useful life	**Total**
Cost as of 1.1.2017	949	631	1,580
Accumulated impairment losses	-313	-2	-315
Carrying amount 1.1.2017	**636**	**629**	**1,265**
Currency translation differences	-2	-34	-36
Additions due to changes in consolidation	–	37	37
Additions	82	–	82
Reclassifications	–	–	–
Disposals due to changes in consolidation	–	–	–
Disposals	–	-1	-1
Reclassifications to assets held for sale	–	–	–
Impairment losses	-3	-1	-4
Reversal of impairment losses	–	–	–
Carrying amount 31.12.2017	**713**	**630**	**1,343**
Cost as of 1.1.2018	1,027	634	1,661
Accumulated impairment losses	-314	-4	-318
Carrying amount 1.1.2018	**713**	**630**	**1,343**
Currency translation differences	–	15	15
Additions due to changes in consolidation	–	–	–
Additions	23	–	23
Reclassifications	–	–	–
Disposals due to changes in consolidation	–	–	–
Disposals	–	–	–
Reclassifications to assets held for sale	–	–	–
Impairment losses	–	–	–
Reversal of impairment losses	–	–	–
Carrying amount 31.12.2018	**736**	**645**	**1,381**
Cost as of 31.12.2018	1,050	648	1,698
Accumulated impairment losses	-314	-3	-317

All goodwill and intangible assets with an indefinite useful life were subjected to a regular impairment test in 2018 as required by IAS 36. Furthermore, there is the obligation to perform an impairment test if there is an indication of impairment. For impairment testing following an indication of impairment ↗ **Note 9, p. 123ff.**

Acquired brands and slots have an indefinite useful life due to their lasting legal and economic significance. The tests were performed at the level of the smallest cash generating unit (CGU) on the basis of fair value less costs to sell or value in use. Because Brussels Airlines is integrated into the Eurowings group for organisational and commercial purposes, goodwill for Brussels Airlines has been attributed to Eurowings and is tested for impairment there. The goodwill arising from the acquisition of Luftfahrtgesellschaft Walter is also part of the goodwill for Eurowings, since the company only acts as a service platform for flight services within Eurowings.

The following table provides an overview of the goodwill tested and the assumptions made in the respective impairment tests regarding the smallest possible cash-generating unit (CGU) in each case.

T101 IMPAIRMENT TESTS OF GOODWILL 2018

Name of the CGU	Lufthansa German Airlines	Eurowings	LSG Sky Chefs USA group	LSG Sky Chefs Korea	Other[1]
Segment	Network Airlines	Eurowings	Catering	Catering	Catering/Service and financial companies
Carrying amount of goodwill (31.12.)	€ 238m	€ 116m	€ 277m	€ 61m	€ 44m
Impairment losses	–	–	–	–	–
Duration of planning period	4 years	4 years	4 years	4 years	4 years
Revenue growth p.a. after end of planning period	2.2%	2.2%	2.0%	2.9%	1.0% to 5.0%
Discount rate	4.7%[2]	4.7%[2]	5.2%[3]	4.9%[3]	4.5% to 9.0%[3]

[1] Goodwill of less than EUR 25m in any individual instance.
[2] After-tax rate.
[3] Pre-tax rate.

The assumptions on revenue growth used for the impairment tests are based on approved internal budgets and external sources for the planning period. In some cases, reductions were made for risk to allow for special regional features and market share trends specific to the respective companies. The margins used are based on past experience or were developed on the basis of cost-cutting measures initiated. The investment rates are based on past experience and take account of the replacement of any means of production envisaged during the planning period. Costs of the central functions were charged to the individual units based on their use of these functions.

Assuming sustained revenue growth by the CGUs as described in the table, the recoverable amounts would exceed the carrying amount by a significant figure, even if the growth assumptions were reduced by one percentage point in each case, with the exception of LSG Sky Chefs Korea. Worsening the scenarios by one percentage point in each case, in terms of planned margins or the discount rates used for the impairment tests, would also not reduce the recoverable amounts below the respective carrying amounts for all of the other CGUs. The sensitivity analysis takes into account changes in one assumption at a time, whereby the other assumptions remain unchanged from the original calculation. At LSG Sky Chefs Korea, the recoverable amount exceeds the carrying amount for the CGU by 50%. An increase in the discount factor of 0.9 percentage points, a reduction of revenue growth by 0.4 percentage points or a reduction of 1.5 percentage points in the planned margin of 11.3% would all result in an impairment charge.

An impairment test was performed for LSG Sky Chefs Italy following the loss of a key customer, which resulted in an impairment loss of EUR 5m on property, plant and equipment.

The following table shows the assumptions used for the previous year's impairment tests.

T101 IMPAIRMENT TESTS OF GOODWILL 2017

Name of the CGU	Lufthansa German Airlines	Eurowings	Brussels Airlines	LSG Sky Chefs USA group	LSG Sky Chefs Korea	Other[1]
Segment	Network Airlines	Eurowings	Eurowings	Catering	Catering	Catering/Service and financial companies
Carrying amount of goodwill (31.12.)	€ 238m	€ 11m	€ 82m	€ 277m	€ 60m	€ 45m
Impairment losses	–	–	–	–	–	€ 3m
Duration of planning period	3 years	3 years	3 years	3 years	3 years	3 years
Revenue growth p.a. after end of planning period	2.2%	2.2%	2.2%	2.0%	3.0%	2.0% to 4.0%
Discount rate	4.7%[2]	4.7%[2]	5.3%[3]	5.4%[3]	5.4%[3]	4.7%[2] to 9.7%[3]

[1] Goodwill of less than EUR 25m in any individual instance.
[2] After-tax rate.
[3] Pre-tax rate.

The intangible assets with indefinite useful lives consist of slots purchased as part of company acquisitions (insofar as they are tradeable) and brand names acquired.

The following table shows the assumptions made for regular impairment testing of the smallest cash-generating unit (CGU) in each case.

T102 IMPAIRMENT TESTS OF SLOTS 2018

Group company	SWISS	Austrian Airlines
Carrying amount for slots (31.12.)	€ 129m	€ 23m
Impairment losses	–	–
Duration of planning period	4 years	4 years
Revenue growth p.a. after end of planning period	2.2%	2.2%
Discount rate	4.8%[1]	4.7%[1]

[1] After-tax rate.

The slots purchased by Deutsche Lufthansa AG with a carrying amount of EUR 112m as of 31 December 2018, unchanged from the previous year, were subjected to an impairment test on the same assumptions as those used for impairment testing the goodwill of the CGU Lufthansa German Airlines.

Based on sustainable revenue growth according to assumptions described in the table, the recoverable amounts significantly exceed the carrying amounts. Even if the assumptions on revenue growth, the discount rate and margins are all reduced by one percentage point in each case, the recoverable amounts are still higher than the carrying amounts.

The sensitivity analysis takes into account changes in one assumption at a time, whereby the other assumptions remain unchanged from the original calculation.

The following table shows the assumptions used for the previous year's impairment tests.

T102 IMPAIRMENT TESTS OF SLOTS 2017

Group company	SWISS	Austrian Airlines
Carrying amount for slots (31.12.)	€ 124m	€ 23m
Impairment losses	–	–
Duration of planning period	3 years	3 years
Revenue growth p.a. after end of planning period	2.2%	2.2%
Discount rate	4.8%[1]	4.7%[1]

[1] After-tax rate.

The regular impairment test for the brands acquired was carried out on the basis of the revenue generated from each brand.

The following additional assumptions were used in the impairment test for the acquired brands:

T103 IMPAIRMENT TESTS OF BRANDS 2018

Group company	SWISS	Austrian Airlines	Brussels Airlines	Other
Carrying amount for brand (31.12.)	€ 230m	€ 107m	€ 37m	€ 7m
Impairment losses	–	–	–	–
Duration of planning period	4 years	4 years	4 years	4 years
Revenue growth p.a. after end of planning period	2.2%	2.2%	1.0%	0.0% to 2.2%
Savings in hypothetical leasing payments before taxes (royalty rate)	0.63%	0.35%	0.20%	0.23% to 0.50%
Discount rate	4.8%[1]	4.7%[1]	4.7%[1]	4.5% to 5.1%[1]

[1] After-tax rate.

Assuming sustained brand-related revenue growth at the end of the planning period, as described in the table, the recoverable amounts for the brands exceed their carrying amounts significantly. Even if the assumptions for sustained brand-related revenue growth were to be reduced or the discount rate were to be increased by one percentage point in each case, the recoverable amounts would exceed the carrying amounts.

There was no impairment charge within the other brands in 2018. Brand rights for a company in the LSG group valued at EUR 1m were written off in 2017, since they will no longer be used.

The sensitivity analysis takes into account changes in one assumption at a time, whereby the other assumptions remain unchanged from the original calculation.

The assumptions used for the previous year's impairment tests can be derived from the following table.

T103 IMPAIRMENT TESTS OF BRANDS 2017

Group company	SWISS	Austrian Airlines	Brussels Airlines	Other
Carrying amount for brand (31.12.)	€ 221m	€ 107m	€ 37m	€ 6m
Impairment losses	–	–	–	€ 1m
Duration of planning period	3 years	3 years	3 years	3 years
Revenue growth p.a. after end of planning period	2.2%	2.2%	1.0%	0.0% to 2.2%
Savings in hypothetical leasing payments before taxes (royalty rate)	0.63%	0.35%	0.20%	0.23% to 0.50%
Discount rate	4.8%[1]	4.7%[1]	4.5%[1]	4.5% to 5.7%[1]

[1] After-tax rate.

17 Other intangible assets

T104 OTHER INTANGIBLE ASSETS

in €m	Concessions, industrial property rights and similar rights and licences to such rights and assets	Internally developed software	Advance payments	**Total**
Cost as of 1.1.2017	1,135	124	147	1,406
Accumulated amortisation	-816	-103	-15	-934
Carrying amount 1.1.2017	**319**	**21**	**132**	**472**
Currency translation differences	-12	–	-3	-15
Additions due to changes in consolidation	56	–	4	60
Additions	31	4	62	97
Reclassifications	81	8	-86	3
Disposals due to changes in consolidation	–	–	–	–
Disposals	-4	–	–	-4
Reclassifications to assets held for sale	–	–	–	–
Amortisation	-102	-7	-12	-121
Reversal of impairment losses	–	–	–	–
Carrying amount 31.12.2017	**369**	**26**	**97**	**492**
Cost as of 1.1.2018	1,230	133	112	1,475
Accumulated amortisation	-861	-107	-15	-983
Carrying amount 1.1.2018	**369**	**26**	**97**	**492**
Currency translation differences	5	2	-1	6
Additions due to changes in consolidation	–	–	–	–
Additions	29	4	77	110
Reclassifications	30	10	-35	5
Disposals due to changes in consolidation	–	–	–	–
Disposals	-1	–	-1	-2
Reclassifications to assets held for sale	–	–	–	–
Amortisation	-92	-7	–	-99
Reversal of impairment losses	–	–	–	–
Carrying amount 31.12.2018	**340**	**35**	**137**	**512**
Cost as of 31.12.2018	1,289	150	152	1,591
Accumulated amortisation	-949	-115	-15	-1,079

Non-capitalised research and development expenses for intangible assets of EUR 44m (previous year: EUR 30m) were incurred in the period. Fixed orders have been placed for intangible assets worth EUR 10m (previous year: EUR 9m), but they are not yet at the Group's economic disposal.

18 Aircraft and reserve engines

T105 AIRCRAFT AND RESERVE ENGINES

in €m	Aircraft and reserve engines	Advance payments for aircraft and reserve engines	**Total**
Cost as of 1.1.2017	26,590	1,348	27,938
Accumulated amortisation	-13,749	–	-13,749
Carrying amount 1.1.2017	**12,841**	**1,348**	**14,189**
Currency translation differences	-240	-30	-270
Additions due to changes in consolidation	259	3	262
Additions	2,450	460	2,910
Reclassifications	404	-404	–
Disposals due to changes in consolidation	–	–	–
Disposals	-51	-4	-55
Reclassifications to assets held for sale	122	–	122
Depreciation	-1,907	–	-1,907
Reversal of impairment losses	82	–	82
Carrying amount 31.12.2017	**13,960**	**1,373**	**15,333**
Cost as of 1.1.2018	29,405	1,373	30,778
Accumulated amortisation	-15,445	–	-15,445
Carrying amount 1.1.2018	**13,960**	**1,373**	**15,333**
Currency translation differences	114	13	127
Additions due to changes in consolidation	–	–	–
Additions	2,542	782	3,324
Reclassifications	475	-475	–
Disposals due to changes in consolidation	-5	–	-5
Disposals	-158	-3	-161
Reclassifications to assets held for sale	-7	–	-7
Depreciation	-1,837	–	-1,837
Reversal of impairment losses	2	–	2
Carrying amount 31.12.2018	**15,086**	**1,690**	**16,776**
Cost as of 31.12.2018	31,208	1,690	32,898
Accumulated amortisation	-16,122	–	-16,122

The previous year's figures were adjusted in connection with the changes to reporting regarding the capitalisation of engine maintenance events. For a description of the effects, we refer to ↗ **Note 2, p. 106ff.** The additions in 2018 include EUR 470m for engine maintenance events (previous year: EUR 332m).

Other additions were for the procurement of new and used aircraft. In the previous year, the additions and changes in the group of consolidated companies included aircraft and reserve engines from the first-time consolidation of Brussels Airlines, as well as aircraft that had previously been in service at the Air Berlin group.

The item also includes 72 aircraft with a carrying amount of EUR 2,173m (previous year: 77 aircraft with a carrying amount of EUR 2,498m), which have mostly been sold to and leased back from foreign leasing companies with the aim of obtaining favourable financing conditions. The leasing companies were fully consolidated as structured entities. The Group is entitled to buy the aircraft back at a fixed price and at a given point in time.

In the reporting year, borrowing costs of EUR 22m were capitalised (previous year: EUR 20m). The financing rate used was 1.7% (previous year: 1.7%).

Order commitments for aircraft and reserve engines amount to EUR 13.5bn (previous year: EUR 12.8bn).

In the aircraft item, aircraft with a carrying amount of EUR 2,323m (previous year: EUR 2,660m) serve as collateral for current financing arrangements and aircraft with a carrying amount of EUR 565m (previous year: EUR 437m) were also acquired under finance leases; ↗ **Note 20, p. 134ff.**

19 Property, plant and other equipment

T106 PROPERTY, PLANT AND OTHER EQUIPMENT

in €m	Land and buildings	Technical equipment and machinery	Other equipment, operating and office equipment	Advance payments and plant under construction	**Total**
Cost as of 1.1.2017	2,680	1,263	1,384	120	5,447
Accumulated depreciation	-1,366	-917	-965	–	-3,248
Carrying amount 1.1.2017	**1,314**	**346**	**419**	**120**	**2,199**
Currency translation differences	-28	-14	-11	-9	-62
Additions due to changes in consolidation	6	1	2	1	10
Additions	25	31	120	147	323
Reclassifications	40	38	8	-90	-4
Disposals due to changes in consolidation	–	–	–	–	–
Disposals	-7	-5	-6	-2	-20
Reclassifications to assets held for sale	–	–	–	–	–
Depreciation	-90	-56	-102	-12	-260
Reversal of impairment losses	–	–	–	–	–
Carrying amount 31.12.2017	**1,260**	**341**	**430**	**155**	**2,186**
Cost as of 1.1.2018	2,648	1,247	1,409	167	5,471
Accumulated depreciation	-1,388	-906	-979	-12	-3,285
Carrying amount 1.1.2018	**1,260**	**341**	**430**	**155**	**2,186**
Currency translation differences	6	4	5	1	16
Additions due to changes in consolidation	–	–	–	–	–
Additions	38	44	121	94	297
Reclassifications	43	38	33	-118	-4
Disposals due to changes in consolidation	–	–	–	–	–
Disposals	-7	-1	-9	-3	-20
Reclassifications to assets held for sale	–	–	–	–	–
Depreciation	-90	-57	-107	–	-254
Reversal of impairment losses	–	–	–	–	–
Carrying amount 31.12.2018	**1,250**	**369**	**473**	**129**	**2,221**
Cost as of 31.12.2018	2,717	1,315	1,509	142	5,683
Accumulated depreciation	-1,467	-946	-1,036	-13	-3,462

As in the previous year, charges of EUR 4m exist over land and property. Pre-emption rights are registered for land held at EUR 193m (previous year: EUR 205m). Other property, plant and equipment carried at EUR 4m (previous year: EUR 13m) serves as collateral for existing financing arrangements. Other property, plant and equipment carried at EUR 93m was acquired by means of finance leases (previous year: EUR 102m). ↗ **Note 20, p. 134ff.**

The following items of property, plant and equipment have been ordered, but are not yet at the Group's economic disposal:

T107 ORDERS OF PROPERTY, PLANT AND EQUIPMENT AS OF THE REPORTING DATE

in €m	**31.12.2018**	31.12.2017
Land and buildings	61	30
Technical equipment and vehicles	31	35
Operating and office equipment	51	44
	143	**109**

20 Assets for which the Group is lessor or lessee

Property, plant and equipment also includes leased assets that are deemed to be the property of the Group since the underlying contracts are structured as finance leases. The following table shows leased assets for which the Group is either lessor or lessee:

T108 ASSETS FOR WHICH THE GROUP IS LESSOR OR LESSEE

in €m	Lessee of aircraft and reserve engines	Lessee and lessor of aircraft and reserve engines	Lessee of buildings	Lessee of intangible assets and technical equipment	Lessee of other equipment, operating and office equipment
Cost as of 1.1.2017	695	–	299	1	3
Accumulated depreciation	-406	–	-148	-1	-2
Carrying amount 1.1.2017	**289**	**–**	**151**	**–**	**1**
Currency translation differences	-8	–	-3	–	–
Additions due to changes in consolidation	227	–	–	–	–
Additions	61	19	5	–	6
Reclassifications	1	–	-41	–	–
Disposals due to changes in consolidation	–	–	–	–	–
Disposals	-15	–	-4	–	–
Reclassifications to assets held for sale	–	–	–	–	–
Depreciation	-118	-1	-12	–	-1
Reversal of impairment losses	–	–	–	–	–
Carrying amount 31.12.2017	**437**	**18**	**96**	**–**	**6**
Cost as of 1.1.2018	843	19	248	1	10
Accumulated depreciation	-406	-1	-152	-1	-4
Carrying amount 1.1.2018	**437**	**18**	**96**	**–**	**6**
Currency translation differences	3	–	–	–	–
Additions due to changes in consolidation	–	–	–	–	–
Additions	243	–	–	–	–
Reclassifications	2	–	–	–	–
Disposals due to changes in consolidation	–	–	–	–	–
Disposals	–	–	–	–	-1
Reclassifications to assets held for sale	–	–	–	–	–
Depreciation	-121	-4	-6	–	-2
Reversal of impairment losses	–	–	–	–	–
Carrying amount 31.12.2018	**564**	**14**	**90**	**–**	**3**
Cost as of 31.12.2018	1,036	19	218	1	9
Accumulated depreciation	-472	-5	-128	-1	-6

The carrying amount of leased aircraft attributed to the Group's economic ownership under IAS 17 is EUR 564m (previous year: EUR 437m) and relates to 26 Airbus A319s, 27 A320s, two A321s, eight A330s and four Boeing 777s.

FINANCE LEASES

As a rule, aircraft finance lease agreements cannot be terminated during a fixed basic lease term of at least four years and they run for a maximum of 23 years (previous year: 20 years).

At the end of the lease term, the lessee sometimes has the right to buy the asset or renew the lease. If the lessee does not exercise this option, the lessor will sell the aircraft at the best possible market price.

In addition, the Group has a variety of finance leases for buildings, fixtures and for operating and office equipment. For buildings and fixtures, the leases run for 19 to 29 years (previous year: 15 to 30 years). In some cases, the leases have purchase or renewal options for the lessee at the end of the lease term. The agreements cannot generally be terminated.

The following lease payments are due for finance leases, whereby the lease payments dependent on reference interest rates have been extrapolated on the basis of the most recent interest rate:

T109 LEASE PAYMENTS DUE UNDER FINANCE LEASES, AS OF 2018

in €m	2019	2020 – 2023	from 2024
Lease payments	126	343	169
Discounted amounts	20	43	17
Present values	106	300	152

In the previous year, the following figures were given for finance leases:

T109 LEASE PAYMENTS DUE UNDER FINANCE LEASES, AS OF 2017

in €m	2018	2019 – 2022	from 2023
Lease payments	131	328	98
Discounted amounts	4	28	20
Present values	127	300	78

OPERATING LEASES

In addition to the finance leases, a large number of leases were signed which, on the basis of their economic parameters, qualify as operating leases, i.e. the leased asset is deemed to belong to the lessor. The leases are for property and land, as well as 66 aircraft (previous year: 62 aircraft).

Operating leases for aircraft have remaining terms of up to ten years (previous year: twelve years). These agreements generally end automatically after the term has expired, but there is sometimes an option to extend the agreement.

T110 LEASE PAYMENTS DUE UNDER OPERATING LEASES, AS OF 2018

in €m	2019	2020 – 2023	from 2024
Aircraft and reserve engines	142	338	15
Land and property	279	853	1,103
Other leases	114	245	–
	535	**1,436**	**1,118**
Payments from sub-leasing (Sublease)	14	9	2

Annual payments from 2024 onwards amount to EUR 149m, of which land and buildings account for EUR 144m and aircraft and reserve engines account for EUR 5m. In the previous year, the following figures were given for operating leases:

T110 LEASE PAYMENTS DUE UNDER OPERATING LEASES, AS OF 2017

in €m	2018	2019 – 2022	from 2023
Aircraft and reserve engines	119	338	41 p.a.
Land and property	307	1,026	223 p.a.
Other leases	102	322	69 p.a.
	528	**1,686**	**333 p.a.**
Payments from sub-leasing (Sublease)	56	183	24 p.a.

Eight aircraft, twelve reserve engines and other non-current assets that were legally and economically the property of the Group at the end of 2018 have been leased to third parties under non-terminable operating leases. These leases give rise to the following forecast payments:

T111 FORECAST PAYMENTS FROM OPERATING LEASES, AS OF 2018

in €m	2019	2020 – 2023	from 2024
Payments received from operating leases	22	23	8

34 aircraft in the economic ownership of Lufthansa, mostly from the acquisition of aircraft that were in service at companies in the Air Berlin group, 13 reserve engines and other non-current assets were used in the previous year on the basis of non-terminable operating leases.

These leases resulted in the following forecast payments:

T111 FORECAST PAYMENTS FROM OPERATING LEASES, AS OF 2017

in €m	2018	2019 – 2022	ab 2023
Payments received from operating leases	24	47	10

21 Equity investments accounted for using the equity method

T112 EQUITY INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

in €m	Investments in joint ventures	Investments in associated companies	**Total**
Cost as of 1.1.2017	274	247	521
Accumulated impairment losses	–	– 5	– 5
Carrying amount 1.1.2017	**274**	**242**	**516**
Currency translation differences	– 12	– 25	– 37
Additions due to changes in consolidation	–	–	–
Additions	55	–	55
Changes with and without an effect on profit and loss	81	41	122
Reclassifications	–	–	–
Disposals due to changes in consolidation	–	–	–
Disposals	–	–	–
Dividends paid	– 48	– 23	– 71
Reclassifications to assets held for sale	–	–	–
Impairment losses	–	–	–
Reversal of impairment losses	–	–	–
Carrying amount 31.12.2017	**350**	**235**	**585**
Cost as of 1.1.2018	350	239	589
Accumulated impairment losses	–	– 4	– 4
Carrying amount 1.1.2018	**350**	**235**	**585**
Currency translation differences	3	1	4
Additions due to changes in consolidation	–	–	–
Additions	32	–	32
Changes with and without an effect on profit and loss	75	37	112
Reclassifications	–	–	–
Disposals due to changes in consolidation	–	–	–
Disposals	–	–	–
Dividends paid	– 69	– 14	– 83
Reclassifications to assets held for sale	–	–	–
Impairment losses	–	–	–
Reversal of impairment losses	–	–	–
Carrying amount 31.12.2018	**391**	**259**	**650**
Cost as of 31.12.2018	391	263	654
Accumulated impairment losses	–	– 4	– 4

Individual interests in companies accounted for using the equity method

The following tables contain summarised data from the income statements and data from the statement of financial position for the individual material joint ventures accounted for using the equity method.

T113 BALANCE SHEET DATA GÜNES EKSPRES HAVACILIK ANONIM SIRKETI (SUNEXPRESS), ANTALYA, TURKEY

in €m	**31.12.2018**	31.12.2017
Current assets	400	449
of which cash and cash equivalents	196	234
Non-current assets	816	844
Current liabilities	404	362
Non-current liabilities	559	719
Current financial liabilities (except trade and other payables and provisions)	114	96
Non-current financial liabilities (except trade and other payables and provisions)	412	477
Shareholders' equity	**253**	**212**
Share of equity	127	106
Other	21	21
Carrying amount	**148**	**127**

T114 INCOME STATEMENT DATA GÜNES EKSPRES HAVACILIK ANONIM SIRKETI (SUNEXPRESS), ANTALYA, TURKEY

in €m	**2018**	2017
Revenue	1,261	1,157
Depreciation and amortisation	53	48
Interest income	6	4
Interest expenses	15	21
Income tax expense or income	34	18
Profit or loss from continuing operations	**47**	**65**
Profit or loss after tax from discontinued operations	–	–
Other comprehensive income	– 6	– 7
Total comprehensive income	**41**	**58**
Share of profit or loss from continuing operations	24	33
Share of comprehensive income	21	29

The item "Other" in the reconciliation with the carrying amount for SunExpress includes the difference from the first-time consolidation of the company.

T115 BALANCE SHEET DATA TERMINAL 2 GESELLSCHAFT MBH & CO. OHG, MUNICH AIRPORT, GERMANY

in €m	31.12.2018	31.12.2017
Current assets	80	84
of which cash and cash equivalents	4	–
Non-current assets	1,381	1,472
Current liabilities	266	277
Non-current liabilities	1,133	1,210
Current financial liabilities (except trade and other payables and provisions)	122	136
Non-current financial liabilities (except trade and other payables and provisions)	1,103	1,182
Shareholders' equity	**62**	**69**
Share of equity	25	28
Other	–	–
Carrying amount	**25**	**28**

T116 INCOME STATEMENT DATA TERMINAL 2 GESELLSCHAFT MBH & CO. OHG, MUNICH AIRPORT, GERMANY

in €m	2018	2017
Revenue	357	317
Depreciation and amortisation	84	86
Interest income	–	–
Interest expenses	39	42
Income tax expense or income	10	5
Profit or loss from continuing operations	**77**	**37**
Profit or loss after tax from discontinued operations	–	–
Other comprehensive income	8	17
Total comprehensive income	**85**	**54**
Share of profit or loss from continuing operations	31	15
Share of comprehensive income	34	22
Dividends received	92	55

The following table contains summarised aggregated data from the income statements and carrying amounts for the individual immaterial joint ventures accounted for using the equity method.

T117 INCOME STATEMENTS DATA AND CARRYING AMOUNTS OF JOINT VENTURES ACCOUNTED FOR USING THE EQUITY METHOD

in €m	2018	2017
Profit or loss from continuing operations	21	31
Profit or loss after tax from discontinued operations	–	–
Other comprehensive income	–	–
Total comprehensive income	**21**	**31**
Carrying amount	**218**	**195**

The following table contains summarised aggregated data from the income statements and carrying amounts for the individual immaterial associated companies accounted for using the equity method.

T118 INCOME STATEMENTS DATA AND CARRYING AMOUNTS OF ASSOCIATED COMPANIES ACCOUNTED FOR USING THE EQUITY METHOD

in €m	2018	2017
Profit or loss from continuing operations	37	39
Profit or loss after tax from discontinued operations	–	–
Other comprehensive income	–	–
Total comprehensive income	**37**	**39**
Carrying amount	**259**	**235**

22 Other equity investments and non-current securities

T119 OTHER EQUITY INVESTMENTS AND NON-CURRENT SECURITIES

in €m	31.12.2018	31.12.2017
Investments in affiliated companies	222	204
Investments	24	17
Other investments	246	221
Non-current securities	41	32

Shares in related parties include shares in affiliated companies, joint ventures and associates that are not consolidated for reasons of materiality. These shares are carried at amortised cost. Disclosures on the equity investments and non-current securities can be found in ↗ **Note 42, p. 157ff.**

In the current financial year, other equity investments held at EUR 8m (previous year: EUR 5m) were sold for a loss of EUR 1m (previous year: profit of EUR 2m).

23 Non-current loans and receivables

T120 NON-CURRENT LOANS AND RECEIVABLES

in €m	31.12.2018	31.12.2017
Loans to and receivables from affiliated companies	108	89
Loans to and receivables from other equity investments	–	–
Other loans and receivables	351	358
Emissions certificates	53	28
	512	**475**

Non-current loans and receivables are carried at amortised cost.

For the impairment test for emissions certificates, we refer to the disclosures on the cash-generating units (CGU) Lufthansa German Airlines, SWISS, Austrian Airlines and Eurowings in ↗ **Note 16, p. 127ff.**

Other receivables include expected reimbursements for obligations for which provisions have been made amounting to EUR 2m (previous year: EUR 2m). Of the non-current receivables, EUR 32m (previous year: EUR 32m) serve as collateral for liabilities.

24 Inventories

T121 INVENTORIES

in €m	31.12.2018	31.12.2017
Raw materials, consumables and supplies	813	663
Finished goods and work in progress	150	156
Advance payments	5	88
	968	**907**

No inventories have been pledged as collateral for loans. EUR 695m of the inventories (previous year: EUR 556m) consist of non-repairable spare parts for aircraft.

The gross value of written-down inventories as of 31 December 2018 was EUR 859m (previous year: EUR 855m). Inventories with a carrying amount of EUR 604m (previous year: EUR 611m) are held at net realisable value. Write-downs to net realisable value of EUR 232m were made at the beginning of the financial year (previous year: EUR 211m). New impairment losses of EUR 36m were recognised in the reporting year (previous year: EUR 40m). Write-downs of EUR 13m made in the previous year were reversed (previous year: EUR 8m).

25 Contract assets

The Lufthansa Group recognised the following contract assets in 2018:

T122 CONTRACT ASSETS

in €m	31.12.2018	1.1.2018
Contract assets from MRO and IT services	234	185
Impairment of contract assets	–	
Total contract assets	**234**	**185**

26 Trade receivables and other receivables

T123 TRADE RECEIVABLES AND OTHER RECEIVABLES

in €m	31.12.2018	31.12.2017
Trade receivables		
Trade receivables from affiliated companies	67	80
Trade receivables from other equity investments	7	4
Trade receivables from third parties	3,938	3,901
	4,012	**3,985**
Other receivables		
Receivables from affiliated companies	93	58
Receivables from other equity investments	–	1
Other receivables	1,408	1,238
Emissions certificates	63	31
	1,564	**1,328**
Total	**5,576**	**5,313**

For the impairment test for emissions certificates, we refer to the disclosures on the cash-generating units (CGU) Lufthansa German Airlines, SWISS, Austrian Airlines, the Eurowings group and Brussels Airlines in ↗ **Note 16, p. 127ff.**

Collateral received for trade receivables has a fair value of EUR 2m, as in the previous year. Other receivables include expected reimbursements for obligations for which provisions have been made amounting to EUR 26m (previous year: EUR 11m).

Other receivables include claims of EUR 154m (previous year: EUR 171m) against insurers in connection with the accident involving the Germanwings aircraft on 24 March 2015. As of the reporting date, these receivables are offset by provisions of EUR 139m for outstanding obligations relating to this accident (previous year: EUR 149m).

Other receivables of EUR 34m (previous year: EUR 77m) serve to secure negative market values of derivatives.

27 Deferred charges and prepaid expenses

Deferred charges and prepaid expenses consist of various services paid for in advance for subsequent periods.

28 Current securities

Current securities are fixed income securities, participation certificates, shares and investments in money market funds.

29 Cash and cash equivalents

This item includes EUR 66m (previous year: EUR 179m) in fixed-term deposits with terms of four to twelve months.

Bank balances in foreign currencies are translated at the exchange rate on the balance sheet date.

30 Assets held for sale

Assets with a carrying amount of EUR 9m were held for sale as of year-end 2018. They consist of two aircraft and one building. In the previous year, the carrying amount was EUR 6m and related to one aircraft, buildings and spare parts for aircraft (carrying amount of EUR 2m).

Shareholders' equity and liabilities

31 Issued capital

ISSUED CAPITAL

Deutsche Lufthansa AG's issued capital totals EUR 1,217m. Issued capital is divided into 475,210,729 registered shares, with each share representing EUR 2.56 of issued capital.

AUTHORISED CAPITAL

A resolution passed at the Annual General Meeting on 29 April 2015 authorised the Executive Board until 28 April 2020, subject to approval by the Supervisory Board, to increase the Company's issued capital by up to EUR 561,160,092 by issuing new registered shares on one or more occasions for payment in cash or in kind (Authorised Capital A). In certain cases, the shareholders' subscription rights can be excluded with the approval of the Supervisory Board. In order to issue new shares to settle dividend entitlements, the Executive Board of Deutsche Lufthansa AG decided, with the approval of the Supervisory Board at the Annual General Meeting on 8 May 2018, to make partial use of the authorisation voted at the Annual General Meeting on 29 April 2015 (Authorised Capital A) and increase the Company's issued capital by EUR 6,130,027.52 by issuing 2,394,542 new registered shares with transfer restrictions and profit entitlement from 1 January 2018. The capital increase was entered in the Commercial Register of Cologne District Court (HRB 2168) on 7 June 2018. As of 31 December 2018, Authorised Capital A amounted to EUR 547,180,702.56.

A resolution passed at the Annual General Meeting on 29 April 2014 authorised the Executive Board until 28 April 2019, subject to approval by the Supervisory Board, to increase the issued capital by up to EUR 29m by issuing new registered shares to employees (Authorised Capital B) for payment in cash. Existing shareholders' subscription rights are excluded. In order to issue new shares to employees of Deutsche Lufthansa AG and its affiliated companies, the Executive Board of Deutsche Lufthansa AG decided, with the approval of the Supervisory Board, to make partial use of the authorisation voted at the Annual General Meeting on 29 April 2014 (Authorised Capital B) and increase the Company's issued capital by EUR 3,984,750.08, excluding shareholders' subscription rights, by issuing 1,556,543 new registered shares with transfer restrictions and profit entitlement from 1 January 2018 for payment in cash. The capital increase was entered in the Commercial Register of Cologne District Court (HRB 2168) on 25 October 2018. As of 31 December 2018, Authorised Capital B amounts to EUR 6,791,923.20.

CONTINGENT CAPITAL

A resolution passed at the Annual General Meeting on 28 April 2016 authorised the Executive Board until 27 April 2021, subject to approval by the Supervisory Board, to issue bearer or registered convertible bonds, bond/warrant packages, profit sharing rights or participating bonds (or combinations of these instruments), on one or more occasions, for a total nominal value of up to EUR 1.5bn, with or without restrictions on maturity. To do so, contingent capital (Contingent Capital II) was created for a contingent capital increase of up to EUR 237,843,840 by issuing up to 92,907,750 new registered shares. The contingent capital increase will only take place insofar as the holders of convertible bonds or warrants from bond/warrant packages decide to exercise their conversion and/or option rights.

AUTHORISATION TO PURCHASE TREASURY SHARES

A resolution passed at the Annual General Meeting held on 29 April 2015 authorised the Executive Board pursuant to Section 71 Paragraph 1 No. 8 Stock Corporation Act (AktG) to purchase treasury shares until 28 April 2020. The authorisation is limited to 10% of current issued capital, which can be purchased on the stock exchange or by a public purchase offer to all shareholders. The authorisation states that the Executive Board can use the shares, in particular, for the purposes defined in the resolution passed at the Annual General Meeting. According to the resolution of the Annual General Meeting held on 28 April 2016, the Executive Board is also authorised to purchase treasury shares by means of derivatives and to conclude corresponding derivative transactions.

In 2018, Deutsche Lufthansa AG bought back 249,185 of its own shares at an average price of EUR 19.40. This represents 0.05% of issued capital.

The shares purchased or created by means of the capital increase were used as follows:

- 1,023,955 shares were transferred to the employees of Deutsche Lufthansa AG and to 35 other affiliated companies and equity investments as part of the profit-sharing for 2017, at a share price of EUR 22.04.
- 755,598 shares were transferred as part of performance-related variable remuneration in 2018 to managers and non-payscale employees of Deutsche Lufthansa AG and to 41 further affiliated companies and equity investments at a price of EUR 17.76.

— 16,891 shares were transferred to Executive Board members at a price of EUR 17.76 as part of the share programme for 2018.

— 3,348 shares were transferred for previous years' programmes (performance-related variable remuneration for 2017 to managers, non-payscale employees and other employees of Deutsche Lufthansa AG and to further affiliated companies and equity investments from profit-sharing for 2016) at a price of EUR 27.12.

— 2,394,542 shares were transferred to shareholders to settle dividend entitlements for 2017.

5,936 shares were resold at a price of EUR 19.91.

On the balance sheet date, treasury shares were no longer held.

CAPITAL MANAGEMENT

The Lufthansa Group continues to aim for a sustainable equity ratio of 25%, in order to ensure long-term financial flexibility and stability as a basis for its growth targets. As of 31 December 2018 and 2017, equity and total assets were as follows:

T124 EQUITY AND LIABILITIES

in €m	31.12.2018	31.12.2017
Shareholders' equity	9,573	9,110
In % of total assets	25.1	25.5
Liabilities	28,640	26,668
In % of total assets	74.9	74.5
Total capital	**38,213**	**35,778**

In the financial year 2018, the equity ratio declined by 0.4 percentage points compared with the adjusted figure for the previous year to 25.1%.

Lufthansa's Articles of Association do not stipulate any capital requirements.

32 Reserves

Capital reserves only include the share premium paid on capital increases and a convertible bond that was redeemed in full in previous years. The legal reserve contained in retained earnings is unchanged at EUR 26m; other reserves consist of other retained earnings.

The following table shows changes in other neutral reserves in 2018:

T125 NOTES ON OTHER COMPREHENSIVE INCOME

in €m	2018	2017
Other comprehensive income after income taxes		
Currency translation differences		
Profit/loss for the period	124	-408
Reclassification adjustments recognised in profit or loss	–	2
Subsequent measurement of financial assets at fair value (with recycling)	-10	21
Subsequent measurement of financial assets at fair value (without recycling)	5	–
Profit/loss for the period	-3	139
Reclassification adjustments recognised in profit or loss	-2	-118
Subsequent measurement of hedges – cash flow hedge reserve	434	-546
Subsequent measurement of hedges – costs of hedging	-90	13
Profit/loss for the period	401	-457
Reclassification adjustments recognised in profit or loss	-57	-31
Transfer to cost of hedged items	–	-58
Other comprehensive income from investments accounted for using the equity method		
Profit/loss for the period – reclassifiable	-2	3
Profit/loss for the period – non-reclassifiable	–	–
Transfer to cost of hedged items	–	–
Revaluation of defined-benefit pension plans	-974	1,186
Revaluation of defined-benefit pension plans within disposal groups	–	–
Other expenses and income recognised directly in equity	1	-3
Income taxes on items in other comprehensive income	30	1
Other comprehensive income after income taxes	**-482**	**269**

T126 NOTE ON INCOME TAXES RECOGNISED FOR OTHER COMPREHENSIVE INCOME

	2018			2017		
in €m	Amount before income taxes	Tax expenses/ income	Amount after income taxes	Amount before income taxes	Tax expenses/ income	Amount after income taxes
Currency translation differences	124	–	124	-406	–	-406
Subsequent measurement of financial assets at fair value (with recycling)	-10	–	-10	21	-1	20
Subsequent measurement of financial assets at fair value (without recycling)	5	–	5	–	–	–
Subsequent measurement of hedges – cash flow hedge reserve	434	-125	309	-546	142	-404
Subsequent measurement of hedges – costs of hedging	-90	38	-52	13	-4	9
Other comprehensive income from investments accounted for using the equity method – reclassifiable	-2	–	-2	3	–	3
Revaluation of defined-benefit pension plans	-974	117	-857	1,186	-136	1,050
Other expenses and income recognised directly in equity	1	–	1	-3	–	-3
Other comprehensive income	**-512**	**30**	**-482**	**268**	**1**	**269**

The overall change in equity is shown in the ↗ **Consolidated statement of changes in shareholders' equity, p. 104.**

33 Pension provisions

The Group's pension obligations comprise both defined-benefit and defined-contribution plans and include both obligations to make current payments and entitlements to future pension payments.

Obligations under defined-benefit pension plans for Group employees related mostly to pension obligations in Germany, Switzerland, Austria and the USA. Various commitments have been made to different groups of employees.

For the employees in Germany and for staff posted abroad by German companies who joined the Company before 1995, the supplementary pension scheme for state employees (VBL) was retained as the Company's pension scheme after Lufthansa's privatisation. Employees who joined after 1994 received a retirement benefit commitment based on an average salary plan, which provided for pension units to be granted annually, with the size of these components depending on the employee's age and salary. In 2003, the VBL pension scheme was changed to the average salary plan applicable to the employees recruited after 1995. Since 2015, the existing domestic retirement benefit commitments to the individual groups of employees have been converted successively into defined contribution schemes.

The Lufthansa collective agreement on benefits for ground staff established a new Company retirement benefit plan in the form of a defined contribution benefit commitment for the ground staff in Germany, in particular those at Deutsche Lufthansa AG, Lufthansa Cargo AG, the Lufthansa Technik group and the LSG group. For employees recruited before 1 January 2016, the entitlements vested up until 31 December 2015 are maintained. For service periods starting from 1 January 2016, employees can reach the same level of benefits by making contributions from their own pocket. For employees recruited from 1 January 2016, the contributions to the new model will be invested on the capital market. When the employee reaches retirement age, the entire account balance is converted into an annuity on the basis of the applicable BilMoG interest rate, subject to a pension adjustment of 1% per annum and while guaranteeing the contributions that were originally made.

On 17 March 2017, the "Lufthansa Pension Cabin" wage agreement was signed with the trade union UFO for cabin crew at Deutsche Lufthansa AG (DLH). It replaces the agreements on the "Lufthansa Company Pension" for cabin crew and the "Lufthansa Transitional Benefit for Cabin Crew".

For employees recruited up to 5 July 2016, the pension entitlements vested up until 30 June 2016 are maintained. For service periods from 1 July 2016, these employees receive employer contributions to the Company pension scheme depending on their eligible gross salary. An initial contribution to the transitional benefit scheme was calculated for the staff concerned as of 30 June 2016 on the basis of parameters and valuation methods defined by the collective bargaining partners. This initial transitional benefit contribution will replace all existing claims by the employees concerned under the collective agreement on “Transitional Benefit for Cabin Crew” and will be switched to a contribution commitment with a minimum guaranteed payment. All employees are free to make their own contributions on a voluntary basis. Contributions from both employer and employee, as well as the initial transitional benefit contribution, are invested on the capital markets with a capital guarantee. When the employee reaches retirement age, the available account balance is converted into an annuity on the basis of the applicable BilMoG interest rate, subject to a pension adjustment of 1% per annum.

On 21 December 2017, the “Lufthansa Pension Cockpit” wage agreement for cockpit staff was signed with the Vereinigung Cockpit pilots’ union. At the same time, a new “Transitional Benefit Cockpit” wage agreement was signed.

For employees recruited before 1 January 2017, the pension entitlements vested up until 31 December 2016 are maintained. For service periods from 1 January 2017, the employees receive employer contributions to the Company pension scheme depending on their eligible gross salary. All employees are free to make their own contributions on a voluntary basis. The capital is invested on capital markets with a capital guarantee and the guaranteed interest rate offered by the life insurance companies (currently 0.9% per annum) as an additional commitment. When the employee reaches retirement age, the available account balance is converted into an annuity on the basis of the applicable BilMoG interest rate, subject to a pension adjustment of 1% per annum.

In the new Company retirement benefit scheme for ground, cabin and cockpit staff, the obligations from the capital market-oriented components are recognised at the time value of the corresponding assets, insofar as the assets exceed the minimum guaranteed amount. Plan assets and benefit obligations are presented on a net basis. The employer contributions constitute service expense.

Cockpit staff are still additionally entitled to a transitional pension arrangement covering the period from the end of their active in-flight service until the beginning of their statutory/Company pension plans. Benefits depend on the number of years of service and the final salary before retirement (final salary plans). Pension entitlements continue to accrue while transitional benefits are being received.

In line with the revised version of the wage agreement, the old rules continue to apply to transitional benefits for cockpit staff. The collective retirement age for pilots will go up in stages from 58 to 60 by 2021. Rules on transitional benefits were extended to cover cockpit staff at Germanwings who were recruited before 1 January 2005.

Defined-benefit Company pension schemes and transitional pension arrangements for Germany are funded by plan assets, while amounts that have not yet been transferred are covered by pension provisions.

There are no minimum funding requirements in Germany.

In the course of acquiring Swiss International Air Lines AG, pension obligations, mainly statutory obligations, were taken on in Switzerland. The retirement benefits are funded via pension funds known as collective foundations. In addition to retirement benefits, the plans cover invalidity and dependant persons’ benefits. Beneficiaries can choose between an annuity and a lump sum payment. The retirement age for the plans lies between 58 and 63 years. Contributions to the pension funds are made by employers and employees, whereby the Company contributions must be at least equal to the employee contributions defined in the terms of the plan. Contributions are deducted from the qualifying salary according to a sliding scale. If there is a deficit of plan assets, employer and employee contributions can be increased, a lower return can be determined or other steps permissible by law can be taken. The decision is taken by the trustees of the pension fund concerned. The trustees’ strategies for making good a deficit are based on the report by a pension fund expert and must be presented to the regulatory authority. The approval of the authority is not required, however.

The pension obligations for employees of Austrian Airlines AG are mostly on a defined contribution basis and have been outsourced to a pension fund. They consist of retirement, invalidity and dependant persons’ benefits.

Obligations under defined-benefit plans at Austrian Airlines AG relate to former directors and Executive Board members and others already drawing their pensions. Obligations under defined-benefit plans for ground staff are now contribution-free and are determined by converting plan assets into an annuity. There are no defined-benefit plans but only defined contribution pension obligations for active pilots, flight attendants and members of the top management level.

The defined-benefit pension plans at LSG Sky Chefs in the USA are largely closed to new entrants and no further benefits are being granted to beneficiaries still in service. Benefit payments are based on average salary and the years of service acquired before the plan was closed or frozen. The retirement age is 65. Pension payments are funded externally. Retirement benefits have been switched to defined contribution plans.

Other staff abroad are also entitled to minor retirement benefits and in some cases to medical care based mainly on length of service and salary earned. As a rule, benefits are financed by means of external funds.

Contributions for defined contribution retirement benefit commitments came to EUR 470m in 2018 (previous year: EUR 426m).

In the financial year 2004, work began on building up plan assets to fund and safeguard future pension payments. The aim was to fund the pension obligations under existing plans in Germany in full. Contractual trust arrangements (CTAs) in the form of a mutual two-stage trusteeship were set up for this purpose.

The main trustee is Lufthansa Pension Trust e. V., a separate legal entity subject to German regulations. Deutsche Lufthansa AG and the trustees/other trustors agree on contributions and, if such a contribution is determined, make a payment to Lufthansa Pension Trust e. V. Deutsche Lufthansa AG and its subsidiaries Lufthansa Technik AG and Lufthansa Cargo AG are parties to the contractual trust arrangement.

The trust assets have largely been held by a Maltese corporate vehicle since 2007. The Investment Board of Lufthansa Malta Pension Holding decides on the fund's asset allocation. The asset management itself is delegated to fund management companies, who invest the assets in accordance with the general investment principles defined by the Investment Board.

The assets to fund pension obligations in the new Lufthansa Pension Ground, Lufthansa Pension Cabin and Lufthansa Pension Cockpit capital market-based benefits system were transferred to an external trustee, Deutsche Treuinvest Stiftung, as part of a contractual trust arrangement. Capital is invested in what are known as age group funds, whose investment strategy is based on a life cycle model. As employees get older, less and less is invested in asset classes with a higher risk-return profile and a greater percentage in more conservative assets classes. The Company has set up an Investment Committee that is responsible for defining and monitoring the investment strategy, e.g. how the age group funds are composed and how the asset allocation changes over time.

Assets to fund pension obligations for other German subsidiaries have also been invested with Deutsche Treuinvest Stiftung.

EUR 330m was contributed to plan assets for employees in Germany in the reporting year (previous year: EUR 1,824m).

Amounts shown in the statement of financial position for defined-benefit commitments are made up as follows:

T127 DEFINED-BENEFIT RETIREMENT BENEFIT COMMITMENTS

	31.12.2018				31.12.2017			
in €m	**Defined-benefit obligations (DBO)**	**Fair value of plan assets**	**Effect of asset ceiling**	**Net carrying amount for defined-benefit obligations**	Defined-benefit obligations (DBO)	Fair value of plan assets	Effect of asset ceiling	Net carrying amount for defined-benefit obligations
Retirement benefits Germany	15,627	–11,446	–	4,181	13,449	–10,075	–	3,374
Transitional benefits Germany	1,391	–395	–	996	3,130	–2,126	–	1,004
Switzerland	3,224	–2,921	–	303	3,251	–2,867	2	386
Austria	427	–184	–	243	402	–193	–	209
USA	339	–279	–	60	350	–293	–	57
Other countries	404	–351	–	53	424	–363	–	61
Carrying amounts	**21,412**	**–15,576**	**–**	**5,836**	**21,006**	**–15,917**	**2**	**5,091**
of which pension provisions	–	–	–	5,865	–	–	–	5,116
of which other assets	–	–	–	29	–	–	–	25

Reconciliation between the funding status and the amounts shown in the consolidated balance sheet is as follows:

T128 RECONCILIATION FUNDING STATUS

in €m	2018	2017
Present value of funded pension obligations	20,847	20,444
Plan assets	-15,576	-15,917
Funding status (net)	**5,271**	**4,527**
Present value of unfunded pension obligations	**565**	**562**
Adjustment for asset ceiling	–	2
Carrying amounts	**5,836**	**5,091**
of which pension provisions	5,865	5,116
of which other assets	29	25

During the reporting period, the present value of defined-benefit pension obligations changed as follows:

T129 CHANGE IN PRESENT VALUE OF PENSION OBLIGATIONS

in €m	2018	2017
Balance on 1.1.	21,006	21,442
Current service costs	552	671
Interest expenses	388	404
Past service cost/effects of curtailments	-113	-551
Effects of settlements	–	–
Revaluations		
Actuarial gains/losses from changes in demographic assumptions	146	6
Actuarial gains/losses from changes in financial assumptions	-246	-602
Experience adjustments	-119	317
Currency translation differences	137	-358
Changes in the group of consolidated companies	–	120
Plan contributions – employees	124	56
Pension payments	-463	-431
Settlement payments	–	-4
Other [1]/reclassifications	–	-64
As of 31.12.	**21,412**	**21,006**

[1] The amounts are partly for benefit obligations which were measured in accordance with IAS 19 for the first time.

Actuarial gains/losses from changes in financial assumptions include gains due to the increase in the discount rate for Switzerland compared with the previous year. The significant change that results from the demographic assumptions stems almost exclusively from adjustments to the mortality tables for Germany and Austria. Adjustments to obligations regarding capital market-based pension plans, which are due to changes in exchange rates, are shown in adjustments based on past experience.

The following table provides a detailed reconciliation of changes in the fair value of plan assets:

T130 CHANGE IN FAIR VALUE OF PLAN ASSETS

in €m	2018	2017
Balance on 1.1.	15,917	13,092
Interest income	291	245
Revaluations		
Income from plan assets, without amounts included in interest	-1,195	910
Currency translation differences	121	-300
Changes in the group of consolidated companies	–	88
Plan contributions – employers	463	1,950
Plan contributions – employees	124	56
Pension payments	-126	-123
Settlement payments	–	-4
Administrative costs related to obligations	-3	-3
Other [1]/reclassifications	-16	6
As of 31.12.	**15,576**	**15,917**

[1] The amounts are partly for benefit obligations which were measured in accordance with IAS 19 for the first time.

In the financial years 2018 and 2017, pension provisions developed as follows:

T131 PENSION PROVISIONS

in €m	2018	2017
Balance on 1.1.	5,116	8,364
Currency translation differences carried forward	16	-58
Changes in the group of consolidated companies	–	32
Pensions payments	-337	-308
Current service costs	552	671
Interest expenses	388	404
Interest income	-291	-245
Effects of amendments incl. curtailments, settlements and administrative costs	-110	-548
Revalutations		
Actuarial gains/losses and experience adjustments	-219	-279
Income from plan assets, without amounts included in interest	1,195	-910
Net effect of adjustments for asset ceiling	-2	2
Plan contributions/reclassifications	-443	-2,009
As of 31.12.	**5,865**	**5,116**

Expenses and income for defined-benefit plans are made up as follows:

T132 EXPENSES AND INCOME FOR DEFINED-BENEFIT PENSION PLANS

in €m	2018	2017
Current service costs	552	671
Past service cost/effects of curtailments	-113	-551
Income from settlements	–	–
Accrued interest on projected pension obligations	388	404
Interest income on plan assets	-291	-245
Administrative costs related to obligations	3	3
Balance of expenses and income recognised in the income statement	**539**	**282**
Income from plan assets, without amounts included in interest	1,195	-910
Actuarial gains and losses	-219	-279
Net effect of adjustment for asset ceiling	-2	2
Other comprehensive income	**974**	**-1,187**
	1,513	**-905**

Interest expenses on pension provisions and interest income on plan assets are shown in the financial result. Current service expense and past service expense are recognised in staff costs.

A loss of EUR 904m was generated from plan assets in the financial year 2018. This amount is made up of the interest income recognised in the income statement and the revaluation component for plan assets. Total income of EUR 1,155m was recognised in the previous year.

There were no significant effects from the asset ceiling defined in IAS 19.64.

Past service expense incurred in the reporting year is partly due to adjustments by the trustees of the pension funds for Swiss International Air Lines AG to the rates for converting pension contributions to pension entitlements in view of higher life expectancy and partly due to the agreement on future core elements of company retirement and transitional benefits for the cockpit staff of Lufthansa CityLine GmbH.

The main actuarial assumptions used to calculate pension obligations and the corresponding plan assets are shown below:

T133 MAIN ACTUARIAL ASSUMPTIONS FOR GERMAN COMPANIES

in %	31.12.2018	31.12.2017
Interest rate		
Retirement benefits	2.0	2.0
Transitional benefits	2.0	2.0
Salary increase		
Retirement benefits	2.5	2.5
Transitional benefits	2.5	2.5
Pension increase		
Retirement benefits	1.0	1.0
Transitional benefits	1.0	1.0

The updated "Heubeck Actuarial Tables 2018 G" were used in the biometric calculations for the German companies in the Group.

T134 MAIN ACTUARIAL ASSUMPTIONS FOR FOREIGN COMPANIES

in %	31.12.2018	31.12.2017
Interest rates		
Austria	2.0	2.0
Switzerland	1.1	0.7
USA	4.3	3.7
Salary increase		
Austria	1.9	1.8
Switzerland	1.5	1.5
USA	–	–
Pension increase		
Austria	2.0	1.7
Switzerland	0.0	0.0
USA	–	–

The BVG 2015 generation tables are used for the biometric calculations for Switzerland. Country-specific mortality tables are used in the other countries.

The following table shows how the present value of defined-benefit obligations would have been affected by changes in the relevant actuarial assumptions for the main pension plans described above:

T135 CHANGE IN ACTUARIAL ASSUMPTIONS, AS OF 2018

	Effect on the defined-benefit contribution as of 31.12.2018 in €m	Change in %
Present value of the obligation [1]	21,412	–
Interest rate		
Increase by 0.5 percentage points	19,712	-7.9
Decrease by 0.5 percentage points	23,399	+9.3
Salary trend		
Increase by 0.5 percentage points	21,556	+0.7
Decrease by 0.5 percentage points	21,283	-0.6
Pension trend		
Increase by 0.5 percentage points	21,662	+1.2
Decrease by 0.5 percentage points	21,187	-1.1

[1] Present value of the obligation using the assumptions shown in the “Actuarial assumptions” tables.

T135 CHANGE IN ACTUARIAL ASSUMPTIONS, AS OF 2017

	Effect on the defined-benefit contribution as of 31.12.2017 in €m	Change in %
Present value of the obligation [1]	21,006	–
Interest rate		
Increase by 0.5 percentage points	19,289	-8.2
Decrease by 0.5 percentage points	22,998	+9.5
Salary trend		
Increase by 0.5 percentage points	21,158	+0.7
Decrease by 0.5 percentage points	20,868	-0.7
Pension trend		
Increase by 0.5 percentage points	21,274	+1.3
Decrease by 0.5 percentage points	20,758	-1.2

[1] Present value of the obligation using the assumptions shown in the “Actuarial assumptions” tables.

A reduction of 10% in the mortality rates used to calculate the pension obligations increases the life expectancy of the beneficiaries by a given amount depending on their individual ages. It roughly corresponds to an increase of one year in the life expectancy of a male employee who is 55 years old today. A 10% reduction in the mortality rate would therefore increase the present value of the main benefit obligations in Germany and Switzerland by EUR 151m as of 31 December 2018 (previous year: EUR 148m).

The sensitivity analysis examines changes in one assumption and leaves the other assumptions unchanged compared with the original calculation. The effects of any correlation between the individual assumptions are therefore not taken into account.

Plan assets for funded defined-benefit pension obligations consist mainly of fixed-income securities, equities and cash and cash equivalents. They do not include financial instruments issued by companies in the Group nor properties used by Group companies.

Plan assets serve solely to meet the defined-benefit obligations. Funding these benefit obligations with assets provides security for future payments. In some countries, this takes place on the basis of statutory regulations, while in others (Germany, for example), this takes place on a voluntary basis.

The Lufthansa Group aims to completely cover its German pension obligations by means of capital contributions and positive capital market returns in the medium term. Regular annual contributions to the trustee have been made for this purpose to date. Investment performance plays a crucial role in meeting this target.

The investment strategy for the capital market-based pension plans is initially defined by the Company and is regularly reviewed in the course of an allocation study. Where necessary, it is adjusted by the Investment Committee to reflect changes in capital market requirements. This may result in changes to the investment strategy for amounts that have already been invested.

The Lufthansa Group manages and monitors the financial risks that arise from outsourcing the defined-benefit pension obligations. There was no change in the risk management and monitoring processes compared with the previous year. Derivative financial instruments are used, especially to manage foreign exchange risks.

The allocation of the funds to asset classes (e.g. equities) for the defined-benefit plans is carried out on the basis of asset-liability matching studies performed by the Lufthansa Group. The Asset-Liability Matching (ALM) study is conducted every three years with an external adviser in order to review the funding strategy on a regular basis and to make adjustments as necessary. The results of the study should indicate what combination of investments (annuities, equities, etc.) can be used to cover the long-term pension obligations. Step one of this process is for the actuary to draft a long-term forecast charting how the pension obligations will develop.

In addition to this, target figures are needed for the relative return and relative risk as regards coverage of the obligations. Last but not least, a risk budget must also be defined.

A simulation is used to test all permissible investment allocations for their future compliance with these objectives. Those which do not fulfil the criteria are eliminated. Preference is given to allocations that are return-oriented yet conservative and that have a high probability of achieving the investment target.

The results of the ALM study show whether there will be strategic shifts in the existing allocation. Alternative investments (e.g. property, private equity, infrastructure) are currently being further developed.

Plan assets are made up as follows:

T136 COMPOSITION OF PLAN ASSETS

	31.12.2018				31.12.2017			
	Listed price in an active market in €m	No listed price in an active market in €m	**Total in €m**	**in %**	Listed price in an active market in €m	No listed price in an active market in €m	**Total in €m**	**in %**
Equities			**4,003**	**25.9**			**4,358**	**27.4**
Europe	2,847	–			2,993	–		
Other	1,156	–			1,365	–		
Fixed-income securities			**6,716**	**43.6**			**5,959**	**37.5**
Government bonds	3,246	–			2,542	2		
Corporate bonds	3,470	–			3,415	–		
Share funds	525	–	**525**	**3.4**	593	–	**593**	**3.7**
Fixed-income funds	422	–	**422**	**2.7**	1,016	–	**1,016**	**6.4**
Mixed funds[1]	148	–	**148**	**1.0**	161	–	**161**	**1.0**
Money market investments	1,443	–	**1,443**	**9.4**	1,958	–	**1,958**	**12.3**
Property			**792**	**5.1**			**753**	**4.7**
Direct investments	–	7			302	6		
Indirect investments	638	147			319	126		
Insurance contracts	–	174	**174**	**1.1**	–	147	**147**	**0.9**
Bank balances	311	203	**514**	**2.4**	480	–	**480**	**3.0**
Other investments[2]	201	638	**839**	**5.4**	242	250	**492**	**3.1**
Total	**14,407**	**1,169**	**15,576**	**100.0**	**15,386**	**531**	**15,917**	**100.0**

[1] Includes equities and interest-bearing securities.
[2] Other investments include, in particular, alternative investments such as hedge funds, commodities and private equity funds.

In addition to various actuarial risks such as interest rate risk, life expectancy risk and the risk of salary increases, the pension plans expose the Group primarily to financial risks in connection with plan assets.

The return on plan assets is assumed at the beginning of the period to be the discount rate, which is determined on the basis of investment grade corporate bonds. For the old pension plans, if the actual return on plan assets is less than the discount rates applied, the net obligation from the pension plan goes up. With the new capital market-based pension plans, a gross obligation is recognised for the time value of the corresponding plan assets, taking the minimum guaranteed amount into account.

The share price risk that arises from the proportion of plan assets invested in equities is considered to be reasonable. The risk of default by bond issuers is limited, because investments are only made in investment grade bonds.

The amount of the net obligation under the old pension plans depends to a large extent on the rates of interest, whereby the current low-interest environment results in a relatively high net obligation. If yields on corporate bonds continue to decline, this would lead to a further increase in defined-benefit obligations, which could probably only be partly offset by positive developments in the market values of the corporate bonds held in plan assets.

Based on current knowledge, an estimated EUR 737m is expected to be transferred to pension plans in 2019 (previous year: EUR 674m). The transfers are made up of planned allocations and benefit payments that are not covered by equivalent reimbursements from plan assets. The weighted duration of pension obligations was 17 years as of 31 December 2018 (previous year: 18 years).

Over the next ten years, the following pension payments are forecast for the defined-benefit commitments in existence as of the reporting date:

T137 FORECAST MATURITIES OF UNDISCOUNTED PENSION PAYMENTS, AS OF 2018

in €m	Forecast pension payments 31.12.2018
2019	531
2020	547
2021	571
2022	586
2023	615
2024 – 2028	3,533

T137 FORECAST MATURITIES OF UNDISCOUNTED PENSION PAYMENTS, AS OF 2017

in €m	Forecast pension payments 31.12.2017
2018	514
2019	526
2020	545
2021	559
2022	567
2023 – 2027	3,224

34 Other provisions

Other provisions disclosed in the statement of financial position as non-current and current other provisions are made up as follows:

T138 NON-CURRENT AND CURRENT OTHER PROVISIONS

	31.12.2018			31.12.2017		
in €m	**Total**	Non-current	Current	**Total**	Non-current	Current
Obligations under partial retirement contracts	**31**	14	17	**30**	14	16
Other staff costs	**196**	150	46	**186**	145	41
Obligation to return emissions certificates	**63**	–	63	**31**	–	31
Onerous contracts	**64**	34	30	**103**	54	49
Environmental restoration	**27**	24	3	**28**	25	3
Legal proceedings	**85**	18	67	**119**	21	98
Restructuring/severance payments	**210**	119	91	**208**	94	114
Fixed-price customer maintenance contracts	**–**	–	–	**148**	42	106
Maintenance of operating lease aircraft	**281**	131	150	**292**	149	143
Warranties	**49**	–	49	**41**	–	41
Other provisions	**456**	47	409	**405**	57	348
Total	**1,462**	**537**	**925**	**1,591**	**601**	**990**

Provisions for construction contracts in the MRO business segment are shown under contract liabilities following the introduction of IFRS 15.

Provisions for staff costs mainly relate to staff anniversary bonuses and other current obligations.

A provision for the obligation to submit CO_2 emissions certificates to the relevant authorities is recognised for an amount equivalent to the carrying amount of the capitalised CO_2 certificates. If the obligation is not fully covered by available certificates, the outstanding amount of the provision is measured using the market price of the emissions certificates as of the reporting date.

Expected losses from onerous contracts result from ongoing obligations or other contractual relationships in which performance and consideration are out of balance.

Provisions for environmental restoration are based on surveyors' findings and the assumption that all contamination is removed within ten years without any further legal requirements.

Provisions for ongoing legal proceedings were based on an assessment of the likely outcome of the proceedings.

The provisions for the overhaul of leased aircraft mainly relate to obligations for the maintenance, overhaul and repair of aircraft.

Other provisions of EUR 139m (previous year: EUR 149m) relate to outstanding obligations in connection with the accident involving the Germanwings aircraft on 24 March 2015.

Changes in groups of individual provisions in 2018 were as follows:

T139 CHANGES IN OTHER PROVISIONS 2018

in €m	Obligations under partial retirement contracts	Other staff costs	Obligation to return emissions certificates	Onerous contracts	Environmental restoration	Legal proceedings
As of 1.1.2018	30	186	31	103	28	119
Changes in the group of consolidated companies	–	2	–	–	–	–
Currency translation differences	–	1	–	–	–	-1
Utilisation	-60	-28	-31	-35	-1	-32
Increase/addition	60	35	63	6	–	28
Interest added back	5	2	–	–	–	–
Reversal	–	-2	–	-10	–	-29
Transfers	-4	–	–	–	–	–
As of 31.12.2018	**31**	**196**	**63**	**64**	**27**	**85**

T139 CHANGES IN OTHER PROVISIONS 2018 (continued)

in €m	Restructuring/ severance payments	Maintenance of lease aircraft	Warranties	Other provisions	**Total**
As of 1.1.2018	208	292	41	457	**1,495**
Changes in the group of consolidated companies	–	-31	–	1	**-28**
Currency translation differences	–	7	–	–	**7**
Utilisation	-69	-84	-13	-161	**-514**
Increase/addition	82	110	25	195	**604**
Interest added back	–	–	–	–	**7**
Reversal	-10	-13	-4	-33	**-101**
Transfers	-1	–	–	-3	**-8**
As of 31.12.2018	**210**	**281**	**49**	**456**	**1,462**

Changes in groups of individual provisions in the previous year were as follows:

T139 CHANGES IN OTHER PROVISIONS 2017

in €m	Obligations under partial retirement contracts	Other staff costs	Obligation to return emissions certificates	Onerous contracts	Environmental restoration	Legal proceedings
As of 1.1.2017	21	167	28	115	28	104
Changes in the group of consolidated companies	–	2	8	–	–	15
Currency translation differences	–	-3	–	–	–	6
Utilisation	-58	-26	-30	-41	-2	-31
Increase/addition	62	47	25	37	2	59
Interest added back	4	–	–	–	–	–
Reversal	–	-2	–	-2	–	-16
Transfers	1	1	–	-6	–	-18
As of 31.12.2017	**30**	**186**	**31**	**103**	**28**	**119**

T139 CHANGES IN OTHER PROVISIONS 2017 (continued)

in €m	Restructuring/ severance payments	Fixed-price customer maintenance contracts	Maintenance of lease aircraft	Warranties	Other provisions	**Total**
As of 1.1.2017	219	167	291	50	379	**1,569**
Changes in the group of consolidated companies	2	–	61	–	13	**101**
Currency translation differences	–	-2	-20	-1	-3	**-23**
Utilisation	-72	-97	-194	-17	-110	**-678**
Increase/addition	63	88	168	16	135	**702**
Interest added back	–	–	–	–	–	**4**
Reversal	-4	-7	-14	-7	-11	**-63**
Transfers	–	-1	–	–	2	**-21**
As of 31.12.2017	**208**	**148**	**292**	**41**	**405**	**1,591**

The funding status for provisions for obligations to employees under partial retirement agreements is as follows:

T140 FUNDING STATUS

in €m	**2018**	2017
Present value of funded obligations under partial retirement agreements	166	167
External plan assets	-156	-162
	10	**5**
of which other provisions	31	30
of which other assets	21	25

A total of EUR 175m has been transferred to an external trust fund as insolvency insurance for employer's performance arrears as part of partial retirement agreements under which the employee at first works full-time for less pay and then retires early on the same reduced pay. These assets, which fulfil the requirements for plan assets and therefore reduce the gross amount of obligations accordingly, are measured at market value on the balance sheet date.

Obligations under partial retirement agreements were measured in 2018 using an interest rate of 0.34% (previous year: 0.03%).

The following cash outflows are estimated for the non-current portion of the other groups of provisions:

T141 CASH OUTFLOWS FOR NON-CURRENT PROVISIONS, AS OF 2018

in €m	2020	2021	2022	2023 and thereafter
Onerous contracts	21	8	2	3
Environmental restoration	3	3	3	16
Restructuring/ severance payments	47	47	19	8
Maintenance of aircraft on leases	80	19	11	24
Other provisions	23	16	7	31

At the end of 2017, the corresponding cash outflows were estimated as follows:

T141 CASH OUTFLOWS FOR NON-CURRENT PROVISIONS, AS OF 2017

in €m	2019	2020	2021	2022 and thereafter
Onerous contracts	25	15	4	10
Environmental restoration	3	3	3	17
Restructuring/ severance payments	19	19	40	15
Fixed-price customer maintenance contracts [1]	22	21	–	–
Maintenance of aircraft on leases	73	54	21	11
Other provisions	23	20	9	31

[1] Figures for the current year are shown in contract liabilities in accordance with IFRS 15.

35 Borrowings

Financial liabilities consist of a non-current portion with a residual term of more than one year and a current portion of less than one year, which is shown under current liabilities. The following table shows the total amount of borrowings:

T142 BORROWINGS 31.12.2018

in €m	Total	Non-current	Current
Bonds	**1,007**	508	499
Liabilities to banks	**1,957**	1,401	556
Leasing liabilities and other loans	**3,721**	3,099	622
	6,685	**5,008**	**1,677**

T142 BORROWINGS 31.12.2017

in €m	Total	Non-current	Current
Bonds	**1,005**	1,005	–
Liabilities to banks	**2,044**	1,881	163
Leasing liabilities and other loans	**3,765**	3,256	509
	6,814	**6,142**	**672**

Collateral was provided for EUR 75m of the liabilities to banks (previous year: EUR 101m).

There were no delays or defaults on payment obligations under these loan agreements in either 2018 or 2017.

Leasing liabilities and other loans relate almost exclusively to finance leases described in ↗ **Note 20, p. 134ff.**, and to aircraft financing arrangements described in ↗ **Note 18, p. 132.**

36 Non-current contract liabilities

T143 NON-CURRENT CONTRACT LIABILITIES

in €m	31.12.2018	1.1.2018
Non-current contract liabilities	22	43
	22	**43**

Following the introduction of IFRS 15, non-current deferred income from construction contracts previously recognised in other provisions is now presented in non-current contract liabilities.

37 Other non-current financial liabilities

T144 OTHER NON-CURRENT FINANCIAL LIABILITIES

in €m	31.12.2018	31.12.2017
Other non-current financial liabilities	137	243
	137	**243**

38 Non-current advance payments received, deferred income and other non-financial liabilities

T145 NON-CURRENT ADVANCE PAYMENTS RECEIVED, DEFERRED INCOME AND OTHER NON-FINANCIAL LIABILITIES

in €m	31.12.2018	31.12.2017
Advance payments received	4	4
Deferred income	21	752
Other non-financial liabilities	26	533
	51	**1,289**

As of 31 December 2017, deferred income included EUR 739m and other non-financial liabilities included EUR 499m in obligations under bonus mile programmes, which as of 2018 are shown under current contract liabilities following the introduction of IFRS 15.

In addition, deferred income includes EUR 8m (previous year: EUR 8m) for grants and subsidies received for capital expenditure, which are realised over the useful life of the assets in the following years.

Other non-financial liabilities include obligations under share-based remuneration agreements for Executive Board members, managers and non-payscale employees. As part of the share-based remuneration agreements, Lufthansa and other consolidated and non-consolidated Group companies participating in the programme offer a 50% discount on employee investment in Lufthansa shares to Executive Board members, managers and non-payscale employees. The option packages granted in 2015, 2016, 2017 and 2018 consist of an outperformance option and a performance option. At the end of the programme, the participants receive a cash payment if the conditions are met.

The outperformance option is linked to the performance of the Lufthansa share compared with a fictitious index composed of European competitors' shares, whereas the performance option is linked to the absolute performance of the Lufthansa share. With the outperformance option, the holder receives a cash payment for each percentage point of outperformance on exercising the option. The cash payment is capped at an outperformance of more than 20%.

The performance option for 2015 results in a cash payment if the share price goes up by more than 29%. This is capped at a share price increase of more than 44%. The performance option for 2016 results in a cash payment if the share price goes up by more than 27%. This is capped at a share price increase of more than 41%. The performance option for 2017 results in a cash payment if the share price goes up by more than 23%; the maximum cash payment will be made if there is a share price increase of 35%. The performance option for 2018 results in a cash payment if the share price goes up by more than 22%. This is capped at a share price increase of more than 33%.

T146 2015, 2016, 2017 AND 2018 OUTPERFORMANCE OPTION PROGRAMMES

	€ per outperformance level	Maximum per tranche in €
Board member	1,000 per percentage point from 1%	20,000
Managers	400 per percentage point from 1%	8,000
Non-payscale staff	200 per 5 percentage points from 1%	1,000

T147 2015, 2016, 2017 AND 2018 PERFORMANCE OPTION PROGRAMMES

	€ per performance level	Maximum per tranche in €
Board member	10,000 + 1,000 per performance unit	20,000
Managers	4,000 + 500 per performance unit	8,000
Non-payscale staff	500 + 100 per performance unit	1,000

The programmes are scheduled to run for four years. All options can be exercised at a fixed time in the final year. The performance and outperformance in all programmes are calculated on the principle of total shareholder return. The shares invested in personally may not be sold until the option is exercised.

Over the financial years 2018 and 2017, the number of options changed as follows:

T148 CHANGE IN NUMBER OF OPTIONS

	2018		2017	
	Number of options / option packages	**Cash settlement in € thousands**	Number of options / option packages	Cash settlement in € thousands
Outstanding options on 1.1.	19,167	–	18,277	–
Options issued	6,066	–	5,178	–
Expired or unused options	523	–	156	–
Options exercised	4,164	36,868	4,132	36,191
Outstanding options on 31.12.	20,546	–	19,167	–

The performance and the outperformance option of the share programme 2014, which has now expired, each resulted in a payment of EUR 37m (previous year: EUR 36m). A total of 772,489 shares were issued in the reporting year at an average price of EUR 17.76 for the share programme 2018, adding up to a total value of EUR 14m. The 50% discount for employees meant the new share issuance resulted in staff costs of EUR 7m (previous year: EUR 5m). Participants in the programme therefore hold 3,561,026 shares as of the reporting date (previous year: 3,907,293 shares).

The fair values of the option rights in the share programmes still running were calculated using Monte Carlo simulations. This involves simulating the future returns of the shares in the comparative index and of Deutsche Lufthansa AG and calculating the value of the option rights as the forecast amount of a dividend.

The following fair values were measured in total:

T149 FAIR VALUE OF OPTION RIGHTS

	Number of option packages as of 31.12.2018	Fair value per option package in € as of 31.12.2018	Vested benefit as a proportion of the programme term	Fair value in € as of 31.12.2018
Board member				
Options 2015	135	37,052	0.71	3,543,097
Options 2016	135	33,643	0.46	2,081,661
Options 2017	165	12,029	0.29	578,896
Options 2018	165	11,481	0.04	78,932
Managers				
Options 2015	1,869	14,816	0.79	21,922,123
Options 2016	2,247	13,454	0.54	16,375,200
Options 2017	2,333	4,809	0.29	3,272,324
Options 2018	2,622	4,680	0.04	511,290
Non-payscale staff				
Options 2015	2,539	1,850	0.79	3,718,577
Options 2016	2,631	1,681	0.54	2,395,635
Options 2017	2,426	606	0.29	428,796
Options 2018	3,279	566	0.04	77,330
Total	**20,546**			**54,983,861**

T149 FAIR VALUE OF OPTION RIGHTS

	Number of option packages as of 31.12.2017	Fair value per option package in € as of 31.12.2017	Vested benefit as a proportion of the programme term	Fair value in € as of 31.12.2017
Board member				
Options 2014	135	39,180	0.75	3,991,463
Options 2015	135	37,671	0.50	2,566,337
Options 2016	135	35,697	0.25	1,227,084
Options 2017	165	18,384	0.04	126,390
Managers				
Options 2014	1,824	15,671	0.79	22,628,924
Options 2015	1,917	15,102	0.54	15,681,539
Options 2016	2,303	14,277	0.29	9,589,980
Options 2017	2,453	7,351	0.04	751,333
Non-payscale staff				
Options 2014	2,205	1,958	0.79	3,417,934
Options 2015	2,554	1,887	0.54	2,610,507
Options 2016	2,646	1,784	0.29	1,376,802
Options 2017	2,695	922	0.04	103,533
Total	**19,167**			**64,071,826**

Staff fluctuation of 5.1% is again assumed when accounting for the obligation resulting from the valuation of option rights, so that the recognised provision is less than their calculated time value. The measurement of options therefore results in another non-financial liability of EUR 53m as of the reporting date (previous year: EUR 61m), of which EUR 25m (previous year: EUR 32m) is shown under non-current liabilities. The payment of EUR 37m in the financial year on the basis of option rights that have now expired reduced the previously recognised liability, so that the change in option rights in the reporting year resulted in staff costs of EUR 29m (previous year: EUR 82m).

The weighted average share prices at the calculation date were used in the Monte Carlo simulation. As stated in the terms of the programme, these are 50-day averages for the shares of Deutsche Lufthansa AG and the competitors included in the comparative index. The volatilities and correlations used are forecasts for a specific date and maturity on the basis of current market estimates.

Swap rates were used as the interest rate for the remaining term of the outperformance option in each case. The maximum term of the programmes was used for measurement purposes.

The parameters used by the external service provider are shown in the following table:

T150 REFERENCE PRICE

		Options 2015	Options 2016	Options 2017	Options 2018
Lufthansa	EUR	12.34	10.55	23.00	21.18
Air France-KLM	EUR	6.32	5.00	13.12	8.56
IAG	GBP	574.73	400.94	612.70	646.28
Ryanair	EUR	13.05	12.40	17.25	12.82
easyJet	GBP	1,733.22	1,018.21	1,240.72	1,340.31
Air Berlin	EUR	1.00	0.68	–	–
Norwegian	NOK	–	–	218.45	236.70
WIZZair	GBP	–	–	2,991.52	2,858.46

T151 PROJECTED VOLATILITIES

in % for:	Options 2015 as of 31.12.2018	Options 2015 as of 31.12.2017	Options 2016 as of 31.12.2018	Options 2016 as of 31.12.2017	Options 2017 as of 31.12.2018	Options 2017 as of 31.12.2017	Options 2018 as of 31.12.2018	Options 2018 as of 31.12.2017
Lufthansa	31.88	31.66	29.76	31.30	31.77	31.78	31.46	–
Air France-KLM	38.09	36.78	37.48	36.45	37.22	37.58	36.85	–
IAG	23.35	36.90	24.38	35.04	33.00	34.45	32.51	–
Ryanair	32.79	31.14	29.00	30.89	31.72	30.59	31.41	–
easyJet	30.17	37.15	30.08	34.96	34.97	34.15	33.82	–
Air Berlin	147.57	100.16	140.85	84.39	–	–	–	–
Norwegian	–	–	–	–	51.97	42.08	50.01	–
WIZZair	–	–	–	–	35.27	34.44	35.27	–
Risk-free interest rate	Options 2015: –0.68% for euro zone (previous year: –0.72%) 0.75% for UK (previous year: 0.49%) Options 2016: –0.64% for euro zone (previous year: –0.60%) 0.74% for UK (previous year: 0.58%)				Options 2017: –0.54% for euro zone (previous year: –0.46%) 0.79% for UK (previous year: 0.69%) 1.20% for Norway (previous year: 0.89%) Options 2018: –0.41% for euro zone 0.85% for UK 1.31% for Norway			
Fluctuation	5.1% (previous year: 5.1%)				5.1% (previous year: 5.1%)			

39 Current contract liabilities

The Lufthansa Group recognised the following contract liabilities:

T152 CONTRACT LIABILITIES

in €m	31.12.2018	1.1.2018
Contract liabilities from unused flight documents	**3,969**	**3,773**
Liabilities from customer loyalty programmes	2,186	2,151
Liabilities from MRO and IT services	79	110
Miscellaneous contract liabilities liabilities	51	60
Other contract liabilities	**2,316**	**2,321**
Liabilities from contracts with customers	**6,285**	**6,094**
Revenue recognised in the reporting period		
Revenue recognised that was included in the contract liability balance at the beginning of the period		
Revenue from unused flight documents	3,491	
Revenue from customer loyalty programmes	578	
Revenue from MRO and IT services	69	
Other	56	
Total	**4,194**	
Revenue recognised from performance obligations satisfied in previous periods		
Revenue from MRO and IT services	–	

Liabilities under customer loyalty programmes as of 31 December 2018 included 225 billion miles from bonus miles programmes (previous year: 220 billion miles).

The unsatiesfied performance obligation under existing long-term service contracts came to EUR 6.1bn in total, assuming that the services are performed as agreed, of which EUR 1.2bn relate to the next twelve months. These essentially consist of maintenance contracts in the MRO segment for the long-term maintenance and overhaul of airline sub-fleets. To calculate the outstanding performance obligations, the number of maintenance events derived from the respective flight plans and agreed in the contracts is taken into account, along with the expected revenue and fixed prices for certain services (VIP and cabin modifications). Around 79% of performance obligations beyond twelve months are expected to have been fulfilled by 2024.

In line with the practical expedient of IFRS 15, no disclosures are made for the performance obligations as of 31 December 2018 that have a forecast original term of one year or less. Award miles can be redeemed for at least three years, but may be redeemed at short notice.

The Lufthansa Group applies practical expedient defined in IFRS 15.94, which allows contract initiation costs to be expensed if the amortisation period otherwise to be taken into account would be twelve months or less.

40 Trade payables and other current financial liabilities

T153 TRADE PAYABLES AND OTHER CURRENT FINANCIAL LIABILITIES

in €m	31.12.2018	31.12.2017
Trade payables		
Trade payables to affiliated companies	43	74
Trade payables to other equity investments	–	–
Trade payables to third parties	3,869	3,357
	3,912	**3,431**
Other liabilities		
Liabilities to banks	39	18
Other liabilities to affiliated companies	269	233
Other liabilities to equity investments	–	–
Liabilities from equity investments	574	591
Other financial liabilities	970	976
	1,852	**1,818**
Total	**5,764**	**5,249**

The carrying amount of these liabilities corresponds to their fair value.

41 Current advance payments received, deferred income and other non-financial liabilities

T154 CURRENT ADVANCE PAYMENTS RECEIVED, DEFERRED INCOME AND OTHER NON-FINANCIAL LIABILITIES

in €m	31.12.2018	31.12.2017
Advance payments received	16	51
Deferred income	39	380
Other non-financial liabilities	333	561
	388	**992**

Obligations of EUR 290m under bonus mile programmes were recognised in the previous year in current deferred income, and obligations of EUR 242m in other current non-financial liabilities. These amounts are presented in contract liabilities in accordance with IFRS 15.

Other non-financial liabilities include EUR 303m (previous year: EUR 286m) in deferred amounts for outstanding holiday allowance and overtime. Other non-financial liabilities also include the current portion of obligations under share-based remuneration agreements measured at fair value (↗ **Note 38, p. 153ff.**).

NOTES TO THE SEGMENT REPORTING

42 Notes to the reportable segments and segment data

NOTES TO THE REPORTABLE SEGMENTS

As of 31 December 2018, the Lufthansa Group operates in five reporting segments, which make up its Group activities. The segments are defined in line with the internal reporting and management structure.

The airline activities were combined in their respective reporting segments based on the similarity between the economic characteristics of the individual airlines, such as network and sales structures, as well as customers and services. The Network Airlines segment comprises Lufthansa German Airlines, SWISS and Austrian Airlines. Further information about the individual airlines can be found in the Group management report ↗ **starting on p. 12.**

The Eurowings segment comprises Eurowings, Germanwings and Brussels Airlines, as well as the equity investment in SunExpress.

The Logistics segment comprises the scheduled airfreight activities of the Lufthansa Cargo group. Lufthansa Cargo is Europe's leading cargo airline.

The MRO segment is a leading global provider of maintenance, repair and overhaul services for civil and commercial aircraft and is represented by the Lufthansa Technik group.

The Catering segment, represented by the LSG Lufthansa Service/Sky Chefs group, is the global market leader in airline catering.

Business activities not allocated to a reportable segment are presented in the "Additional Businesses and Group Functions" column of the segment reporting along with the income and expenses of central Group functions. They include income and expenses of Lufthansa Commercial Holding GmbH, Lufthansa AirPlus group, the Lufthansa Systems group, the Lufthansa Aviation Training group and other Group companies.

NOTES TO SEGMENT DATA AND INTERNAL MANAGEMENT

The accounting policies of the reportable segments are the same as those described in ↗ **Note 2, p. 106ff.**

The Group measures the performance of its segments using two segment result indicators: EBIT and Adjusted EBIT. EBIT is made up of the IFRS operating result and the result from equity investments. Adjusted EBIT is obtained by correcting EBIT for gains and losses on the disposal of assets and impairment losses and earnings attributable to other periods in connection with pension obligations (plan adjustments and plan settlements).

Sales and revenue between reportable segments are based on arm's length prices. Administrative services are charged as cost allocations.

For information on external traffic revenue ↗ **Note 3, p. 121.**

Capital employed largely comprises segment assets, adjusted for derivative financial instruments, and deferred tax items less non-interest-bearing debt.

The result of the equity valuation for the segment's equity investments is part of its segment result. However, from a Group perspective, it is not attributed to the operating result, but rather to the financial result.

T155 SEGMENT INFORMATION FOR THE 2018 REPORTING SEGMENTS

in €m	Network Airlines	Eurowings	Logistics	MRO	Catering	Total reportable operating segments	Additional Businesses and Group Functions	Reconciliation		Group
								Not allocated	Consoli-dation	
External revenue	21,992	4,212	2,681	3,812	2,499	35,196	648	–	–	35,844
of which traffic revenue	20,877	4,118	2,550	–	–	27,545	–	558	–	28,103
Inter-segment revenue	727	18	32	2,106	718	3,601	344	–	-3,945	–
Total revenue	**22,719**	**4,230**	**2,713**	**5,918**	**3,217**	**38,797**	**992**	**–**	**-3,945**	**35,844**
Other operating income	699	290	57	264	77	1,387	1,884	–	-987	2,284
Total operating income	**23,418**	**4,520**	**2,770**	**6,182**	**3,294**	**40,184**	**2,876**	**–**	**-4,932**	**38,128**
Operating expenses	**21,024**	**4,775**	**2,538**	**5,764**	**3,208**	**37,309**	**3,109**	**–**	**-4,952**	**35,466**
of which cost of materials and services	11,884	3,174	1,753	3,359	1,385	21,555	261	–	-3,147	18,669
of which staff costs	4,159	619	420	1,435	1,218	7,851	1,080	–	-7	8,924
of which depreciation and amortisation	1,497	372	104	124	66	2,163	54	–	-37	2,180
of which other operating expenses	3,484	610	261	846	539	5,740	1,714	–	-1,761	5,693
Results of equity investments	**35**	**24**	**36**	**7**	**29**	**131**	**44**	**–**	**-1**	**174**
of which result of investments accounted for using the equity method	31	24	25	9	25	114	1	–	-1	114
Adjusted EBIT[1]	**2,429**	**-231**	**268**	**425**	**115**	**3,006**	**-189**	**–**	**19**	**2,836**
Reconciliation items	**120**	**–**	**-5**	**1**	**-5**	**111**	**27**	**–**	**–**	**138**
Impairment losses/gains	1	–	-4	5	-5	-3	-5	–	-1	-9
Effects from pension provisions	110	–	–	–	–	110	2	–	1	113
Results of disposal of assets	9	–	-1	-4	–	4	30	–	–	34
EBIT	**2,549**	**-231**	**263**	**426**	**110**	**3,117**	**-162**	**–**	**19**	**2,974**
Other financial result										-190
Profit/loss before income taxes										2,784
Capital employed[2]	9,635	2,220	1,430	4,825	1,263	19,373	1,890	–	-290	20,973
of which from investments accounted for using the equity method	25	148	52	284	138	647	6	–	-3	650
Segment capital expenditure	2,573	515	374	241	79	3,782	59	–	-24	3,817
of which from investments accounted for using the equity method	–	–	–	32	–	32	–	–	–	32
Number of employees at end of period	51,778	9,255	4,505	23,219	35,512	124,269	11,265	–	–	135,534
Average number of employees	51,327	9,296	4,422	22,537	35,548	123,130	11,200	–	–	134,330

[1] For reconciliation from Adjusted EBIT to EBIT ↗ T023, p. 32, in the Group management report.
[2] The capital employed results from total assets adjusted for non-operating items (deferred taxes, positive market values, derivatives) less non-interest bearing liabilities (including trade payables and liabilities from unused flight documents).

T155 SEGMENT INFORMATION FOR THE 2017 REPORTING SEGMENTS

in €m	Network Airlines	Eurowings	Logistics	MRO	Catering	Total reportable operating segments	Additional Businesses and Group Functions	Reconciliation		Group
								Not allocated	Consolidation	
External revenue	22,644	4,045	2,497	3,568	2,556	35,310	269	–	–	35,579
of which traffic revenue	21,538	3,927	2,373	–	–	27,838	–	561	–	28,399
Inter-segment revenue	673	–4	27	1,836	663	3,195	177	–	–3,372	–
Total revenue	**23,317**	**4,041**	**2,524**	**5,404**	**3,219**	**38,505**	**446**	**–**	**–3,372**	**35,579**
Other operating income	801	281	73	326	55	1,536	2,243	–	–1,191	2,588
Total operating income	**24,118**	**4,322**	**2,597**	**5,730**	**3,274**	**40,041**	**2,689**	**–**	**–4,563**	**38,167**
Operating expenses	**21,841**	**4,294**	**2,357**	**5,345**	**3,240**	**37,077**	**2,839**	**–**	**–4,561**	**35,355**
of which cost of materials and services	12,617	3,044	1,575	3,039	1,396	21,671	231	–	–2,874	19,028
of which staff costs	4,203	484	435	1,356	1,220	7,698	1,031	–	–6	8,723
of which depreciation and amortisation	1,479	262	100	115	64	2,020	53	–	–33	2,040
of which other operating expenses	3,542	504	247	835	560	5,688	1,524	–	–1,648	5,564
Results of equity investments	**19**	**32**	**23**	**30**	**32**	**136**	**20**	**–**	**1**	**157**
of which result of investments accounted for using the equity method	15	32	20	25	26	118	1	–	–1	118
Adjusted EBIT[1]	**2,296**	**60**	**263**	**415**	**66**	**3,100**	**–130**	**–**	**–1**	**2,969**
Reconciliation items	**453**	**–93**	**–1**	**–4**	**–21**	**334**	**–3**	**–**	**–3**	**328**
Impairment losses/gains	–129	–78	–6	–4	–26	–243	–16	–	–1	–260
Effects from pension provisions	559	–15	4	–	–	548	2	–	1	551
Results of disposal of assets	23	–	1	–	5	29	11	–	–3	37
EBIT	**2,749**	**–33**	**262**	**411**	**45**	**3,434**	**–133**	**–**	**–4**	**3,297**
Other financial result										–139
Profit/loss before income taxes										3,158
Capital employed[2]	9,139	1,996	1,317	4,226	1,219	17,897	2,233	–	–143	19,987
of which from investments accounted for using the equity method	48	131	48	247	129	603	6	–	–24	585
Segment capital expenditure	2,051	972	79	233	84	3,419	62	–	–143	3,338
of which from investments accounted for using the equity method	17	–	–	38	–	55	–	–	–	55
Number of employees at end of period	50,190	7,501	4,511	21,502	34,563	118,267	11,157	–	–	129,424
Average number of employees	49,679	7,190	4,504	21,200	35,122	117,695	11,161	–	–	128,856

[1] For reconciliation from Adjusted EBIT to EBIT ↗ T023, p. 32, in the Group management report.
[2] The capital employed results from total assets adjusted for non-operating items (deferred taxes, positive market values, derivatives) less non-interest bearing liabilities (including trade payables and liabilities from unused flight documents).

The reconciliation column includes both the effects of consolidation activities and the amounts resulting from different definitions of segment item contents compared with the corresponding Group items.

Eliminated segment revenue generated with other consolidated segments is shown in the reconciliation column for revenue.

The amounts in the reconciliation column for Group EBIT include the effects of consolidation procedures on profit or loss in which income and expense do not figure for two companies at the same amount, or in the same period.

The change in accounting for engine overhaul events had the following effects on segment results:

T156 RESTATEMENT EFFECTS OF ENGINE MAINTENANCE BY REPORTABLE SEGMENTS

	Network Airlines	Eurowings	Logistics	Consoli-dation	**Group**
Increase in depreciation and amortisation 2018	-266	-88	-19	35	-338
Reduction in MRO expense 2018	422	35	22	-489	-10
Increase in capitalised internal expenses 2018	–	–	–	470	470
Effect on Adjusted EBIT [1] 2018	**156**	**-53**	**3**	**16**	**122**
Impairment losses/results of disposal	–	–	–	–	–
Effect on EBIT 2018	**156**	**-53**	**3**	**16**	**122**
Increase in depreciation and amortisation 2017	-268	-66	-17	30	-321
Reduction in MRO expense 2017	301	32	38	-386	-15
Increase in capitalised internal expenses 2017	–	–	–	332	332
Effect on Adjusted EBIT [1] 2017	**33**	**-34**	**21**	**-24**	**-4**
Impairment losses/results of disposal	-4	-8	1	2	-9
Effect on EBIT 2017	**29**	**-42**	**22**	**-22**	**-13**

[1] For reconciliation from Adjusted EBIT to EBIT ↗ T023, p. 32, in the Group management report.

NOTES ON GEOGRAPHICAL REGIONS IN 2018

The allocation of traffic revenue to geographic regions is based on the original location of sale. Non-current assets are allocated according to the location of the relevant asset. The allocation of other revenue to the individual regions is based on the geographical location of the customer.

The regions are defined on a geographical basis. As an exception to this rule, traffic revenue generated in Turkey is attributed to Europe.

Lufthansa controls its air traffic operations on the basis of network results and not on the basis of regional earnings contributions. The same applies to the Catering segment. Consequently, the presentation of regional segment results is of no informational value for the Lufthansa Group.

A presentation of traffic revenue generated in the Network Airlines, Eurowings and Logistics segments by traffic region, rather than by original location of sale, is included in the information on the respective segments in the management report.

External revenue, non-current assets and capital expenditure are as follows:

T157 EXTERNAL REVENUE AND NON-CURRENT ASSETS BY REGION FOR 2018

in €m	Europe	North America	Central and South America	Asia / Pacific	Middle East	Africa	**Group**
Traffic revenue [1]	19,022	4,193	674	3,142	594	478	**28,103**
Other revenue	3,283	2,272	361	1,383	223	219	**7,741**
Non-current assets [2] [3]	20,342	276	41	206	2	23	**20,890**
Capital expenditure on non-current assets [3]	3,773	39	5	16	–	5	**3,838**

[1] Traffic revenue is allocated according to the original location of sale.
[2] Non-current assets include property, plant and equipment and intangible assets with the exception of repairable spare parts for aircraft.
[3] Aircraft are allocated according to their location of registration.

The figures for the main countries are as follows:

T158 EXTERNAL REVENUE AND NON-CURRENT ASSETS BY COUNTRIES FOR 2018

in €m	Germany	USA
Traffic revenue [1]	8,955	3,759
Other revenue	1,066	1,896
Non-current assets [2] [3]	13,984	261
Capital expenditure on non-current assets [3]	2,410	36

[1] Traffic revenue is allocated according to the original location of sale.
[2] Non-current assets include property, plant and equipment and intangible assets with the exception of repairable spare parts for aircraft.
[3] Aircraft are allocated according to their location of registration.

NOTES ON GEOGRAPHICAL REGIONS IN 2017

External revenue, non-current assets and capital expenditure are as follows:

T157 EXTERNAL REVENUE AND NON-CURRENT ASSETS BY REGION FOR 2017

in €m	Europe	North America	Central and South America	Asia/Pacific	Middle East	Africa	**Group**
Traffic revenue [1]	19,040	4,338	676	3,174	681	490	**28,399**
Other revenue	2,888	2,103	312	1,375	294	208	**7,180**
Non-current assets [2] [3]	18,818	261	42	210	3	20	**19,354**
Capital expenditure on non-current assets [3]	3,384	34	2	9	–	2	**3,431**

[1] Traffic revenue is allocated according to the original location of sale.
[2] Non-current assets include property, plant and equipment and intangible assets with the exception of repairable spare parts for aircraft.
[3] Aircraft are allocated according to their location of registration.

The figures for the main countries are as follows:

T158 EXTERNAL REVENUE AND NON-CURRENT ASSETS BY COUNTRIES FOR 2017

in €m	Deutschland	USA
Traffic revenue [1]	8,761	3,889
Other revenue	946	1,766
Non-current assets [2] [3]	12,999	247
Capital expenditure on non-current assets [3]	2,501	32

[1] Traffic revenue is allocated according to the original location of sale.
[2] Non-current assets include property, plant and equipment and intangible assets with the exception of repairable spare parts for aircraft.
[3] Aircraft are allocated according to their location of registration.

In 2018 and in the previous year, no more than 10% of Lufthansa Group revenue was generated with any one customer.

SEGMENT REPORTING FROM 2019

Part of the Lufthansa Systems group is managed by the Lufthansa Technik group as of financial year 2019 and so has been allocated to the MRO segment. The companies affected by the change generated revenue of EUR 234m in 2018 and Adjusted EBIT of EUR 20m. The previous year's figures will be adjusted accordingly in the 2019 financial reporting.

NOTES TO THE CONSOLIDATED CASH FLOW STATEMENT

43 Notes to cash flow from operating, investing and financing activities

The cash flow statement shows how cash and cash equivalents have changed over the reporting period at the Lufthansa Group. In accordance with IAS 7, cash flows are divided into cash inflows and outflows from operating activities, from investing activities and from financing activities. The cash and cash equivalents shown in the cash flow statement comprise the statement of financial position items bank balances and cash-in-hand, without fixed-term deposits with terms of three to twelve months, amounting to EUR 66m (previous year: EUR 179m). The amount of liquidity in the broader sense is reached by adding securities that can be liquidated at short notice.

ADDITIONAL INFORMATION ON THE CASH FLOW STATEMENT

Cash flow from operating activities
Cash flow from operating activities is derived from profit/loss before income taxes using the indirect method. It is adjusted for non-cash income and expenses as well as changes in trade working capital and in the other assets/liabilities position that are not attributable to investing or financing activities.

In the current financial year, the Group primarily recognised the following non-cash income and expenses:

T159 SIGNIFICANT NON-CASH INCOME AND EXPENSES

in €m	2018	2017
Result of miscellaneous financial items	46	-56
Write-down on receivables	99	99
Reversal of write-downs on receivables	-48	-46
Income from the reversal of provisions and accruals	-260	-151
Adjustments to retirement and transitional benefit systems	-113	-551
Total	**-276**	**-705**

Trade working capital consists of changes in the carrying amounts of inventories, trade receivables and payables, contract assets and down payments, other current assets and other current liabilities, contract liabilities and current deferrals and prepaid expenses.

Other assets/liabilities mainly include corrections between pensions expenses and payments, changes in other provisions, accruals/deferrals and corrections for non-cash effects from currency translation.

For the effects of the new accounting methods applied retroactively, we refer to ↗ **Note 2, p. 106ff.**

Cash flow from investing (and cash management) activities
Cash flows from investing and financing activities are calculated on the basis of payments.

Cash flow from investing activities results mainly from investments and disinvestments in non-current assets.

Assets capitalised by the Lufthansa Group that meet the criteria for finance leases are categorised as cash flow from investing activities. In the reporting year, they amounted to EUR 243m (previous year: EUR 91m).

The Group contributed EUR 587m to pension assets in 2018 (previous year: EUR 2,006m). These payments were categorised as cash flow from investing and cash management activities. By contrast, pension payments from fund assets lead to cash inflows from investments (EUR 126m; previous year: EUR 123m). They correspond to cash outflows from operating activities.

For the effects of the new accounting methods for engine overhaul events, we refer to ↗ **Note 2, p. 106ff.**

Cash flow from financing activities

Cash flow from financing activities includes outflows for the repayment of finance lease liabilities. Inflows of EUR 241m from new borrowing (previous year: EUR 69m) are shown corresponding to cash outflows from investing activities for new finance lease transactions.

Borrowing and the instruments used to hedge it changed as follows in the financial year:

T160 FINANCIAL LIABILITIES

	31.12.2017	Cash effective	Non-cash effective					**31.12.2018**
			Addition due to changes in consolidation	Currency translation differences	Accrued interest	Reclassification	Changes in fair value	
Non-current borrowings	6,142	491	–	90	13	-1,728	–	5,008
Current borrowings	672	-722	–	4	-5	1,728	–	1,677
Other borrowings	18	22	–	-1	–	–	–	39
Interest rate swaps and currency futures used for hedging – assets	-83	30	–	–	–	–	-101	-154
Interest rate swaps and currency futures used for hedging – liabilities	2	–	–	–	–	–	47	49

Changes in borrowing in the previous year were as follows:

T160 FINANCIAL LIABILITIES

	31.12.2016	Cash effective	Non-cash effective					31.12.2017
			Addition due to changes in consolidation	Currency translation differences	Accrued interest	Reclassification	Changes in fair value	
Non-current borrowings	5,811	1,104	199	-290	–	-682	–	6,142
Current borrowings	764	-921	155	-10	2	682	–	672
Other borrowings	63	-44	–	-1	–	–	–	18
Interest rate swaps and currency futures used for hedging – assets	-98	6	–	–	–	–	9	-83
Interest rate swaps and currency futures used for hedging – liabilities	–	–	–	–	–	–	2	2

OTHER DISCLOSURES

44 Additional disclosures on financial instruments

FINANCIAL ASSETS BY MEASUREMENT CATEGORY

The introduction of IFRS 9 as of 1 January 2018 alters both the classification of financial assets and their measurement, particularly because of the introduction of the new impairment model based on expected losses. The following overview describes the changes in the measurement categories and the measurement of financial assets when IFRS 9 is applied for the first time. IFRS 9 does not imply any changes for Lufthansa in the classification and measurement of financial liabilities.

T161 IFRS 9 CHANGE – CHANGES IN THE MEASUREMENT CATEGORY AND CARRYING AMOUNTS OF FINANCIAL ASSETS

	IAS 39 Carrying amounts by measurement category as of 31.12.2017					
in €m	Loans and receivables	At fair value through profit or loss	Available for sale	Derivative financial instruments which are an effective part of a hedging relationship	Changes in carrying amounts due to revaluation for the expected loss impairment model	Changes in carrying amount due to change of measurement category
Other equity investments	–	–	17	–	–	–
Non-current securities	–	–	32	–	–	–
of which equity instruments	–	–	32	–	–	–
of which debt instruments	–	–	–	–	–	–
Loans	158	–	–	–	–	–
Non-current receivables	289	–	–	–	–	–
Non-current derivative financial instruments	–	77	–	565	–	–
Trade receivables and other current receivables	5,283	–	–	–	–10	–
Current derivative financial instruments	–	56	–	544	–	–
Current securities	–	–	2,551	–	–	–
of which equity instruments	–	–	391	–	–	–
of which debt instruments	–	–	2,160	–	–	–
Cash and cash equivalents	1,397	–	–	–	–	–
Total	**7,127**	**133**	**2,600**	**1,109**	**–10**	**–**

T161 IFRS 9 CHANGE – CHANGES IN THE MEASUREMENT CATEGORY AND CARRYING AMOUNTS OF FINANCIAL ASSETS (continued)

	IFRS 9 Carrying amounts by measurement category as of 1.1.2018				
in €m	Amortised cost	At fair value through profit or loss	At fair value through other comprehensive income (with recycling)	At fair value through other comprehensive income (without recycling)	Derivative financial instruments which are an effective part of a hedging relationship
Other equity investments	–	17	–	–	–
Non-current securities	–	–	–	32	–
of which equity instruments	–	–	–	32	–
of which debt instruments	–	–	–	–	–
Loans	158	–	–	–	–
Non-current receivables	289	–	–	–	–
Non-current derivative financial instruments	–	77	–	–	565
Trade receivables and other current receivables	5,273	–	–	–	–
Current derivative financial instruments	–	56	–	–	544
Current securities	–	391	2,160	–	–
of which equity instruments	–	391	–	–	–
of which debt instruments	–	–	2,160	–	–
Cash and cash equivalents	1,397	–	–	–	–
Total	**7,117**	**541**	**2,160**	**32**	**1,109**

As of the current reporting date, the financial assets can be broken down into measurement categories with the following carrying amounts:

T162 FINANCIAL ASSETS IN THE BALANCE SHEET AS OF 31.12.2018

in €m	Amortised cost	At fair value through profit or loss	At fair value through other comprehensive income (with recycling)	At fair value through other comprehensive income (without recycling)	Derivative financial instruments which are an effective part of a hedging relationship
Other equity investments	–	24	–	–	–
Non-current securities	–	–	–	–	–
of which equity instruments	–	–	–	30	–
of which debt instruments	11	–	–	–	–
Loans	174	–	–	–	–
Non-current receivables	279	–	–	–	–
Non-current derivative financial instruments	–	4	–	–	824
Trade receivables and other current receivables	5,513	–	–	–	–
Current derivative financial instruments	–	23	–	–	334
Current securities	–	–	–	–	–
of which equity instruments	–	280	–	–	–
of which debt instruments	–	–	1,457	–	–
Cash and cash equivalents	1,500	–	–	–	–
Total	**7,477**	**331**	**1,457**	**30**	**1,158**

The category "At fair value through other comprehensive income" includes derivatives that do not meet the requirements for applying hedge accounting and so are accounted for as stand-alone derivatives. This category also includes equity instruments, consisting of shares and equity investments, for which the instrument-specific option of fair value through other comprehensive income without recycling has not been exercised. As of the reporting date, the fair-value option without effect on profit and loss and without recycling was chosen for two share positions, in order to avoid the recognition of changes in market value through profit or loss. The first position comprises shares in VISA Inc. (market value: EUR 15m, dividend payments: EUR 0.1m), the second position comprises shares in Alliance Aviation Services Ltd. (market value: EUR 15m, dividend payments: EUR 0.6m). As of the reporting date, both share positions had reserves of EUR 18m. The market valuation reserve for financial assets measured at fair value (with recycling) without effect on profit and loss was EUR 3m as of the reporting date.

FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY

The financial liabilities can be divided into measurement categories with the following carrying amounts, whereby the category "at fair value through profit or loss" includes derivatives that do not meet the requirements for applying hedge accounting and so are accounted for as stand-alone derivatives.

T163 FINANCIAL LIABALITIES IN THE BALANCE SHEET AS OF 31.12.2018

in €m	Liabilities at fair value through profit or loss	Derivative financial instruments which are an effective part of a hedging relationship	Other financial liabilities at cost
Financial liabilities	–	–	6,685
Derivative financial instruments	29	586	
Trade payables	–	–	3,912
Other financial liabilities	–	–	1,989
Total	**29**	**586**	**12,586**

T163 FINANCIAL LIABALITIES IN THE BALANCE SHEET AS OF 31.12.2017

in €m	Liabilities at fair value through profit or loss	Derivative financial instruments which are an effective part of a hedging relationship	Other financial liabilities at cost
Financial liabilities	–	–	6,814
Derivative financial instruments	123	191	
Trade payables	–	–	3,431
Other financial liabilities	–	–	2,061
Total	**123**	**191**	**12,306**

The net result of the different categories of financial assets and liabilities is made up as follows:

T164 NET RESULT 2018 FOR FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORY

in €m	Interest expenses	Interest income	Depreciation	Result from valuation and sale	Currency result	**Net result**
Assets at amortised cost	–	59	43	–	29	**131**
At fair value through other comprehensive income (with recycling)	–12	22	–	–10	7	**7**
At fair value through other comprehensive income (without recycling)	–	–	–	–	–	**–**
Assets at fair value through profit or loss	–	–	–	–32	–	**–32**
Liabilities at amortised cost	–124	–	–	–	–39	**–163**
Liabilities at fair value through profit or loss	–	–	–	–18	–	**–18**
Total	**–136**	**81**	**43**	**–60**	**–3**	**–75**

T164 NET RESULT 2017 FOR FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORY

in €m	Interest expenses	Interest income	Depreciation	Result from valuation and sale	Currency result	**Net result**
Loans and receivables	–	8	135	–	–135	**8**
Financial assets held for sale	–	130	–	–	–26	**104**
Financial assets held for trading	–	–	–	–216	–	**–216**
Liabilities at continued acquisition cost	–127	–	–	–	510	**383**
Total	**–127**	**138**	**135**	**–216**	**349**	**279**

The following table shows the carrying amounts and market values for individual classes of financial liabilities. The stated market values of bonds reflect their stock market listings (Level 1 of the fair value hierarchy). The market values for other types of financial liability have been calculated using the applicable interest rates for the remaining term to maturity and repayment structures at the balance sheet date based on the available market information (Reuters) (Level 2 of the fair value hierarchy). For other assets, non-current receivables, trade receivables and cash-in-hand carried at amortised cost, the carrying amount is deemed to be a reasonable approximation of the fair value.

T165 FINANCIAL LIABILITIES

	31.12.2018		31.12.2017	
in €m	**Carrying amount**	**Market value**	Carrying amount	Market value
Bonds	1,007	1,026	1,005	1,063
Liabilities to banks	1,957	1,984	2,044	2,113
Leasing liabilities and other loans	3,721	3,664	3,765	3,722
Total	**6,685**	**6,674**	**6,814**	**6,898**

FINANCIAL ASSETS HELD AT FAIR VALUE BY LEVEL OF FAIR VALUE HIERARCHY

The following table shows financial assets and liabilities held at fair value by level of fair value hierarchy. The levels are defined as follows:

- Level 1: Financial instruments traded on active markets, the quoted prices for which are taken unchanged for the measurement.
- Level 2: Measurement is made by means of valuation methods with parameters derived directly or indirectly from observable market data.
- Level 3: Measurement is made by means of valuation methods with parameters not based exclusively on observable market data.

In the financial year 2018, the fair value hierarchy for assets and liabilities held at fair value was as follows:

T166 FAIR VALUE HIERARCHY OF ASSETS AS OF 31.12.2018

in €m	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit and loss				
Financial derivatives classified as held for trading	–	27	–	27
Securities	278	2	–	280
Total financial assets through profit and loss	**278**	**29**	**–**	**307**
Derivative financial instruments which are an effective part of a hedging relationship	**–**	**1,158**	**–**	**1,158**
Financial assets at fair value through other comprehensive income				
Equity instruments	15	15	–	30
Debt instruments	–	1,455	–	1,455
	15	**1,470**	**–**	**1,485**
Total assets	**293**	**2,657**	**–**	**2,950**

T167 FAIR VALUE HIERARCHY OF LIABILITIES AS OF 31.12.2018

in €m	Level 1	Level 2	Level 3	Total
Derivative financial instruments at fair value through profit or loss	–	-29	–	-29
Derivative financial instruments which are an effective part of a hedging relationship	–	-586	–	-586
Total liabilities	**–**	**-615**	**–**	**-615**

In the previous year, the fair value hierarchy for assets and liabilities held at fair value was as follows:

T166 FAIR VALUE HIERARCHY OF ASSETS AS OF 31.12.2017

in €m	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit and loss				
Financial derivatives classified as held for trading	–	131	–	131
Securities	–	–	–	–
Total financial assets through profit and loss	**–**	**131**	**–**	**131**
Derivative financial instruments which are an effective part of a hedging relationship	**–**	**1,110**	**–**	**1,110**
Financial assets available for sale				
Equity instruments	410	13	–	423
Debt instruments	–	2,160	–	2,160
	410	**2,173**	**–**	**2,583**
Total assets	**410**	**3,414**	**–**	**3,824**

T167 FAIR VALUE HIERARCHY OF LIABILITIES AS OF 31.12.2017

in €m	Level 1	Level 2	Level 3	Total
Derivative financial instruments at fair value through profit or loss	–	123	–	123
Derivative financial instruments which are an effective part of a hedging relationship	–	191	–	191
Total liabilities	**–**	**314**	**–**	**314**

NETTING OF FINANCIAL ASSETS AND LIABILITIES

The following financial assets and liabilities are subject to global netting agreements and other agreements.

T168 NETTING OF FINANCIAL ASSETS AS OF 31.12.2018

in €m	Gross amount	Netted amounts	Reported net amount	Amounts not netted	Cash collateral	Net amount
Trade receivables and other current receivables	5,983	470	5,513	–	33	5,513
Derivative financial instruments – assets	1,185	–	1,185	10	13	1,162
Cash and cash equivalents	1,508	8	1,500	–	–	1,500
Total assets	**8,676**	**478**	**8,198**	**10**	**46**	**8,175**

T169 NETTING OF FINANCIAL LIABILITIES AS OF 31.12.2018

in €m	Gross amount	Netted amounts	Reported net amount	Amounts not netted	Cash collateral	Net amount
Trade payables and other financial liabilities	4,390	478	3,912	–	13	3,912
Derivative financial instruments – liabilities	615	–	615	10	33	572
Total liabilities	**5,005**	**478**	**4,527**	**10**	**46**	**4,484**

In the previous year, the net balances were as follows:

T168 NETTING OF FINANCIAL ASSETS AS OF 31.12.2017

in €m	Gross amount	Netted amounts	Reported net amount	Amounts not netted	Cash collateral	Net amount
Trade receivables and other current receivables	5,434	151	5,283	–	77	5,283
Derivative financial instruments – assets	1,242	–	1,242	72	10	1,160
Cash and cash equivalents	1,422	25	1,397	–	–	1,397
Total assets	**8,098**	**176**	**7,922**	**72**	**87**	**7,840**

T169 NETTING OF FINANCIAL LIABILITIES AS OF 31.12.2017

in €m	Gross amount	Netted amounts	Reported net amount	Amounts not netted	Cash collateral	Net amount
Trade payables and other financial liabilities	3,607	176	3,431	–	10	3,431
Derivative financial instruments – liabilities	314	–	314	72	77	165
Total liabilities	**3,921**	**176**	**3,745**	**72**	**87**	**3,596**

PRINCIPLES OF HEDGING POLICY

As an aviation group with worldwide operations, the Lufthansa Group is exposed to exchange rate, interest rate and fuel price movement risks, as well as to credit and liquidity risks. Limiting these risks by means of systematic financial management is part of company policy.

Market risk

The major market and price risks to which the Lufthansa Group is exposed are exchange rate fluctuations between the euro and other currencies, interest rate fluctuations in international money and capital markets, and price fluctuations in the crude oil and oil products markets. Hedging policy for limiting these risks is laid down by the Executive Board and documented by internal Group guidelines. It also provides for the use of financial derivatives. The corresponding financial transactions are concluded only with first-rate counterparties.

Foreign exchange risk

For US dollars, Lufthansa is mainly in a net payer position as regards currency risks from its operating business, since fuel payments are dollar-denominated. There is always a net surplus for other currencies. The main risks in this respect stem from the Chinese renminbi, the Swiss franc, British pound sterling, the Japanese yen and the Indian rupee. Depending on market liquidity, currency risks from projected operational exposure are hedged gradually over a period of 24 months by means of futures contracts, which are accounted for as cash flow hedges. The target hedging level is defined in the Group's internal guidelines. At the end of 2018, exposure from operations for the next 24 months was as follows:

T170 CURRENCY EXPOSURE, AS OF 2018

in millions	USD	CNY	JPY	GBP	INR
Exposure (currency)	-9,512	9,906	148,644	1,223	61,881
Exposure (EUR at spot rate)	-8,374	1,256	1,152	1,373	783
Hedges (currency)	3,892	-3,825	-60,508	-482	-13,019
Hedging level	41%	39%	41%	39%	21%
Hedging rate	1.22	8.25	130.19	0.90	85.64

50% of currency risks from capital expenditure on aircraft are hedged when the contract is signed. The hedging level is reviewed and increased, where necessary, if, over the lifetime of the contract, the exchange rate goes significantly above or below that used to calculate the investment. In the last 24 months before payment, the hedging level is increased in half-yearly steps of 10%, reaching 90% by the end. These investment hedges are therefore also accounted for as cash flow hedges. Capital expenditure on aircraft takes place in US dollars and is hedged in euros or Swiss francs, depending on the functional currency of the Group company making the purchase.

The US dollar exposure for capital expenditure as of year-end 2018 was as follows, broken down by the hedged currency:

T171 USD INVESTMENT EXPOSURE, HEDGED IN EUR

in millions	2019	2020	2021	2022	2023	2024	2025
Exposure from net capital expenditure (USD)	-1,588	-1,356	-1,860	-2,220	-2,125	-1,436	-578
Exposure from net capital expenditure (EUR at spot rate)	-1,388	-1,186	-1,626	-1,941	-1,857	-1,255	-505
Hedges (USD)	1,417	1,052	1,227	1,790	1,696	1,082	396
Hedging level	89%	78%	66%	81%	80%	75%	68%
Hedging rate EUR/USD	1.26	1.36	1.38	1.44	1.45	1.54	1.47

T172 USD INVESTMENT EXPOSURE, HEDGED IN CHF

in millions	2019	2020	2021	2022	2023	2024	2025
Exposure from net capital expenditure (USD)	-265	-227	-228	-185	-208	-224	–
Exposure from net capital expenditure (EUR at spot rate)	-232	-198	-199	-162	-182	-196	–
Hedges (USD)	259	203	192	135	104	112	–
Hedging level	98%	89%	84%	73%	50%	50%	–
Hedging rate USD/CHF	0.92	0.87	0.85	0.84	0.85	0.82	–

The following sensitivity analysis shows how net profit and equity would change if the currencies identified as price risk variables had been different from those at the balance sheet date.

T173 SENSITIVITY ANALYSIS BY CURRENCY

in €m	Effects on earnings after taxes[1]	Effects on equity[1]
Currency – USD		
+10%	-140	1,053
-10%	118	-862
Currency – JPY		
+10%	1	-40
-10%	-1	33
Currency – CHF		
+10%	11	-72
-10%	-12	58
Currency – GBP		
+10%	7	-44
-10%	-9	36
Currency – CNY		
+10%	-1	-39
-10%	–	32
Currency – INR		
+10%	1	-13
-10%	-1	11

[1] All amounts after deferred tax effects; +/– signs relate to net profit and/or equity.

Interest rate risk

The Lufthansa Group aims to pay interest on 100% of its financial liabilities in euros at floating rates of interest. To do so, interest rate swaps are arranged for interest-bearing, fixed-rate financial debt and leasing liabilities. Financial liabilities denominated in euros are hedged using “plain vanilla” interest rate swaps, while cross-currency interest rate swaps are used to hedge financial liabilities in foreign currencies. Depending on the interest rate structure of the exposure to be hedged, hedges are either classified as fair value hedges or cash flow hedges. The interest rate risk is monitored constantly; strategic interest rate hedges are used as needed in response to different market situations. Depending on the counterparties and the instruments used, cash collateral for interest rate swaps is either deposited with or received from counterparties (↗ T168, T169, p. 168).

The tables below describe the floating/fixed ratio for non-current borrowing as of financial year-end 2018 after taking into consideration interest rate hedging, as well as the distribution of the nominal volume of interest rate hedges.

T174 INTEREST RATE EXPOSURE AFTER HEDGING

in €m	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Fix	505	283	197	164	173	155	104	73	78	–	–
Variable	5,786	4,383	3,784	2,015	1,687	1,194	902	679	425	288	139
Float/Fix-Ratio	92%	94%	95%	92%	91%	89%	90%	90%	84%	100%	100%

T175 NOMINAL VOLUME OF INTEREST RATE HEDGES

in €m	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Fix	-2,458	-2,319	-1,198	-1,051	-770	-627	-505	-340	-242	-101	-46
Variable	2,392	2,257	1,148	1,037	766	633	530	355	250	101	46

The following sensitivity analysis shows how net profit and equity would change if the interest rate identified as a price risk variable had been different from the perspective of the balance sheet date. In view of the current low interest rates, a reduction of more than 50 basis points is not considered likely, which is why the analysis was limited to this figure.

T176 SENSITIVITY ANALYSIS BY INTEREST RATE

in €m	Effects on earnings after taxes[1]	Effects on equity[1]
Interest		
+100 basis points	55	-28
-50 basis points	-29	16

[1] All amounts after deferred tax effects; +/– signs relate to net profit and/or equity.

Fuel price risk

In 2018, fuel costs accounted for 17.2% of the Lufthansa Group's operating expenses (previous year: 15.0%). Significant changes in fuel prices can therefore have a significant effect on the Group's result.

Fuel price risk is limited by the use of crude oil hedges. The hedging level and the time horizon depend on the risk profile, which is derived from the business model of a Group company. As a rule, up to 5% of exposure is hedged monthly for up to 24 months by spread options and other combinations of hedges. Executive Board approval may be obtained to extend the hedging period and to increase the monthly hedging volume in order to exploit market opportunities. The target hedging level is up to 85%.

From a year-end perspective, fuel exposure was as follows:

T177 FUEL EXPOSURE

		2019	2020
Fuel requirement	in 1,000 tonnes	11,145	11,320
Hedges	in 1,000 tonnes	8,117	2,736
Hedging level	%	73	24
Hedging rate	USD/bbl	66.41	70.09

The following sensitivity analysis shows how net profit and equity would change if the fuel price identified as a risk variable had been different from the perspective of the balance sheet date.

T178 SENSITIVITY ANALYSIS BY FUEL PRICE

in €m	Effects on earnings after taxes[1]	Effects on equity[1]
Fuel price		
+10%	–	236
-10%	–	-240

[1] All amounts after deferred tax effects; +/– signs relate to net profit and/or equity.

Market values of the derivative financial instruments used for hedging

At the balance sheet date, exchange rate, interest and fuel price risks are hedged by means of the following hedging transactions:

T179 DERIVATIVE FINANCIAL INSTRUMENTS USED FOR HEDGING AS OF 31.12.2018

in €m	Positive market value	Negative market value	Change in fair value of hedging instrument – designated risk	Change in fair value of hedging instrument – non-designated risk	Basis adjustment of hedged items	OCI – cash flow hedge reserve	OCI – cost of hedging	Ineffective portion of hedges – designated risk	Ineffective portion of hedges – non designated risk
Fair value hedge									
Interest rate hedges – interest rate swaps	101	-47	60	–	-47	–	–	13	–
Cash flow hedge									
Fuel hedging – options	27	-459	-833	-173	–	-840	-174	6	1
Exchange rate hedging – forward transactions	977	-78	463	83	–	462	76	1	6
Interest rate hedges – interest rate swaps	54	-1	19	–	–	15	–	3	–
Total	**1,159**	**-585**	**-291**	**-90**	**-47**	**-363**	**-98**	**23**	**7**
of which current	334	-383							

The market values stated for financial derivatives correspond to the price at which an independent third party would assume the rights and/or obligations from the financial instrument. The fair values of interest rate derivatives correspond to their respective market values, which are measured using appropriate mathematical methods, such as discounting expected future cash flows. Discounting takes market standard interest rates and the residual term of the respective instruments into account. Currency forward transactions and interest rate swaps are individually discounted to the balance sheet date based on their respective forward rates and the appropriate interest rate curve. The market prices of options used to hedge fuel prices are determined using acknowledged option pricing models.

Depending on the hedged exposure, Lufthansa designates interest rate hedges as both fair value hedges and cash flow hedges and accounts for them accordingly. Interest rate swaps are designated as part of a hedging relationship and are not separated or broken down into individual components. Ineffectiveness in these hedging relationships mainly occurs as a result of the subsequent designation of cross currency swaps in hedges as of 1 January 2018. Other reasons for ineffectiveness in hedging relationships are different parameters in the hedged item and the hedging instrument and the basis spread in cross currency swaps. Ineffectiveness in fair value hedges and cash flow hedges are recognised and presented as part of the financial result, below the other financial items.

Derivatives used in the context of fuel hedging to hedge future kerosene purchases are designated as cash flow hedges. Since 1 January 2018, Lufthansa has applied the IFRS 9 component approach, using crude oil, based on Brent Crude ICE, as the designated risk component of the hedging instrument. The hedged item is composed of a global mix of crude oil types. The base risk between individual crude oil components in the hedging instrument and the crude oil mix in the hedged item is reduced by rebalancing the volumes that make up the hedged item on a quarterly basis. In 2018, the quarterly rebalancing factors for adjusting the hedged item were as follows: 1.016 (Q1), 1.017 (Q2), 1.019 (Q3) and 1.020 (Q4). Lufthansa generally uses options and combinations of options to hedge fuel prices. The intrinsic value of the option is designated as the hedging instrument, so that effective changes in the intrinsic values are recognised in other comprehensive income in the cash flow hedge reserve. The time value of an option is not designated as a hedging instrument and effective changes in the time value are therefore recognised as a cost of hedging. This rule was applied for the first time retroactively. Ineffectiveness in fuel price hedges result from the base risk between the crude oil component and the crude oil mix in the component approach. Ineffectiveness is recognised and presented as part of the financial result, below the other financial items.

Since 1 January 2018, Lufthansa has prospectively applied the spot-to-spot method for exchange rate forward transactions designated as cash flow hedges. The spot component of a forward contract is designated as a hedging instrument and effective value changes are recognised in the cash flow hedge reserve. The other effective components of a forward contract, the forward component and the cross currency basis spread are recognised in a separate OCI component in line with the legal requirements for the cost of hedging. Ineffectiveness in hedging relationships result from changes in the timing of the planned aircraft purchases. Ineffectiveness in hedges is recognised and presented as part of the financial result, below the other financial items.

Lufthansa uses the hypothetical derivative method to calculate changes in the value of hedged items designated as being part of a hedging relationship.

T180 DESIGNATED HEDGED ITEMS IN HEDGING RELATIONSHIPS

in €m	Carrying amount of liabilities	Change in fair value of hedged items – designated risk	Change in fair value of hedged items – non-designated risk	Basis adjustment of hedged items from fair value hedges – cumulative
Fair value hedge				
Interest rate hedges – interest rate swaps	6,685	-47	–	-65
Cash flow hedge				
Fuel hedging – options	–	840	174	–
Exchange rate hedging – forward transactions	–	-502	-61	–
Interest rate hedges – interest rate swaps	–	-16	–	–
Total	**6,685**	**275**	**113**	**-65**

T181 STATEMENT OF EQUITY RECONCILIATION FOR CASH FLOW HEDGES

in €m	As of 1.1.2018	Gains or losses from effective hedging relationships	Reclassification to profit or loss	Reclassification to acquisition costs of inventories	Reclassification to acquisition costs of aircraft	As of 31.12.2018
OCI – cash flow hedge reserve	**837**	**490**	**57**	**786**	**33**	**451**
Fuel hedging – options	479	-53	–	786	–	-360
Exchange rate hedging – futures	358	552	57	–	33	820
Interest rate hedges – interest rate swaps	–	-9	–	–	–	-9
OCI – cost of hedging	**-61**	**-90**	**–**	**–**	**–**	**-151**
Fuel hedging – options	-61	-166	–	–	–	-227
Exchange rate hedging – futures	–	76	–	–	–	76
Total	**776**	**400**	**57**	**786**	**33**	**300**

Derivative financial instruments that do not meet the requirements for applying hedge accounting are measured at fair value through profit or loss. As a rule, these derivatives were originally in an economic hedging relationship with a particular exposure, but the exposure can either not be measured for hedge accounting purposes or no longer exists.

Fair values are all calculated solely on the basis of recognised financial and mathematical methods, using publicly available market information.

Changes in the market values of derivatives that do not qualify as effective hedging transactions under IFRS 9 can be seen in the income statement and in the overview of other financial items ↗ **Note 13, p. 125.**

Liquidity risk

Complex financial planning systems enable Lufthansa to identify its future liquidity position at an early stage. Based on the results of the Group strategy and planning processes, a monthly rolling liquidity plan differentiated by currency is drawn up with a planning horizon of 24 months. This planning method offers an up-to-date picture of anticipated liquidity developments within the Company and corresponding currency effects.

In principle, the Lufthansa Group holds a liquidity reserve of at least EUR 2,300m that is available at short notice. In addition, the Lufthansa Group held confirmed unused lines of credit as of 31 December 2018 totalling EUR 849m (previous year: EUR 855m).

A maturity analysis for the financial liabilities and the derivative financial instruments based on undiscounted gross cash flows including the relevant interest payments shows the following projected cash inflows and outflows from the perspective of the balance sheet date 31 December 2018. As a result of the hedges used, there are generally direct connections between the cash inflows and outflows for the derivative financial instruments shown.

T182 MATURITY ANALYSIS OF LIABILITIES FROM DERIVATIVE FINANCIAL INSTRUMENTS

in €m	From fuel derivatives	Cash inflow from gross settlement of interest rate and exchange rate derivatives	Cash outflow from gross settlement of interest rate and exchange rate derivatives	**Net**
1st quarter	51	-939	951	**63**
Up to 1 year [1]	218	-1,405	1,444	**257**
1-5 years	100	-1,520	1,517	**97**
Later	–	-734	708	**-26**

[1] Without payments in 1st quarter.

T183 MATURITY ANALYSIS FOR NON-DERIVATIVE FINANCIAL INSTRUMENTS

in €m	**Outflows**
1st quarter	-5,304
Up to 1 year [1]	-3,024
1-5 years	-3,889
Later	-1,662

[1] Without payments in 1st quarter.

Credit risk

The sale of passenger travel and freight documents mostly takes place via agencies. These agencies are mostly connected to national clearing systems for billing passenger and freight sales. The creditworthiness of the agents is reviewed by the responsible clearing systems. Due to the broad diversification, credit risk for the agencies is relatively low worldwide. Nonetheless, credit terms for agents in some markets were tightened significantly in cooperation with the International Air Transport Association (IATA) in order to reduce credit risks even further.

Receivables and liabilities between airlines are offset through bilateral arrangements or via the IATA clearing house, insofar as the contracts underlying services do not explicitly specify otherwise. Systematic settlement of weekly receivables and liability balances significantly reduces the default risk. Fidelity guarantee insurance also covers partial risks within a certain range. Service contracts occasionally require collateral for miscellaneous transactions. All other contractual relationships are subject to credit rules, which, depending on the type and volume of the contract involved, require collateral, credit ratings/references or historical data from prior dealings, particularly payment history, in order to avoid defaults.

Counterparty risks in connection with credit card companies are monitored closely and incoming payments are reviewed daily. To reduce risks even further, a permanent analysis process examines whether to further tighten credit terms for some settlement partners. In addition to the monitoring of receivables at the Company or segment level, there is also counterparty monitoring at Group level, with individually assigned limits, in order to identify the accumulation of portfolio risks across the entire Group and take appropriate action where necessary. The maximum credit risk for financial assets from the potential insolvency of customers is their carrying amount.

In addition to individual write-downs on receivables if a default event occurs, IFRS 9 has since 1 January 2018 required risk provisions to be recognised for expected losses. Lufthansa's trade receivables are exposed to external credit risks for which expected losses have already been taken into consideration in accordance with IFRS 9, in addition to individual write-downs. A simplified impairment model based on an impairment matrix is used for the portion of the receivables portfolio that does not consist of credit card receivables but is subject to external credit risks. The portfolio is divided into clusters based on customer groups, regions and days past due. A default matrix is calculated on the basis of historical default events in Lufthansa's receivables portfolio, which is adjusted for forward-looking, publicly available insolvency forecasts. This impairment matrix is applied to trade receivables that are exposed to external credit risk and are not credit card receivables. In addition, the receivables portfolio includes credit card receivables for which Lufthansa is the credit card issuer. Expected losses for these credit card receivables are calculated in a separate model, based on counterparty-specific external ratings and default probabilities. Lufthansa uses a definition of default of 90 days past due for receivables, which are in principle written off in full if the default event occurs.

The following table shows the reconciliation of risk provisions between IAS 39 and IFRS 9 and the first-time application effect of IFRS 9. The statement of risk provisions that follows it shows changes in risk provisions in the financial year and the related carrying amounts. Impairment losses of EUR 17m were recognised as of 31 December 2017 under IAS 39, of which EUR 11m were trade receivables and EUR 6m were credit card receivables, which were carried over to expected losses as defined in IFRS 9. The additional need to recognise an impairment of EUR 10m (EUR 8m after tax) required as of 1 January 2018 under IFRS 9 was recognised in equity without effect on profit and loss. In the following tables, Levels 1 and 2 describe expected credit losses, whereas Level 3 shows individual impairment losses on the basis of actual default events.

T184 IFRS 9 CHANGE – RECONCILIATION OF RISK PROVISION FOR FINANCIAL ASSETS

in €m	Risk provision IAS 39 as of 31.12.2017	Risk provision IFRS 9 as of 1.1.2018			
		Level 1	Level 2	Level 3	Simplified approach
Trade receivables and other receivables (simplified approach)	272	–	–	–	276
Trade receivables and other receivables (credit card receivables)	6	12	–	–	–
Total	**278**	**12**	**–**	**–**	**276**

T185 STATEMENT OF RISK PROVISIONS

in €m	Opening balance risk provision as of 1.1.2018	Additions through profit or loss	Reversals through profit or loss	Utilisation	Closing balance risk provision as of 31.12.2018	Opening balance gross carrying amount as of 1.1.2018	Closing balance gross carrying amount as of 31.12.2018
Trade receivables and other receivables (simplified approach)	276	95	-31	-15	325	2,371	2,522
of which from expected losses	15	2	-8	–	9	2,095	2,216
of which from individual loss allowances	261	93	-23	-15	316	276	306
Trade receivables and other receivables (credit card receivables)	12	19	-2	-4	24	906	1,048
of which Level 1	12	7	-2	–	17	899	1,037
of which Level 2	–	–	–	–	–	–	–
of which Level 3	–	12	–	-4	7	7	11
Total	**288**	**114**	**-33**	**-19**	**349**	**3,277**	**3,570**

In addition, a risk provision of EUR 0.3m was recognised as of the reporting date in Level 1 of the general impairment model for securities measured fair value through other comprehensive income. In the reporting year, the Lufthansa Group used the following default rates for each past due category in the impairment matrix for the simplified approach of the impairment model.

T186 IMPAIRMENT MATRIX FOR TRADE RECEIVABLES

		Not overdue	1 – 30 days overdue	31 – 60 days overdue	61 – 90 days overdue	More than 90 days overdue	**Total**
Default rate	%	0.2	0.5	1.2	1.5	1.7	**–**
Carrying amounts for trade receivables	€m	1,484	364	163	30	175	**2,216**
Expected loss	€m	2	2	2	–	3	**9**

In order to determine expected losses of credit card receivables according to IFRS 9, the off-balance sheet exposure must be considered, in addition to the on-balance sheet exposure. The off-balance sheet exposure describes the portion of a credit card's unused or free limit. The following overview shows the risk data for the credit card portfolio. Expected losses are calculated at the level of the individual credit card, so that the sizes of the average default probability and the average loss relate to the individual credit card.

T187 CONCENTRATION OF CREDIT RISK FROM CREDIT CARD RECEIVABLES

Internal credit rating	Probability of default according to external credit rating	Average probability of default	Average expected loss in €m	Exposure in €m Level 1 impairment model	Exposure in €m Level 2 impairment model	Exposure in €m Level 3 impairment model
On-balance sheet exposure						
Low risk	≤ 2.0%	0.7%	13	591	–	–
Medium risk	> 2.0% to ≤ 6.5%	2.5%	41	432	–	–
High risk	> 6.5%	11.9%	154	14	–	11
Total				**1,037**	**–**	**11**
Off-balance sheet exposure						
Low risk	≤ 2.0%	0.7%	18	665	–	–
Medium risk	> 2.0% to ≤ 6.5%	2.5%	64	763	–	–
High risk	> 6.5%	11.9%	274	21	–	–
Total				**1,449**	**–**	**–**

Securities representing debt instruments are rated as follows (Standard & Poor's):

T188 SECURITIES RATINGS – DEBT INSTRUMENTS

in €m	
AAA	306
AA+	37
AA	114
AA–	123
A+	265
A	222
A–	198
BBB+	101
BBB	66
Below BBB or unrated	36
Total	**1,468**

The credit risk for derivative financial instruments and securities held at fair value through or without effect on profit and loss is the risk that a counterparty defaults. The maximum credit risk from these instruments is their carrying amount. The counterparty default risk for financial market transactions is limited by defining a maximum risk, taking the credit score given by recognised rating agencies into account.

45 Contingencies and events after the balance sheet date

T189 CONTINGENT LIABILITIES

in €m	**31.12.2018**	31.12.2017
From guarantees, bills of exchange and cheque guarantees	988	881
From warranty contracts	218	354
From providing collateral for third-party liabilities	45	39
	1,251	**1,274**

Warranties include an amount of EUR 114m (previous year: EUR 267m) relating to contingent liabilities towards creditors of joint ventures. Liabilities under collateral agreements included contingent liabilities of EUR 6m (previous year: EUR 4m) towards creditors of joint ventures. Of the total, EUR 1,094m (previous year: EUR 1,137m) relates to joint and several guarantees and warranties taken on. These are matched by compensatory claims against the other co-debtors amounting to EUR 1,042m (previous year: EUR 1,048m). Insofar as annual financial statements have yet to be published, these figures are preliminary.

Otherwise, provisions for other risks could not be made because utilisation was not sufficiently probable. The potential financial effect of these provisions on the result would have been EUR 55m (previous year: EUR 80m).

As in the previous year, no profits or cash inflows are expected from contracts for the sale of aircraft.

LEGAL RISKS

The Group is exposed to a number of legal risks in the course of its normal business. Based on current knowledge, the assumption is that these will not have any major, lasting effects on the net assets, financial and earnings position, beyond those for which provisions for litigation risks have been made see ↗ **Note 34, p. 149ff.**

Legal disputes and other claims made against the Group are always subject to uncertainty, however. Management estimates of these risks may also change over time. The actual outcome of these legal disputes may differ from earlier management estimates, which could have significant effects on the net assets, financial and earnings position and the reputation of our Company.

Due to the existing uncertainties and to those described below, we cannot make an assessment of the amount of the respective contingent liabilities or of the group of contingent liabilities. The legal disputes that these statements refer to include:

Risk of successful claims for damages in ongoing antitrust proceedings

Various cargo airlines, including Lufthansa Cargo AG and Swiss International Air Lines AG, were involved in a cargo cartel in the period between December 1999 and February 2006. Deutsche Lufthansa AG, Lufthansa Cargo AG and Swiss International Air Lines AG are at risk of civil claims for damages in Germany, the United Kingdom, Norway, Israel, South Korea and the Netherlands. The lawsuits have been brought by both direct and indirect customers and are addressed to the airlines as co-debtors.

In Germany, a lawsuit against Lufthansa Cargo AG and others for information and damages was filed with Cologne regional court by a subsidiary of Deutsche Bahn AG. Litigation proceedings were started in late 2013 and expanded in late 2014. The lawsuit is addressed to a total of eleven cargo airlines and claims for purported damages of around EUR 3bn in total, including interest. Most recently, the respondents filed extensive separate replies to the extended suit on 30 November 2016. Many of the respondent airlines have since reached a settlement with the claimant. As a result, the lawsuit was withdrawn for the portion of revenue supposedly attributable to these airlines, so the disputed amount is now approximately EUR 1.6bn including interest.

At present, it is not possible to give a concrete assessment of the outcome of the lawsuits already pending and of the number and amount of any other claims. When evaluating the risk, it should nonetheless be borne in mind that the European Commission's decision on the cargo cartel, which the claimants in the civil lawsuits refer to, among others, is still not legally binding. Following the appeal of this 2010 decision by the European Court of Justice (ECJ) in December 2015, the European Commission sent revised penalty notices in March 2017 in which the content was the same but the reasoning had been altered. The airlines concerned, including Lufthansa, again contested them, so the penalty notices are still not effective.

Moreover, an expert economic opinion commissioned by Lufthansa Cargo AG and Swiss International Air Lines AG has come to the conclusion that the cartel did not inflict any actual damage on customers. Even if there were damages (i.e. allegedly higher cartel prices), the court will have to examine whether the claimants did not pass them on to their own customers (in the case of the freight forwarders) or whether they were indeed passed on to them (in the case of the final customers). Based on current assessments, there is nonetheless a slight probability of losing some of these lawsuits, which could have not insignificant effects on the Group's net assets, financial and earnings position.

Investigations in connection with work and service contracts
The investigations by the customs authorities in the previous year into possible breaches of the German Law on Labour Leasing (Arbeitnehmerüberlassungsgesetz – AÜG) concerning the procurement of services by the Lufthansa Group have been settled amicably. No penalties were imposed on individual Lufthansa employees nor on companies in accordance with Section 30 of the Administrative Offences Act (Gesetz über Ordnungswidrigkeiten – OWiG). Administrative proceedings with the German Statutory Pension Insurance Scheme concerning the legal status of two workers have been submitted for judicial review to the Social Court in Berlin.

TAX RISKS

Tax risks exist largely because of differences in legal opinions between the German tax authorities and the Company. In tax audits for the financial years 2001 to 2012, the tax authorities came to a number of different conclusions to those on which the Company had based its tax returns, relating, in particular, to partial write-downs on shareholder loans, the treatment of various lease structures and the acquisition of a foreign subsidiary, as well as the recognition and measurement of certain provisions and assets. The Lufthansa Group has appealed against the resulting tax assessments. Some of the disputed claims by the tax authorities were paid in the previous year, without prejudicing the appeal. The Lufthansa Group still assumes, however, that there is a very strong likelihood of winning in all matters being disputed. Provisions have therefore not been made for the outstanding points as of the reporting date. There is, however, the risk of a possible subsequent payment totalling some EUR 500m for the circumstances mentioned. The assessment of the amount is subject to uncertainty. If the legal position of Deutsche Lufthansa AG is upheld, no adverse effects on the earnings, assets and financial position are to be expected.

EVENTS AFTER THE BALANCE SHEET DATE

Since 31 December 2018, no events of particular importance have occurred that would be expected to have a significant influence on the net assets, financial and earnings position.

46 Other financial obligations

As of 31 December 2018, there were order commitments of EUR 13.9bn for capital expenditure on property, plant and equipment, including repairable spare parts, and for intangible assets (previous year: EUR 12.9bn). There were also capital and shareholder loan commitments of EUR 336m towards equity investments (previous year: EUR 475m).

47 Auditors’ fees

The fees paid to the auditors in the financial year and charged to expenses in accordance with Section 314 Paragraph 1 No. 9 HGB are made up as follows:

T190 AUDITORS’ FEES

in €m	2018	2017
Annual audit	4.2	4.1
Other assurance services	0.4	0.3
Tax advisory services	0.6	0.7
Other services	0.3	0.4
Total	**5.5**	**5.5**

Auditing services include above all the fees for the statutory audit of the separate and consolidated financial statements of Deutsche Lufthansa AG and its consolidated subsidiaries, fees for the auditors’ review of the interim financial statements and for audit advice in connection with the implementation of new accounting standards and the audit of information systems and processes. The fees shown under other advisory services relate in particular to services in connection with statutory and contractual requirements. Tax advisory services mainly comprise tax advice on transfer pricing matters, international taxes and inspections by tax authorities. Other services particularly relate to advice on the use of biometric identification methods and IT consultancy services.

The following fees paid to the global PricewaterhouseCoopers group, especially abroad, were additionally recognised as expenses:

T191 ADDITIONAL AUDITORS’ FEES

in €m	2018	2017
Annual audit	3.9	3.6
Other assurance services	0.2	0.2
Tax advisory services	0.4	0.4
Other services	0.2	0.5
Total	**4.7**	**4.7**

The auditor at PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft responsible for the Lufthansa Group is Eckhard Sprinkmeier. He held this position for the first time in financial year 2018.

COMPOSITION OF THE GROUP

48 Group of consolidated companies

The consolidated financial statements of Deutsche Lufthansa AG include all major subsidiaries, joint ventures and associated companies.

Subsidiaries are entities over which Deutsche Lufthansa AG has rights that give it the ability to control the entity's relevant activities. Relevant activities are those activities that have a significant influence on the entity's return. Deutsche Lufthansa AG therefore only has control over a company when it is exposed to variable returns from the company and its power over the company's relevant activities enables it to influence these returns. This definition of control also applies to structured entities that are identified as such in the list of significant Group companies. In general, the ability to control subsidiaries arises when Deutsche Lufthansa AG holds a direct or indirect majority of voting shares. In structured entities, the ability to control does not come from holding the majority of voting shares, but rather from contractual agreements. Entities are consolidated from the time that the ability to control begins. They cease to be consolidated when the ability to control ends.

Joint arrangements are classified either as joint ventures or as joint operations. A joint arrangement exists for when the Lufthansa Group carries on joint business activities with third parties on the basis of a contractual agreement. Joint management or control only exists when decisions on activities that have a significant effect on the returns from an agreement require the unanimous approval of the parties sharing control.

Significant interests in companies that are managed jointly with one or more partners (joint ventures) are accounted for using the equity method. Joint operations are defined by the fact that the parties exercising joint control over the arrangement have rights to the assets attributed to the arrangement and are liable for its debts. Assets and liabilities, revenue and expenses from the significant joint operations are recognised in the consolidated financial statements of the Lufthansa Group in proportion to these rights and obligations.

Associated companies are companies in which Deutsche Lufthansa AG has the opportunity to exercise major influence over financial and operating policy based on an interest of between 20% and 50%. Significant associated companies are accounted for in the consolidated financial statements using the equity method.

A list of major subsidiaries, joint arrangements and associated companies can be found in ↗ T198 – T201, p. 194 – 201, and the list of shareholdings in ↗ T202, p. 202 – 205.

In addition to Deutsche Lufthansa AG as the parent company, the group of consolidated companies includes 66 domestic and 256 foreign companies, including structured entities (previous year: 63 domestic and 268 foreign companies).

One material joint operation was also included in the consolidated financial statements on a pro rata basis in accordance with IFRS 11. It consists of a German cargo airline operated jointly by Deutsche Post AG and Deutsche Lufthansa AG, which each hold 50% of the share capital and voting rights. The two shareholders are also customers of the company and use the capacities of its cargo aircraft. In contrast to its capital and voting rights, the company's assets and liabilities, as well as its income and expenses, are allocated based on the user relationship of the shareholders according to their contracts.

Changes in the group of consolidated companies during the 2018 financial year are shown in the following table:

T192 CHANGES IN THE GROUP OF CONSOLIDATED COMPANIES FROM 1.1.2018 TO 31.12.2018

Name, registered office	Additions	Disposals	Reasons
Network Airlines			
Lufthansa Malta Holding Ltd., St. Julians, Malta		1.1.2018	Merger
All Nippon Airways Trading Sky Leasing Ltd., Tokyo, Japan		13.4.2018	Liquidation
Canary Ltd., Tokyo, Japan		13.4.2018	Liquidation
TLC Saffron Ltd., Tokyo, Japan		13.4.2018	Liquidation
Lark Ltd., Tokyo, Japan		20.4.2018	Liquidation
Matterhorn Leasing Co. Ltd., Tokyo, Japan		20.4.2018	Liquidation
SL Opal Ltd., Tokyo, Japan		20.4.2018	Liquidation
Warbler Leasing Ltd., Tokyo, Japan		20.4.2018	Liquidation
Lufthansa Leasing Austria GmbH & Co. OG Nr. 23, Salzburg, Austria		18.7.2018	Merger
Tyrolean Airways Luftfahrzeuge Technik GmbH, Innsbruck, Austria		31.8.2018	Merger
First Valley Highway Kumiai, Tokyo, Japan		28.9.2018	Liquidation
Second Valley Highway Kumiai, Tokyo, Japan		28.9.2018	Liquidation
Third Valley Highway Kumiai, Tokyo, Japan		28.9.2018	Liquidation
Lily Port Leasing Co. Ltd., Tokyo, Japan		17.12.2018	Liquidation
SL Crane Ltd., Tokyo, Japan		17.12.2018	Liquidation
Stork Ltd., Tokyo, Japan		17.12.2018	Liquidation
Celine Leasing Co., Ltd., Tokyo, Japan	18.12.2018		Established
Yamasa Aircraft LH14 Kumiai, Okoyama, Japan	20.12.2018		Established
A319 LDD-LDE-LDF Ltd., George Town, Grand Cayman, Caiman islands		27.12.2018	Liquidation
Eurowings			
Luftfahrtgesellschaft Walter mit beschränkter Haftung, Dortmund	10.1.2018		Acquisition
Eurowings Digital GmbH, Cologne	1.10.2018		Beginning of operations
MRO segment			
Lufthansa Technik Airmotive Ireland Ltd., Dublin, Ireland		14.8.2018	Disposal
Catering segment			
LSG Transalpino SAS, Paris, France	1.1.2018		Beginning of operations
Retail In Motion Mexico S. de R.L. de C.V., Mexico City, Mexico	1.2.2018		Beginning of operations
Retail Inmotion Middle East L.L.C., Abu Dhabi, United Arab Emirates	25.10.2018		Established
LSG Sky Chefs Lounge, Inc., Wilmington, USA	1.11.2018		Established
LSG Sky Chefs RPC West GmbH, Neu-Isenburg	1.11.2018		Established
ALMEIDA & CADIMA, LDA, Lisboa, Portugal	21.11.2018		Acquisition
Additional Businesses and Group Functions			
Lufthansa SICAV-FIS-Fonds, Saint-Josse-ten-Noode, Belgium		16.3.2018	Liquidation

ACQUISITION OF SUBSIDIARIES

With effect from 9 January 2018, Lufthansa Commercial Holding GmbH acquired all of the shares of Luftfahrtgesellschaft Walter mbH. The acquisition is based on the purchase agreement signed by the Lufthansa Group and the Air Berlin group on 13 October 2017. The purchase price is EUR 24m. Within the Eurowings segment, the company acts as a platform with its own air operator certificate and provides services to Eurowings on the basis of wet-lease agreements for 20 Bombardier DH-8 Q400s and ten Airbus A320/A319s at present. The company operates without its own fleet and solely within Eurowings. At the time of initial consolidation, it had gross assets of EUR 19m and net assets of EUR 1m. The difference of EUR 23m resulting from the purchase price allocation was classified in full as goodwill, given the peculiarities of the acquired business operations, and assigned to Eurowings. In the 2018 financial year, the company generated revenue of EUR 117m and a net profit for the year of EUR 5m. Since the company owns no aircraft and only provides services to Group companies, the effects of its consolidation on the Group's net assets, financial and earnings position are immaterial.

Another acquisition was made in the Catering segment, whose consolidation, taken individually and in aggregate, had no material effect on the net assets, financial and earnings position of the Group and the segment.

USE OF EXEMPTION PROVISIONS

The following fully consolidated German Group companies made use of the exemption provisions of Section 264 Paragraph 3 and Section 264b HGB in 2018.

T193 USE OF EXEMPTION PROVISIONS

Company name	Registered office
Eurowings Aviation GmbH	Cologne
Eurowings Digital GmbH	Cologne
Eurowings GmbH	Dusseldorf
Eurowings Technik GmbH	Cologne
Evertaste GmbH	Alzey
Germanwings GmbH	Cologne
Hamburger Gesellschaft für Flughafenanlagen mbH	Hamburg
Jettainer GmbH	Raunheim
LSG Asia GmbH	Neu-Isenburg
LSG Lufthansa Service Catering- und Dienstleistungsgesellschaft mbH	Neu-Isenburg
LSG Lufthansa Service Europa/Afrika GmbH	Neu-Isenburg
LSG Lufthansa Service Holding AG	Neu-Isenburg
LSG Sky Chefs Düsseldorf GmbH	Neu-Isenburg
LSG Sky Chefs Europe GmbH	Neu-Isenburg
LSG Sky Chefs Frankfurt International GmbH	Neu-Isenburg
LSG Sky Chefs Frankfurt ZD GmbH	Neu-Isenburg
LSG Sky Chefs Lounge GmbH	Neu-Isenburg
LSG Sky Chefs Objekt- und Verwaltungsgesellschaft mbH	Neu-Isenburg
LSG Sky Chefs Verwaltungsgesellschaft mbH	Neu-Isenburg
LSG South America GmbH	Neu-Isenburg
LSG-Food & Nonfood Handel GmbH	Neu-Isenburg
LSY GmbH	Norderstedt
Lufthansa AirPlus Servicekarten GmbH	Neu-Isenburg
Lufthansa Asset Management GmbH	Frankfurt/Main
Lufthansa Asset Management Leasing GmbH	Frankfurt/Main
Lufthansa Aviation Training Berlin GmbH	Berlin
Lufthansa Aviation Training Germany GmbH	Frankfurt/Main
Lufthansa Aviation Training GmbH	Hallbergmoos
Lufthansa Cargo AG	Frankfurt/Main
Lufthansa CityLine GmbH	Munich
Lufthansa Commercial Holding GmbH	Cologne
Lufthansa Global Business Services GmbH	Frankfurt/Main
Lufthansa Industry Solutions AS GmbH	Norderstedt
Lufthansa Industry Solutions BS GmbH	Raunheim
Lufthansa Industry Solutions GmbH & Co. KG	Norderstedt
Lufthansa Process Management GmbH	Neu-Isenburg
Lufthansa Seeheim GmbH	Seeheim-Jugenheim
Lufthansa Systems GmbH & Co. KG	Raunheim
Lufthansa Technik AERO Alzey GmbH	Alzey
Lufthansa Technik AG	Hamburg
Lufthansa Technik Immobilien- und Verwaltungsgesellschaft mbH	Hamburg
Lufthansa Technik Logistik GmbH	Hamburg
Lufthansa Technik Logistik Services GmbH	Hamburg

T193 USE OF EXEMPTION PROVISIONS (continued)

Company name	Registered office
Lufthansa Technik Maintenance International GmbH	Frankfurt/Main
Lufthansa Technik Objekt- und Verwaltungsgesellschaft mbH	Hamburg
Miles & More GmbH	Neu-Isenburg
Spiriant GmbH	Neu-Isenburg
time:matters GmbH	Neu-Isenburg
time:matters Holding GmbH	Neu-Isenburg
time:matters Spare Parts Logistics GmbH	Neu-Isenburg

The companies are affiliated with Deutsche Lufthansa AG by means of direct or indirect profit and loss transfer agreements respectively.

Furthermore, LHBD Holding Limited, London, UK, registration number 06939137, is exempt from the obligation to have its individual financial statements audited pursuant to Section 479A of the UK Companies Act 2006.

The consolidated financial statements include investments in 35 joint ventures and 37 associated companies (previous year: 38 joint ventures and 35 associated companies), of which ten joint ventures (previous year: ten) and 15 associates (previous year: 15) were accounted for using the equity method. The other joint ventures and associated companies were valued at amortised cost due to their minor overall significance.

49 Related party disclosures

Balances and transactions between the Company and its fully consolidated subsidiaries, which constitute related parties, have been eliminated in the course of consolidation and are not commented on in this Note. Details of transactions between the Group and other related parties are disclosed below.

The Lufthansa Group segments render numerous services to related parties within the scope of their ordinary business activities. Conversely, the companies in question provide services to the Lufthansa Group as part of their normal business. These extensive supply and service relationships take place on the basis of market prices.

In addition, the Group and certain non-consolidated subsidiaries have concluded numerous billing agreements, partly governing the joint use of services. In these cases, the administrative services provided are charged as cost allocations.

The Lufthansa Group's cash management is centralised, and, in this respect, the Lufthansa Group also performs a "banking function" vis-à-vis the non-consolidated companies of the Group. Non-consolidated Group companies included in the Group's cash management invest their available cash with the Group or borrow funds from the Group and carry out their derivative hedging transactions with the Group. All transactions take place at market conditions.

Due to geographical proximity in many cases, a large number of subletting contracts exists between the Lufthansa Group and related parties. In these cases, the Group usually charges the rental costs and incidental expenses incurred to the companies in question on a pro rata basis.

The following table shows the volume of significant services provided to or by related parties:

T194 VOLUME OF SIGNIFICANT SERVICES PROVIDED TO OR BY RELATED PARTIES

	Volume of services rendered		Volume of services received	
in €m	**2018**	2017	**2018**	2017
Non-consolidated subsidiaries				
Airport Services Dresden GmbH, Germany	0	0	4	5
Albatros Versicherungsdienste GmbH, Germany	1	1	42	53
Austrian Airlines Technik-Bratislava, s.r.o., Slovakia	2	3	6	6
Austrian Airlines Tele Sales Service GmbH, Austria	0	0	5	5
Delvag Versicherungs-AG, Germany	9	8	6	5
DLH Fuel Company mbH, Germany	0	0	476	429
Global Load Control (PTY) LTD, South Africa	0	1	7	7
handling counts GmbH, Germany	1	1	11	9
LGSP Lufthansa Ground Service Portugal, Unipessoal Lda., Portugal	0	0	8	9
Lufthansa Aviation Training Austria GmbH, Austria	2	1	5	4
Lufthansa Aviation Training Operations Germany GmbH, Germany	4	3	13	12
Lufthansa Aviation Training USA Inc., USA	1	0	13	11
Lufthansa Consulting GmbH, Germany	1	1	9	7
Lufthansa Engineering and Operational Services GmbH, Germany	4	3	33	25
Lufthansa Global Business Services Hamburg GmbH, Germany	7	7	30	26
Lufthansa Global Business Services S.A. de C.V., Mexico	1	1	4	5
Lufthansa Global Business Services Sp. z o.o., Poland	2	2	30	27
Lufthansa Global Tele Sales GmbH, Germany	1	4	57	60
Lufthansa Industry Solutions TS GmbH, Germany	0	0	10	9
Lufthansa Services Philippines, Inc., Philippines	1	2	5	5
Lufthansa Services (Thailand) Ltd., Thailand	0	0	5	5
Lufthansa Super Star gemeinnützige Gesellschaft mit beschränkter Haftung, Germany	0	13	4	11
Lufthansa Systems FlightNav AG, Switzerland	1	1	23	23
Lufthansa Systems Hungaria Kft, Hungary	1	0	21	17
Lufthansa Systems Poland Sp. z o.o., Poland	2	1	28	21
Lufthansa Technical Training GmbH, Germany	6	6	23	17
Lufthansa Technik Component Services Asia Pacific Limited, China	1	1	6	4
Lufthansa Technik Logistik of America LLC, USA	7	7	41	33
Lufthansa Technik Middle East FZE, United Arab Emirates	0	0	5	4
Lufthansa Technik Shenzhen Co., Ltd., China	19	23	28	28
Lufthansa Technik Turbine Shannon Limited, Ireland	5	6	15	18
LZ-Catering GmbH, Germany	5	6	13	13
ZeroG GmbH, Germany	0	0	5	4

T194 VOLUME OF SIGNIFICANT SERVICES PROVIDED TO OR BY RELATED PARTIES (continued)

	Volume of services rendered		Volume of services received	
in €m	**2018**	2017	**2018**	2017
Joint ventures				
Airfoil Services Sdn. Bhd., Malaysia	5	0	7	8
FraCareServices GmbH, Germany	2	6	1	1
Lufthansa Bombardier Aviation Services GmbH, Germany	2	2	9	7
N3 Engine Overhaul Services GmbH & Co. KG, Germany	13	4	0	0
Shanghai Pudong International Airport Cargo Terminal Co. Ltd., China	1	1	6	7
Spairliners GmbH, Germany	63	52	48	45
Star Alliance Services GmbH, Germany	3	3	7	0
Terminal 2 Gesellschaft mbH & Co. oHG, Germany	1	1	14	13
Terminal One Group Association, L.P., USA	5	5	5	5
XEOS Sp. z o.o., Poland	5	6	0	0
Associated companies				
Aircraft Maintenance and Engineering Corp., China	16	13	5	4
Airmail Center Frankfurt GmbH, Germany	0	0	9	8
AviationPower GmbH, Germany	0	1	27	35
HEICO Aerospace Holdings Corp., USA	0	0	12	11
Other affiliated companies				
Shanghai Pudong International Airport Public Cargo Terminal Co. Ltd. (West), Shanghai, China	0	0	90	77
SunExpress Germany GmbH, Germany	25	28	98	103

The following tables show receivables owed by and liabilities to related parties:

T195 RECEIVABLES FROM AFFILIATED COMPANIES

in €m	**2018**	2017
Trade receivables from non-consolidated subsidiaries	19	52
Trade receivables from joint ventures	22	16
Trade receivables from associated companies	14	6
Trade receivables from other affiliated companies	12	6
Total trade receivables	**67**	**80**
Other receivables from non-consolidated subsidiaries	42	12
Other receivables from joint ventures	41	36
Other receivables from associated companies	10	10
Total other receivables	**93**	**58**
Loans to non-consolidated subsidiaries	81	66
Loans to joint ventures	27	23
Loans to associated companies	–	–
Total non-current receivables	**108**	**89**

T196 LIABILITIES TO AFFILIATED COMPANIES

in €m	**2018**	2017
Trade payables to non-consolidated subsidiaries	27	53
Trade payables to joint ventures	9	14
Trade payables to associated companies	4	4
Trade payables to other affiliated companies	3	3
Total trade payables	**43**	**74**
Other liabilities to non-consolidated subsidiaries	269	233
Other liabilities to joint ventures	0	0
Other liabilities from associated companies	0	0
Total other liabilities	**269**	**233**

No individual shareholders of Deutsche Lufthansa AG exercise significant influence over the Group. For transactions involving members of the Executive Board and Supervisory Board ("directors' dealings"), see ↗ **Note 50, p. 184.**

50 Supervisory Board and Executive Board

The disclosure of remuneration for key managers required by IAS 24 includes the remuneration of the active members of the Executive Board and Supervisory Board.

The members of the Executive Board and the Supervisory Board as well as the other offices that they hold are named in the combined management report in the section ↗ **Corporate governance, p. 79ff.**

The principles of the remuneration system and the amount of remuneration paid to Executive Board and Supervisory Board members are shown and explained in detail in the remuneration report. The **remuneration report** forms part of the combined management report ↗ **p. 84–91.**

Total Executive Board remuneration under IFRS was EUR 16.2m (previous year: EUR 23.0m), including current service costs for pensions of EUR 3.5m (previous year: EUR 3.2m).

The active members of the Executive Board in past reporting years were remunerated as follows:

T197 EXECUTIVE BOARD REMUNERATION (IFRS)

in € thousands	2018	2017
Basic salary	4,832	4,831
Other [1]	427	449
One-year variable remuneration	4,845	5,430
Total short-term remuneration	**10,104**	**10,710**
Long-term variable remuneration [2]	3,570	3,014
Share-based remuneration	-968	6,090
Current service cost for retirement benefits	3,510	3,166
Total long-term remuneration	**6,112**	**12,270**
Severance payments	–	–
Total	**16,216**	**22,980**

[1] Other remuneration includes in particular benefits from the use of company cars, discounts in connection with cash outflows from share programmes (↗ **Notes to the consolidated financial statements, Note 38, p. 153ff.**) and concessionary travel in accordance with the relevant IATA regulations.
[2] Expenses recognised in the reporting year for long-term variable remuneration for the financial years 2016 to 2018.

Pension provisions for Executive Board members active in the 2018 financial year came to EUR 12.4m (previous year: EUR 10.8m).

In addition to the provision for the one-year variable remuneration of EUR 4,845k (previous year: EUR 5,430k), provisions totalling EUR 3,570k were recognised for the future payment of long-term variable remuneration for the Executive Board members active in the financial year 2018 (previous year: EUR 3,014k). In addition, provisions of EUR 5,651k were recognised for the future payment of long-term, share-based remuneration for the Executive Board members active as of 31 December 2018 (previous year: EUR 7,911k).

Total remuneration (HGB) paid to the Executive Board of Deutsche Lufthansa AG in the financial year 2018 came to EUR 13,015k (previous year: EUR 14,731k). This includes EUR 1,893k for the new share programme, in which the Executive Board acquired a total of 37,125 shares.

Current payments and other benefits for former members of the Executive Board and their surviving dependants came to EUR 6.8m (previous year: EUR 5.2m). This includes payments by subsidiaries as well as benefits in kind and concessionary travel.

Pension obligations towards former Executive Board members and their surviving dependants amount to EUR 68.3m (previous year: EUR 71.0m). They are included in pension provisions (↗ **Note 33, p. 142ff.**).

Expenses for the fixed remuneration of Supervisory Board members came to EUR 2,107k in 2018 (previous year: EUR 2,164k). Other remuneration, mainly attendance fees, amounted to EUR 68k (previous year: EUR 89k). The Deutsche Lufthansa AG Supervisory Board members were also paid EUR 27k for work on supervisory boards of Group companies (previous year: EUR 17k).

In the reporting year, as in the previous year, no loans or advance payments were made to members of the Executive Board and to members of the Supervisory Board.

In addition to their Supervisory Board remuneration, employee representatives on the Supervisory Board received compensation for their work in the form of wages and salaries including pension entitlements amounting to EUR 1.1m in total in 2018 (previous year: EUR 1.0m).

Declaration by the legal representatives

We declare that, to the best of our knowledge and according to the applicable accounting standards, the consolidated financial statements give a true and fair view of the net assets, the financial and earnings positions of the Group, and that the Group management report, which has been combined with the management report for Deutsche Lufthansa AG, includes a fair view of the course of business, including the business result, and the situation of the Group, and suitably presents the principal opportunities and risks to its future development.

Frankfurt, 5 March 2019
Executive Board

Carsten Spohr
Chairman of the Executive Board and CEO

Thorsten Dirks
Member of the Executive Board
Eurowings

Harry Hohmeister
Member of the Executive Board
Chief Commercial Officer
Network Airlines

Detlef Kayser
Member of the Executive Board
Airline Resources &
Operations Standards
(since 1 January 2019)

Ulrik Svensson
Member of the Executive Board
Chief Financial Officer

Bettina Volkens
Member of the Executive Board
Corporate Human Resources
and Legal Affairs

Independent auditor's report

To Deutsche Lufthansa AG, Cologne

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Audit Opinions
We have audited the consolidated financial statements of Deutsche Lufthansa AG, Cologne, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2018, the consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Deutsche Lufthansa AG, which is combined with the Company's management report, for the financial year from 1 January to 31 December 2018. In accordance with the German legal requirements, we have not audited the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

— the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2018, and of its financial performance for the financial year from 1 January to 31 December 2018, and

— the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions
We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). We performed the audit of the consolidated financial statements in supplementary compliance with the International Standards on Auditing (ISAs). Our responsibilities under those requirements, principles and standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements
Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

1. Recognition of traffic revenue, including contract liabilities in respect of unused flight documents and customer loyalty programs, as well as the impact of the initial application of IFRS 15
2. Pension provisions
3. Recoverability of non-current assets, in particular goodwill and intangible assets with indefinite useful lives
4. Accounting treatment of hedging transactions, including the impact of the initial application of IFRS 9
5. Changes in the accounting treatment of engine overhauls

Our presentation of these key audit matters has been structured in each case as follows:

a. Matter and issue
b. Audit approach and findings
c. Reference to further information

Hereinafter we present the key audit matters:

1. Recognition of traffic revenue, including contract liabilities in respect of unused flight documents and customer loyalty programs, as well as the impact of the initial application of IFRS 15

a. Until they are used due to departure, sold flight documents are recognized as contract liabilities for unused flight documents in the Company's consolidated financial statements. Once a passenger coupon or an airfreight document has been used due to departure, the corresponding traffic revenue is recognized as revenue in the income statement. First of all, the part of the flight documents that has not yet been used in the financial year and is still valid in the following year is added to the contract liabilities for unused flight documents. In addition, based on historical data, the amount of expired flight documents which are expected to not be used is estimated; this amount is also recognized under contract liabilities for unused flight documents. In the financial year 2018, the Lufthansa Group realized a total of EUR 28.1 billion in traffic revenue, of which EUR 25.0 billion was attributable to passenger airlines. As of 31 December 2018, EUR 4.0 billion was recognized in the consolidated statement of financial position as contract liabilities for unused flight documents.

   Until they are redeemed, bonus miles awarded to Miles & More members are recognized as contract liabilities on the basis of the individual selling price per bonus mile. Where bonus miles are collected with external cooperation partners, these are recognized as liabilities until redeemed and measured at the prices paid to Lufthansa by the external cooperation partners. Bonus miles which are no longer expected to be used are realized as revenue over a period of three years. The contract liabilities from customer loyalty programs amounted to EUR 2.2 billion as of the balance sheet date.

   In this financial year, the initial application of the new accounting standard on revenue recognition (IFRS 15) resulted in impacts on the recognition and deferral of revenues, as well as on the presentation of revenue. The initial application of IFRS 15 resulted – based on the amount that would have arisen for the financial year 2018 based on the previous accounting standards – in a decrease in traffic revenues amounting to EUR 2.3 billion, which was primarily attributable to the netting of traffic revenues previously reported on a gross basis with airport charges previously recognized under cost of materials and services. In addition, IFRS 15 has shifted the point in time at which certain other traffic revenue (in particular rebooking fees) and revenue resulting from the expected expiry of bonus miles is recognized. The Lufthansa Group has applied IFRS 15 using the modified retrospective approach pursuant to IFRS 15.C3(b), based on which the cumulative effect of initial application of IFRS 15 was presented as an adjustment to opening retained earnings as of 1 January 2018. This resulted in a reduction in retained earnings of EUR 310 million as of 1 January 2018. The initial application of IFRS 15 necessitated a Group-wide analysis of the various business models and contract types within the Group companies.

   From our point of view, these matters were of particular significance for our audit, as recognition and measurement of these items, which are specific to the business model and significant in amount, are highly dependent on the estimates and assumptions of the executive directors regarding the use behavior of flight documents, to which calculation processes that are, in some cases, complex are applied. Recognizing and deferring revenue correctly in accordance with the Group-wide application of the new accounting standard IFRS 15 was moreover considered to be complex.

b. We also included our specialists in the Risk Assurance Service (RAS) to audit traffic revenue. With their support, we evaluated, among other things, the appropriateness and effectiveness of the established internal control system used to settle and realize traffic revenue, including the IT systems used. To the extent that we were not able to conduct our own evaluation of the internal control system of services relating to IT systems or processes outsourced to third parties, we obtained an assurance report attesting to the appropriateness and effectiveness of the internal control system established by the service provider (ISAE 3402 Type II or SSAE 16), which our specialists assessed. In our audit of the contract liabilities for unused flight documents, we reconstructed among other things the individual steps used in the calculations. Specifically, we examined the open flight documents and their measurement by year of sale and validity. Furthermore, we considered the consistency and continuity of the methods used to calculate the flight prices, fees, taxes and other levies attributable to the flight documents no longer expected to be used. In order to assess the appropriateness of the contract liabilities from customer loyalty programs accounted for as of the balance sheet date, we evaluated among other things the fair value measurement for each category of use and the underlying assumptions and parameters derived therefrom. Furthermore, we assessed the mathematical accuracy of the calculation of the contract liabilities from customer loyalty programs.

In addition, we assessed together with the support of our internal specialists from Capital Markets & Accounting Advisory Services (CMAAS) the impact of the initial application of IFRS 15. We assessed among other things the appropriateness of the procedure used including the impact analyses conducted within the Group and assessed the estimates and judgments made by the executive directors with respect to the recognition and deferral of revenue for the various business models of the Group companies.

We were able to satisfy ourselves that the estimates and assumptions made by the executive directors are sufficiently substantiated and documented to ensure that revenue is appropriately recognized in accordance with IFRS 15 as applied for the first time.

c. The disclosures on traffic revenue, contract liabilities in respect of unused flight documents and customer loyalty programs, as well as the impact of the initial application of IFRS 15 are contained in sections 2, 3 and 39 of the notes to the consolidated financial statements.

2. Pension provisions

a. In the Company's consolidated financial statements pension provisions amounting to EUR 5.9 billion are reported, comprising the net amount of the obligations under various pension plans amounting to EUR 21.4 billion and the fair values of the plan assets amounting to EUR 15.5 billion. The majority of these provisions relates to old-age and transitional pension commitments in Germany and Switzerland. The obligations from defined benefit pension plans were measured using the projected unit credit method in accordance with IAS 19. This requires in particular that assumptions be made as to long-term salary and pension trends and average life expectancy. The discount rate must be determined by reference to market yields on high-quality corporate bonds with matching currencies and consistent maturities. The plan assets are measured at fair value, which in turn involves making estimates that are subject to uncertainties.

From our point of view, these matters were of particular significance in the context of our audit because the measurement of this significant item in terms of its amount is based to a large extent on estimates and assumptions made by the Company's executive directors.

b. As part of our audit we evaluated the actuarial expert reports obtained and the professional qualifications of the external experts. Due to the specific features of the actuarial calculations, we were assisted by internal specialists from Pension Consulting. Together with them, we evaluated the numerical data, the actuarial parameters and the valuation methods and assumptions on which the valuations were based for compliance with the standards and appropriateness. On this basis, we then assessed the calculations of the figures presented on the statement of financial position, the accounting entries for the provisions and the disclosures in the notes to the consolidated financial statements based on the expert opinions. Our evaluation of the fair values of plan assets was based on bank confirmations submitted to us. Based on our audit procedures, we were able to satisfy ourselves that the estimates and assumptions made by the executive directors are substantiated and sufficiently documented.

c. The disclosures relating to pension provisions are contained in sections 2 and 33 of the notes to the consolidated financial statements.

3. Recoverability of non-current assets, in particular goodwill and intangible assets with indefinite useful lives

a. In the Company's consolidated financial statements a total amount of EUR 1.4 billion is reported under the line item "Intangible assets with an indefinite useful life, incl. goodwill" of the consolidated statement of financial position. Goodwill and intangible assets with indefinite useful lives are regularly tested for impairment ("impairment test") once per financial year or if there are indications of an impairment. In addition, items of property, plant and equipment are tested for impairment if there are indications of impairment. The carrying amount of the relevant cash-generating units, including goodwill, is compared with the corresponding recoverable amount in the context of the impairment test. These measurements are generally based on the present value of future cash flows of the cash-generating unit/group of cash-generating units to which the respective asset is to be allocated. The present values are calculated using discounted cash flow models. The measurements are based on projections that were also used to prepare the four-year budget for the Lufthansa Group prepared by the executive directors and acknowledged by the Supervisory Board. The discount rate used is the weighted average cost of capital for the relevant cash-generating unit.

   The outcome of this valuation exercise is dependent to a large extent on the estimates made by the executive directors with respect to the future cash inflows, the discount rate used, the rate of growth and other assumptions, and is therefore subject to considerable uncertainty. Against this background and due to the complex nature of the valuation, this matter was of particular significance in the context of our audit.

b. As part of our audit, we assessed the methodology used for the purposes of performing the impairment test, among other things. After matching the future cash inflows used for the calculation against the adopted four-year budget of the Group, we assessed the appropriateness of the calculation, in particular by reconciling it with general and sector-specific market expectations. In addition, we assessed the appropriate consideration of the costs of Group functions.

   With the knowledge that even relatively small changes in the discount rate applied can have material effects on the values calculated in this way, we also focused our testing on the parameters used to determine the discount rate applied, and evaluated the calculation model. In order to reflect the uncertainty inherent in the projections, we assessed the sensitivity analyses performed by the Company and carried out our own additional sensitivity analyses with respect to those cash-generating units with low headroom (recoverable amount compared with the carrying amount). Taking into account the information available, we determined that the carrying amounts of the cash-generating units, including the allocated goodwill, were adequately covered by the discounted future net cash flows. Overall, the valuation parameters and assumptions used by the executive directors are in line with our expectations and are also within the ranges considered by us to be reasonable.

c. The Company's disclosures relating to impairment testing are contained in sections 2, 9 and 16 of the notes to the consolidated financial statements.

4. Accounting treatment of hedging transactions, including the impact of the initial application of IFRS 9

a. The Lufthansa Group uses a variety of derivative financial instruments to hedge against currency, fuel price and interest rate risks arising from its ordinary business activities. The executive directors' hedging policy is documented in corresponding internal guidelines and serves as the basis for these transactions. Currency risks arise primarily from sale transactions, procurement transactions (in particular fuel and investments in aircraft) and financing denominated in foreign currencies. The risk associated with changes in fuel prices results from future procurement transactions that are subject to market price risks. The risk of changes in interest rates results from changes in the fair values of fixed-rate financing.

   Derivative financial instruments are recognized at fair value as of the balance sheet date. The positive fair values of all of the derivative financial instruments used as hedges amounted to EUR 1.2 billion as of the balance sheet date and the negative fair value amounted to EUR 0.6 billion. If the financial instruments used by the Lufthansa Group are effective hedges of future cash flows in the context of hedging relationships in accordance with the requirements of IFRS 9, changes in fair value are recognized in other comprehensive income over the duration of the hedging relationship (cash flow hedges). As of the balance sheet date, a cumulative amount of EUR 0.3 billion was recognized in other comprehensive income as effective fair value changes before income taxes (increasing equity) (EUR 0.5 billion in the cash flow hedge reserve and EUR – 0.2 billion in the cost of hedging reserve).

At the time of transitioning from hedge accounting under IAS 39 to IFRS 9 at the beginning of the financial year, the Lufthansa Group exercised the option, where possible, of implementing the transition prospectively, without restating prior-period figures. With regard to the accounting treatment of hedges with options, the transition was implemented retrospectively, restating prior-period figures, as required by the standard. As a result, fair value changes relating to options that had been recognized through profit or loss in the previous period were retrospectively transferred to the cost of hedging reserve outside profit or loss as cost of hedging.

In our view, these matters were of particular importance for our audit due to the high complexity and number of hedging transactions as well as the extensive accounting and disclosure requirements of IFRS 9 and IFRS 7.

b. We involved our internal specialists from Corporate Treasury Solutions (CTS) to assist in the audit of the accounting including the effects of the various hedging transactions on equity and profit or loss. Together with these specialists, we assessed, among other things, the internal control system with regard to derivative financial instruments, including the internal activities to monitor compliance with the hedging policy. We also assessed how the effects from transition were determined and how the prior-period figures were adjusted in relation to the initial application of IFRS 9. In our audit of the fair values, we also evaluated the measurement methods based on market data and the underlying data used. With respect to the hedging of expected future cash flows, we mainly carried out a retrospective assessment of past hedge effectiveness and an estimate of expected future hedge effectiveness, and assessed the corresponding effectiveness tests. We obtained bank confirmations in order to assess the completeness of and to examine the fair values of the recorded transactions. In doing so we were able to satisfy ourselves that, overall, the hedging transactions were appropriately accounted for and measured.

c. The disclosures on the hedging transactions as well as the impact of the initial application of IFRS 9 are contained in sections 2 and 44 of the notes to the consolidated financial statements.

5. Changes in the accounting treatment of engine overhauls

a. The Company's executive directors made changes to the accounting treatment of engine overhauls in the financial year 2018. In the Company's consolidated financial statements, material components of items of property, plant and equipment that have different useful lives are recognized and depreciated separately pursuant to IAS 16 (component approach). In the past, the component approach was applied for physical aircraft components such as seats and inflight entertainment systems, as well as for general overhauls. Due to more pronounced investment cycles for aircraft and based on the better data analyses that are now available for engine maintenance processes, large-scale engine overhauls have now also been capitalized as a separate component and depreciated over a useful life of six years since the beginning of the financial year 2018. This change improves the presentation of the Company's assets, liabilities and financial performance by reducing the extent to which the impact of maintenance work expenses on earnings fluctuates over time. In line with the provisions set out in IAS 8, the impact of this change has been applied retrospectively and the prior-period figures have been adjusted. This accounting change has reduced the "Aircraft and reserve engines" line item in the statement of financial position by EUR 609 million as of 1 January 2017 and by EUR 626 million as of 31 December 2017. Equity was reduced by EUR 475 million as of 1 January 2017 and by EUR 488 million as of 31 December 2017. The profit after income taxes deteriorated by EUR 11 million in 2017 and improved by EUR 102 million in 2018. The executive directors made various assumptions and used simplifications for the purposes of calculating, with retroactive effect, the historical cost and cumulative depreciation of engine overhaul components and aircrafts, as well as for the purposes of eliminating intercompany profits.

In our view, this matter was of particular importance for our audit due to the complexity involved in calculating, with retroactive effect, the historical cost and cumulative depreciation of engine overhaul components and aircrafts. In addition, the retrospective adjustments to the "Aircraft and reserve engines" line item, which is significant in terms of amount, are based to a large extent on estimates and assumptions made by the Company's executive directors.

b. As part of our audit, we firstly assessed whether the requirements for changing the accounting treatment of engine overhauls had been met. This also involved assessing whether the changes in accounting treatment were consistent with the requirements set out in IAS 16.

With regard to the retrospective calculation of the historical cost and cumulative depreciation of engine overhaul components and aircrafts, we evaluated the methods used and the appropriateness of the underlying estimates and assumptions. On this basis, we assessed the calculation of the impact, in terms of amount, of the retrospective change on the consolidated statement of financial position as of 1 January 2017 and as of 31 December 2017, as well as on the consolidated income statement for the financial years 2017 and 2018 and compared it, among other things, with financial information from the Group's accounts. We also assessed the elimination of intracompany profits. In addition, we evaluated the presentation of the change in accounting in the consolidated statement of financial position and the consolidated income statement, as well as the corresponding disclosures in the notes to the consolidated financial statements.

On the basis of our audit procedures, we were able to satisfy ourselves that the methods used are appropriate and that the estimates and assumptions made by the executive directors are sufficiently documented and substantiated to ensure that the retrospective change in the accounting treatment of engine overhauls is appropriate.

c. The Company's disclosures on the reasons for, and the impact of, the changes in the accounting treatment of engine overhauls are contained in section 2 of the notes to the consolidated financial statements.

Other Information
The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report:

— the statement on corporate governance pursuant to § 289f HGB and § 315d HGB included in section "Corporate Governance" of the group management report

— the corporate governance report pursuant to No. 3.10 of the German Corporate Governance Code

The other information comprises further the remaining parts of the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

— is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or

— otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report
The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management re-port that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report
Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) and supplementary compliance with the ISAs will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

— Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

— Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

— Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

— Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

— Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

— Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

— Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

— Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 8 May 2018. We were engaged by the supervisory board on 18 June 2018. We have been the group auditor of the Deutsche Lufthansa AG, Cologne, without interruption since the financial year 1955.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Eckhard Sprinkmeier.

Düsseldorf, 5 March 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Petra Justenhoven	Eckhard Sprinkmeier
Wirtschaftsprüferin	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Major subsidiaries

T198 MAJOR SUBSIDIARIES AS OF 31.12.2018

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
Network Airlines business segment			
Air Dolomiti S.p.A. Linee Aeree Regionali Europee, Dossobuono di Villafranca (Verona), Italy	100.00	100.00	
AirNavigator Ltd., Tokyo, Japan	0.00	0.00 [1]	
Air Sylph Ltd., Tokyo, Japan	0.00	0.00 [1]	
AirTrust AG, Zug, Switzerland	100.00	100.00	June
AirUtopia Ltd. Japan, Tokyo, Japan	0.00	0.00 [1]	
ALIP No. 4 Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
ALIP No. 5 Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
ALIP No. 6 Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
ALIP No. 7 Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
AUA Beteiligungen Gesellschaft m.b.H., Vienna Airport, Austria	100.00	100.00	
AUA LNR/LNS/LNT/LNU Ltd., George Town, Grand Cayman, Cayman Islands	0.00	0.00 [1]	
Aura Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Auslese Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Austrian Airlines AG, Vienna Airport, Austria	100.00	100.00	
Austrian Airlines Lease and Finance Company Ltd., Guernsey, UK	100.00	100.00	
Bayern Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Benjamin LH6 Kumiai Japan, Okayama, Japan	0.00	0.00 [1]	
Bremen Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
CASTOR Ltd., Tokyo, Japan	0.00	0.00 [1]	
Celine Leasing Co., Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dia Adler Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dia Falke Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dia Flamingo Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dia Himmel Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dia Ibis Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dia Kranich Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dia Vogel Ltd., Tokyo, Japan	0.00	0.00 [1]	
Dunkel Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Edelweiss Air AG, Kloten, Switzerland	100.00	100.00	
Eifel Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Ellen Finance 2010 S.N.C., Paris, France	0.00	0.00 [1]	
Empyrée S.A.S., Paris, France	0.00	0.00 [1]	
Evans Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
FG Honest Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
FG Unity Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
FG Vision Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
FI Beauty Leasing Ltd., Tokyo, Japan	0.00	0.00 [1]	
Fleur Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
FL Falcon Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
FL Uranus Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Gabriela Finance 2012 Limited, Dublin, Ireland	0.00	0.00 [1]	
Gina Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Global Brand Management AG, Basel, Switzerland	100.00	100.00	
Heike LH8 Kumiai Ltd., Okayama, Japan	0.00	0.00 [1]	
Helles Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Hummels Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	

T198 MAJOR SUBSIDIARIES AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
Ingrid Finance 2010 S.N.C., Paris, France	0.00	0.00 [1]	
Jour Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Lahm Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
LHBD Holding Limited, London, UK	100.00	100.00 [2]	
Lufthansa CityLine GmbH, Munich Airport	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 10, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 12, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 14, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 15, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 16, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 17, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 18, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 20, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 21, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 22, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 24, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 25, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 26, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 27, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 28, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 29, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 30, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 32, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 33, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 34, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 35, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 36, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 37, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 38, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 39, Salzburg, Austria	100.00	100.00	
Lufthansa Malta Aircraft-Leasing Ltd., St. Julians, Malta	100.00	100.00	
Lufthansa Process Management GmbH, Neu-Isenburg	100.00	100.00	
Miles & More GmbH, Neu-Isenburg	100.00	100.00	
Muller Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
NBB Cologne Lease Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
NBB Harz Lease Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
NBB Koblenz Lease Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
NBB Rhine Valley Lease LLC, Tokyo, Japan	0.00	0.00 [1]	
NBB Saxon Lease Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Nicolai LH7 Kumiai Japan, Okayama, Japan	0.00	0.00 [1]	
ÖLB Österreichische Luftverkehrs-Beteiligungs GmbH, Vienna Airport, Austria	100.00	100.00	
ÖLH Österreichische Luftverkehrs-Holding GmbH, Vienna Airport, Austria	100.00	100.00 [3]	
ÖLP Österreichische Luftverkehrs-Privatstiftung, Vienna Airport, Austria	0.00	0.00 [4]	
ORIX Himalia Corporation Ltd., Tokyo, Japan	0.00	0.00 [1]	
ORIX Miranda Corporation Ltd., Tokyo, Japan	0.00	0.00 [1]	
Schloss Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
SJ Frankfurt Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
SL Aurora Ltd., Tokyo, Japan	0.00	0.00 [1]	

T198 MAJOR SUBSIDIARIES AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
SL Prairie Ltd., Tokyo, Japan	0.00	0.00 [1]	
SL Victoria Ltd., Tokyo, Japan	0.00	0.00 [1]	
SMFL Y Lease Nin-i-Kumiai, Tokyo, Japan	0.00	0.00 [1]	
SMFL Y Lease Nin-i-Kumiai Two, Tokyo, Japan	0.00	0.00 [1]	
SMLC Crater Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Soir Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
Swiss Aviation Software AG, Basel, Switzerland	100.00	100.00	
Swiss Global Air Lines AG, Basel, Switzerland	100.00	100.00	
Swiss International Air Lines AG, Basel, Switzerland	100.00	100.00	
Sylvaner Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
TI DC Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
TI DD Leasing Co. Ltd., Tokyo, Japan	0.00	0.00 [1]	
TimBenNico Finance 2011 S.N.C., Paris, France	0.00	0.00 [1]	
Tim LH5 Kumiai Japan, Okayama, Japan	0.00	0.00 [1]	
TLC Amaryllis Ltd., Tokyo, Japan	0.00	0.00 [1]	
TLC Petunia Ltd., Tokyo, Japan	0.00	0.00 [1]	
TLC Salvia Ltd., Tokyo, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH3 Kumiai, Okayama, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH4 Kumiai, Okayama, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH9 Kumiai, Okayama, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH10 Kumiai, Okayama, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH11 Kumiai, Okayama, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH12 Kumiai, Okayama, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH13 Kumiai, Okayama, Japan	0.00	0.00 [1]	
Yamasa Aircraft LH14 Kumiai, Okoyama, Japan	0.00	0.00 [1]	
Eurowings business segment			
Brussels Airlines SA/NV, Brussels, Belgium	100.00	100.00	
Eurowings Aviation GmbH, Cologne	100.00	100.00	
Eurowings Digital GmbH, Cologne	100.00	100.00	
Eurowings Europe GmbH, Vienna Airport, Austria	100.00	100.00	
Eurowings GmbH, Dusseldorf	100.00	100.00	
Eurowings Technik GmbH, Cologne	100.00	100.00	
Germanwings GmbH, Cologne	100.00	100.00	
LeaseAir GmbH & Co. Verkehrsflugzeuge V KG, Dusseldorf	100.00	100.00	
Luftfahrtgesellschaft Walter mit beschränkter Haftung, Dortmund	100.00	100.00	
Lufthansa Asset Management Leasing GmbH, Frankfurt/Main	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 19, Salzburg, Austria	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 31, Salzburg, Austria	100.00	100.00	
SN Airholding SA/NV, Brussels, Belgium	100.00	100.00	
Logistics business segment			
Jettainer Americas, Inc., Wilmington, USA	100.00	100.00	
Jettainer GmbH, Raunheim	100.00	100.00	
Lufthansa Cargo AG, Frankfurt/Main	100.00	100.00	
Lufthansa Leasing Austria GmbH & Co. OG Nr. 50, Salzburg, Austria	100.00	100.00	
time:matters GmbH, Neu-Isenburg	100.00	100.00	
time:matters Holding GmbH, Neu-Isenburg	100.00	100.00	
time:matters Spare Parts Logistics GmbH, Neu-Isenburg	100.00	100.00	

T198 MAJOR SUBSIDIARIES AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
MRO business segment			
BizJet International Sales & Support, Inc., Tulsa, USA	100.00	100.00	
Hamburger Gesellschaft für Flughafenanlagen mbH, Hamburg	100.00	100.00	
Hawker Pacific Aerospace, Sun Valley, USA	100.00	100.00	
JASEN Grundstücksgesellschaft mbH & Co. oHG, Grünwald	100.00	50.00 [1)]	
Lufthansa Technik AERO Alzey GmbH, Alzey	100.00	100.00	
Lufthansa Technik AG, Hamburg	100.00	100.00	
Lufthansa Technik Airmotive Ireland Holdings Ltd., Dublin, Ireland	100.00	100.00	
Lufthansa Technik Airmotive Ireland Leasing Ltd., Dublin, Ireland	100.00	100.00	
Lufthansa Technik Budapest Repülögép Nagyjavító Kft., Budapest, Hungary	100.00	100.00	
Lufthansa Technik Component Services LLC, Tulsa, USA	100.00	100.00	
Lufthansa Technik Immobilien- und Verwaltungsgesellschaft mbH, Hamburg	100.00	100.00	
Lufthansa Technik Landing Gear Services UK Ltd., Kestrel Way, Hayes, UK	100.00	100.00	
Lufthansa Technik Logistik GmbH, Hamburg	100.00	100.00	
Lufthansa Technik Logistik Services GmbH, Hamburg	100.00	100.00	
Lufthansa Technik Maintenance International GmbH, Frankfurt/Main	100.00	100.00	
Lufthansa Technik Malta Limited, Luqa, Malta	92.00	92.00	
Lufthansa Technik North America Holding Corp., Tulsa, USA	100.00	100.00	
Lufthansa Technik Objekt- und Verwaltungsgesellschaft mbH, Hamburg	100.00	100.00	
Lufthansa Technik Philippines, Inc., Manila, Philippines	51.00	51.00	
Lufthansa Technik Puerto Rico LLC, San Juan, Puerto Rico	100.00	100.00	
Lufthansa Technik Shannon Limited, Claire, Ireland	100.00	100.00	
Lufthansa Technik Sofia OOD, Sofia, Bulgaria	75.10	75.10	
Catering business segment			
Aerococina S.A. de C.V., Mexico City, Mexico	100.00	100.00	
AIRO Catering Services Eesti OÜ, Tallinn, Estonia	100.00	100.00	
Airo Catering Services Latvija SIA, Marupe, Latvia	100.00	100.00	
AIRO Catering Services Sweden AB, Upplands Väsby, Sweden	100.00	100.00	
AIRO Catering Services - Ukraine, Boryspil, Ukraine	100.00	100.00	
ALMEIDA & CADIMA, LDA, Lissabon, Portugal	100.00	100.00	
Arlington Services, Inc., Wilmington, USA	100.00	100.00	
Arlington Services Mexico, S.A. de C.V., Mexico City, Mexico	100.00	100.00	
Arlington Services Panama S.A., Panama City, Panama	100.00	100.00	
AVIAPIT-SOCHI OOO, Sotschi, Russia	100.00	100.00	
Bahia Catering Ltda., São Cristóvão (Salvador), Brazil	100.00	100.00	
Belém Serviços de Bordo Ltda., CRP Belém, Brazil	70.00	70.00	
Capital Gain International (1986) Ltd., Hong Kong, China	100.00	100.00	
Caterair Servicos de Bordo e Hotelaria Ltda., Rio de Janeiro, Brazil	100.00	100.00	
Cater Suprimento de Refeicoes, Ltda., Rio de Janeiro, Brazil	100.00	100.00	
Charm Food Service Co. Ltd., Incheon, South Korea	80.00	100.00	
CLS Catering Services Ltd., Vancouver, British Columbia, Canada	70.00	70.00	
Comercializadora de Servicios Limitada, Santiago de Chile, Chile	100.00	100.00	
Comisariato de Baja California, S.A. de C.V., Tijuana, Mexico	51.00	51.00	
Comisariatos Gotre, S.A. de C.V., Torreon, Mexico	51.00	51.00	
Constance Food Group, Inc., New York, USA	100.00	100.00	
Evertaste GmbH, Alzey	100.00	100.00	
Evertaste Limited, West Drayton, UK	51.00	51.00	
Evertaste Oy, Vantaa, Finland	100.00	100.00	

T198 MAJOR SUBSIDIARIES AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
Evertaste S.r.l., Fiumicino, Italy	100.00	100.00	
Fortaleza Serviços de Bordo Ltda., Fortaleza, Brazil	70.00	70.00	
Inflight Catering (Pty) Ltd., Johannesbourg, South Africa	100.00	100.00	
Inflight Catering Services Limited, Dar es Salaam, Tansania	61.99	61.99	
International Food Services Ltd., Hong Kong, China	100.00	100.00	
Inversiones Turisticas Aeropuerto Panama, S.A., Panama City, Panama	100.00	100.00	
LSG Asia GmbH, Neu-Isenburg	100.00	100.00	
LSG Catering China Ltd., Hong Kong, China	100.00	100.00	
LSG Catering Guam, Inc., Guam, USA	100.00	100.00	
LSG Catering Hong Kong Ltd., Hong Kong, China	100.00	100.00	
LSG Catering Saipan, Inc., Saipan, Micronesia	100.00	100.00	
LSG Catering (Thailand) Ltd., Bangkok, Thailand	100.00	100.00	
LSG-Food & Nonfood Handel GmbH, Neu-Isenburg	100.00	100.00	
LSG France SAS, Paris, France	100.00	100.00	
LSG Helvetia SAS, Paris, France	100.00	100.00	
LSG Holding Asia Ltd., Hong Kong, China	86.88	80.00	
LSG Linearis S.A.S., Paris, France	100.00	100.00	
LSG Lufthansa Service Asia Ltd., Hong Kong, China	100.00	100.00	
LSG Lufthansa Service Cape Town (Pty) Ltd., Cape Town, South Africa	100.00	100.00	
LSG Lufthansa Service Catering- und Dienstleistungsgesellschaft mbH, Neu-Isenburg	100.00	100.00	
LSG Lufthansa Service Enterprises Ltd., Hong Kong, China	100.00	100.00	
LSG Lufthansa Service Europa/Afrika GmbH, Neu-Isenburg	100.00	100.00	
LSG Lufthansa Service Guam, Inc., Guam, USA	100.00	100.00	
LSG Lufthansa Service Holding AG, Neu-Isenburg	100.00	100.00	
LSG Lufthansa Service Hong Kong Ltd., Hong Kong, China	47.90	50.00 [4]	
LSG Lufthansa Service Saipan, Inc., Saipan, Micronesia	100.00	100.00	
LSG Lufthansa Service – Sky Chefs do Brasil Catering, Refeições Ltda., Guarulhos, Brazil	100.00	100.00	
LSG Sky Chefs Argentina S.A., Buenos Aires, Argentina	100.00	100.00	
LSG Sky Chefs Belgium N.V., Zaventem, Belgium	100.00	100.00	
LSG Sky Chefs Berlin GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Bremen GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Brussels International BVBA, Zaventem, Belgium	100.00	100.00	
LSG Sky Chefs Czechia spol. s.r.o., Bor, Czechia	100.00	100.00	
LSG Sky Chefs Danmark A/S, Dragør, Denmark	100.00	100.00	
LSG Sky Chefs de Venezuela C.A., Caracas, Venezuela	99.99	99.93	
LSG Sky Chefs Dusseldorf GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Europe GmbH, Neu-Isenburg	100.00	100.00	
LSG/Sky Chefs Europe Holdings Ltd., West Drayton, UK	100.00	100.00	
LSG Sky Chefs – First Catering Schweiz AG, Bassersdorf, Switzerland	60.00	60.00	
LSG Sky Chefs Frankfurt International GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Frankfurt ZD GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Hamburg GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Havacilik Hizmetleri A.S., Sefaköy-Istanbul, Turkey	100.00	100.00	
LSG Sky Chefs (India) Private Ltd., Mumbai, India	100.00	100.00	March
LSG Sky Chefs Istanbul Catering Hizmetleri A.S., Istanbul, Turkey	100.00	100.00 [6]	
LSG Sky Chefs Kenya Limited, Nairobi, Kenya	50.20	50.20	
LSG Sky Chefs Köln GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Korea Co Ltd., Incheon, South Korea	80.00	80.00	
LSG Sky Chefs Leipzig GmbH, Neu-Isenburg	100.00	100.00	

T198 MAJOR SUBSIDIARIES AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
LSG Sky Chefs Lounge GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Lounge, Inc., Wilmington, USA	100.00	100.00	
LSG Sky Chefs Malmö AB, Stockholm, Sweden	100.00	100.00	
LSG Sky Chefs München GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs New Zealand Limited, Auckland, New Zealand	100.00	100.00	March
LSG Sky Chefs Norge AS, Gardermoen, Norway	100.00	100.00	
LSG Sky Chefs North America Solutions, Inc., Wilmington, USA	100.00	100.00	
LSG Sky Chefs Objekt- und Verwaltungsgesellschaft mbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs (Qingdao) Co. Ltd., Laixi City, China	100.00	100.00	
LSG Sky Chefs RPC West GmbH, Neu-Isenburg	100.00	100.00	
LSG Sky Chefs Rus, Moscow, Russia	100.00	100.00	
LSG Sky Chefs Schweiz AG, Bassersdorf, Switzerland	100.00	100.00	
LSG Sky Chefs South Africa (Proprietary) Ltd., Johannesburg, South Africa	100.00	100.00	
LSG Sky Chefs S.p.A., Fiumicino, Italy	100.00	100.00	
LSG Sky Chefs Spain, S.A., Madrid, Spain	100.00	100.00	
LSG Sky Chefs Supply Chain Solutions, Inc., Wilmington, USA	100.00	100.00	
LSG Sky Chefs Sverige AB, Stockholm, Sweden	100.00	100.00	
LSG Sky Chefs TAAG Angola S.A., Luanda, Angola	40.00	40.00 [4)]	
LSG Sky Chefs (Thailand) Ltd., Bangkok, Thailand	100.00	100.00	
LSG Sky Chefs UK Ltd., West Drayton, UK	100.00	100.00	
LSG Sky Chefs USA, Inc., Wilmington, USA	100.00	100.00	
LSG Sky Chefs Verwaltungsgesellschaft mbH, Neu-Isenburg	100.00	100.00	
LSG South America GmbH, Neu-Isenburg	100.00	100.00	
LSG Transalpino SAS, Paris, France	100.00	100.00	
MIM IFE Limited, Dublin, Ireland	100.00	100.00	
Myanmar LSG Lufthansa Service Ltd., Yangon, Myanmar	100.00	100.00	
Natal Catering Ltda., Aeroporto São Gonçalo do Amarante, Brazil	70.00	70.00	
Oakfield Farms Solutions, L.L.C., Wilmington, Delaware, USA	100.00	100.00	
Retail In Motion Asia Limited, Hong Kong, China	100.00	100.00	
Retail in Motion GmbH, Neu-Isenburg	100.00	100.00	
Retail in Motion Latin America SpA, Santiago de Chile, Chile	100.00	100.00	
Retail in Motion Limited, Dublin, Ireland	100.00	100.00	
Retail In Motion Mexico S. de R.L. de C.V., Mexico City, Mexico	51.00	100.00	
Retail Inmotion Middle East L.L.C., Abu Dhabi, United Arab Emirates	100.00	100.00	
SC International Services, Inc., Wilmington, USA	100.00	100.00	
SCIS Air Security Corporation, Wilmington, USA	100.00	100.00	
ServCater Internacional Ltda., Guarulhos, Brazil	90.00	90.00	
Siam Flight Services Ltd., Bangkok, Thailand	49.00	66.67	
Silver Wings Bulgaria OOD, Sofia, Bulgaria	28.75	28.75 [5)]	
Sky Chefs Argentine, Inc., Wilmington, USA	100.00	100.00	
Sky Chefs Chile SpA, Santiago de Chile, Chile	100.00	100.00	
Sky Chefs De Mexico, S.A. de C.V., Mexico City, Mexico	51.00	51.00	
Sky Chefs de Panama, S.A., Panama City, Panama	100.00	100.00	
Sky Chefs, Inc., Wilmington, USA	100.00	100.00	
Sky Chefs Things Remembered Services FZE, Lagos, Nigeria	51.00	51.00	
Sky Chefs Things Remembered Services Limited, Lagos, Nigeria	51.00	51.00	
SkylogistiX GmbH, Neu-Isenburg	51.00	51.00	
Spiriant Asia Pacific Limited, Hong Kong, China	100.00	100.00	
Spiriant Bahrain Limited W.L.L., Manama, Bahrain	60.00	60.00	

T198 **MAJOR SUBSIDIARIES AS OF 31.12.2018** (continued)

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
Spiriant GmbH, Neu-Isenburg	100.00	100.00	
Supply Chain S.à.r.l., Senningerberg, Luxembourg	100.00	100.00	
Western Aire Chef, Inc., Wilmington, USA	100.00	100.00	
ZAO AeroMEAL, Yemelyanovo, Russia	100.00	100.00	
Additional Businesses and Group Functions			
AirPlus Air Travel Card Vertriebsgesellschaft mbH i.L., Vienna, Austria	100.00	100.00	
AirPlus Holding GmbH, Vienna, Austria	100.00	100.00	
AirPlus International AG, Kloten, Switzerland	100.00	100.00	
AirPlus International, Inc., Alexandria, USA	100.00	100.00	
AirPlus International Limited, London, UK	100.00	100.00	
AirPlus International S.r.l., Bologna, Italy	100.00	100.00	
AirPlus Payment Management Co. Ltd., Shanghai, China	100.00	100.00	
BCC Corporate NV/SA, Brussels, Belgium	100.00	100.00	
Crane Strategic Investment S.C.S., Grevenmacher, Luxembourg	100.00	100.00	
LHAMIH LIMITED, Dublin, Ireland	100.00	100.00	
LHAMI LEASING LIMITED, Dublin, Ireland	100.00	100.00	
LSY GmbH, Norderstedt	100.00	100.00	
Lufthansa AirPlus Servicekarten GmbH, Neu-Isenburg	100.00	100.00	
Lufthansa Asset Management GmbH, Frankfurt/Main	100.00	100.00	
Lufthansa Aviation Training Berlin GmbH, Berlin	100.00	100.00	
Lufthansa Aviation Training Germany GmbH, Frankfurt/Main	100.00	100.00	
Lufthansa Aviation Training GmbH, Hallbergmoos	100.00	100.00	
Lufthansa Aviation Training Switzerland AG, Kloten, Switzerland	100.00	100.00	
Lufthansa Commercial Holding GmbH, Frankfurt/Main	100.00	100.00	
Lufthansa Global Business Services GmbH, Frankfurt/Main	100.00	100.00	
Lufthansa Industry Solutions AS GmbH, Norderstedt	100.00	100.00	
Lufthansa Industry Solutions BS GmbH, Raunheim	100.00	100.00	
Lufthansa Industry Solutions GmbH & Co. KG., Norderstedt	100.00	100.00	
Lufthansa Leasing Austria 1. Beteiligungs GmbH, Salzburg, Austria	100.00	100.00	
Lufthansa Malta Blues LP, St. Julians, Malta	99.99	99.99	
Lufthansa Malta Corporate Finance Limited, St. Julians, Malta	100.00	100.00	
Lufthansa Malta Finance Holding Limited, St. Julians, Malta	100.00	100.00	
Lufthansa Malta Working Capital Solutions Limited, St. Julians, Malta	100.00	100.00	
Lufthansa Seeheim GmbH, Seeheim-Jugenheim	100.00	100.00	
Lufthansa Systems Americas, Inc., Irving, USA	100.00	100.00	
Lufthansa Systems GmbH & Co. KG, Raunheim	100.00	100.00	
MARDU Grundstücks-Verwaltungsgesellschaft mbH & Co. oHG, Grünwald	100.00	50.00 [1]	
MUSA Grundstücks-Verwaltungsgesellschaft mbH & Co. oHG, Grünwald	100.00	50.00 [1]	
Quinto Grundstücksgesellschaft mbH & Co. oHG, Grünwald	100.00	49.75 [1]	
TGV DLH, Dusseldorf	100.00	100.00	

[1] Fully consolidated structured entity in accordance with IFRS 10.
[2] The Companies House registration number is: 06939137.
[3] 50.20% of the equity stakes and voting rights are attributed via ÖLP.
[4] Management responsibility for the company lies with the Group.
[5] 28.75% equity shares and voting rights are attributed via a call option.
[6] 33.34% of the equity stakes and 50.01% voting rights are attributed via a call option.

T199 MAJOR JOINT VENTURES AS OF 31.12.2018[1]

Name, registered office	Equity stake in %	Voting share in %	Different reporting period
Network Airlines business segment			
Terminal 2 Gesellschaft mbH & Co oHG, Munich Airport	40.00	40.00	
Eurowings business segment			
Günes Ekspres Havacilik Anonim Sirketi (Sun Express), Antalya, Turkey	50.00	50.00	
Logistics business segment			
Shanghai Pudong International Airport Cargo Terminal Co. Ltd., Shanghai, China	29.00	22.22	
MRO business segment			
EME Aero Sp. z o.o., Jasionka, Poland	50.00	50.00	
Lufthansa Bombardier Aviation Services GmbH, Schönefeld	51.00	51.00	
N3 Engine Overhaul Services GmbH & Co. KG, Arnstadt	50.00	50.00	
Spairliners GmbH, Hamburg	50.00	50.00	
XEOS Sp. z o.o., Warsaw, Poland	51.00	50.00	
Catering business segment			
Alpha LSG Limited, Manchester, UK	50.00	50.00	
Additional Businesses and Group Functions			
Diners Club Spain S.A., Madrid, Spain	25.00	25.00	

T200 JOINT OPERATIONS AS OF 31.12.2018[2]

Aerologic GmbH, Leipzig	50.00	50.00	

T201 MAJOR ASSOCIATED COMPANIES AS OF 31.12.2018[1]

MRO business segment			
Aircraft Maintenance and Engineering Corp., Beijing, China	25.00	28.57	
HEICO Aerospace Holdings Corp., Florida, USA	20.00	20.00	
Catering business segment			
CateringPor – Catering de Portugal, S.A., Lissabon, Portugal	49.00	49.00	
Cosmo Enterprise Co. Ltd., Narita City, Japan	20.00	20.00	March
Gansu HNA LSG Sky Chefs Co., Ltd., Lanzhou, China	49.00	40.00	
Hongkong Beijing Air Catering Ltd., Hong Kong, China	45.00	40.00	
Hongkong Shanghai Air Catering Ltd., Hong Kong, China	45.00	40.00	
Inflite Holdings (Cayman) Ltd., Grand Cayman, Cayman Islands	49.00	49.00	September
Inflite Holdings (St. Lucia) Ltd., Castries, St. Lucia	49.00	49.00	September
Nanjing Lukou International Airport LSG Catering Co. Ltd., Nanjing, China	40.00	40.00	
Tolmachevo Catering OOO, Novosibirsk, Russia	26.00	26.00	
Wenzhou Longwan International Airport LSG Sky Chefs Co. Ltd., Wenzhou City, China	40.00	40.00	
Xian Eastern Air Catering Co. Ltd., Xian, China	30.00	28.57	
Yunnan Eastern Air Catering Co. Ltd., Kunming, China	24.90	28.57	
ZAO Aeromar, Moscow region, Russia	49.00	49.00	

[1] Accounted for using the equity method.
[2] Included on a pro rata basis in accordance with IFRS 11.

Miscellaneous equity investments

T202 MISCELLANEOUS EQUITY INVESTMENTS AS OF 31.12.2018

Name, registered office	Equity stake in %	Voting share in %
Subsidiaries, not consolidated		
ACS Aircontainer Services Gesellschaft m.b.H., Fischamend, Austria	100.00	100.00
AIRBEL N.V./S.A., Brussels, Belgium	50.50	50.50
Air Dolomiti Deutschland GmbH, Munich	100.00	100.00
Airline Marketing Services India Private Limited, Mumbai, India	100.00	100.00
AirPlus International Soluções de Pagamento Limitada, São Paulo, Brazil	100.00	100.00
Airport Services Dresden GmbH, Dresden	100.00	100.00
Airport Services Friedrichshafen GmbH, Friedrichshafen	100.00	100.00
Airport Services Leipzig GmbH, Schkeudiz	100.00	100.00
Albatros Service Center GmbH, Cologne	100.00	100.00
Albatros Versicherungsdienste GmbH, Cologne	100.00	100.00
Aviation Quality Services GmbH, Frankfurt/Main	100.00	100.00
Austrian Airlines Technik-Bratislava, s.r.o., Bratislava, Slovakia	100.00	100.00
Austrian Airlines Tele Sales & Service GmbH, Innsbruck, Austria	100.00	100.00
Avionic Design GmbH, Hamburg	100.00	49.00
Cargo Future Communications (CFC) GmbH, Büchenbeuren	65.00	65.00
Caterair Portugal – Assistencia A Bordo, Lda., Sacavém, Portugal	100.00	100.00
CB Customs Broker GmbH, Kelsterbach	100.00	100.00
Crossair AG, Basel, Switzerland	100.00	100.00
Customs Broker Cargo Handling GmbH, Mörfelden-Walldorf	100.00	100.00
Delvag Versicherungs-AG, Cologne	100.00	100.00
Deutsche Lufthansa Unterstützungswerk GmbH, Frankfurt/Main	100.00	100.00
DLH Fuel Company mbH, Hamburg	100.00	100.00
DLH Malta Pension Ltd., St. Julians, Malta	100.00	100.00
DLH Malta Transition Limited, St. Julians, Malta	100.00	100.00
eTP GmbH, Frankfurt/Main	100.00	100.00
EW Beteiligungs- und Verwaltungsgesellschaft mbH, Dusseldorf	100.00	100.00
FLYdocs Inc., Delaware, USA	0.00	100.00
FLYdocs Systems India Private Ltd., Vadodara, India	100.00	100.00
FLYdocs Systems Limited, Staffordshire, UK	100.00	100.00
FLYdocs Systems (MIDCO) Limited, Staffordshire, UK	100.00	100.00
Flydocs Systems (TOPCO) Limited, Staffordshire, UK	100.00	100.00
Gen2 Systems Limited, Tamworth, UK	100.00	100.00
GERANOS Grundstücksgesellschaft mbH & Co. IMMOBILIEN KG, Cologne	85.00	100.00
German-American Aviation Heritage Foundation, Washington, USA	100.00	100.00
Global Load Control (PTY) LTD, Cape Town, South Africa	100.00	100.00
Global Tele Sales Brno s.r.o., Brno, Czechia	100.00	100.00
Global Tele Sales Ltd., Contaf, Dublin, Ireland	100.00	100.00
Global Telesales of Canada, Inc., Peterborough, Canada	100.00	100.00
Global Tele Sales (PTY) Ltd., Cape Town, South Africa	100.00	100.00
handling counts GmbH, Frankfurt/Main	100.00	100.00
help alliance gGmbH, Frankfurt/Main	100.00	100.00
Hinduja Lufthansa Cargo Holding B.V., Amsterdam, Netherlands	100.00	100.00
IBYKUS-KG THG Grundbuchtreuhandgesellschaft mbH & Co., Cologne	85.00	88.14
IND Beteiligungs GmbH, Raunheim	100.00	100.00
In-Flight Management Solutions Latin America, S.A. de C.V., Mexico City, Mexico	100.00	100.00
Korongo Air SPRL i.L., Lubumbashi Airport, Congo	40.40	80.00
LCAG Malta Pension Ltd., St. Julians, Malta	100.00	100.00
LCAG Malta Transition Limited, St. Julians, Malta	100.00	100.00
LCH Grundstücksgesellschaft Berlin mbH, Frankfurt/Main	100.00	100.00

T202 MISCELLANEOUS EQUITY INVESTMENTS AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %
LGSP Lufthansa Ground Service Portugal, Unipessoal Lda., Maia/Oporto, Portugal	100.00	100.00
LHT Malta Pension Ltd., St. Julians, Malta	100.00	100.00
LSG Malta Pension Ltd., St. Julians, Malta	100.00	100.00
LSI Malta Pension Ltd., St. Julians, Malta	100.00	100.00
Lufthansa Aviation Training Austria GmbH, Vienna Airport, Austria	100.00	100.00
Lufthansa Aviation Training Crew Academy GmbH, Frankfurt/Main	100.00	100.00
Lufthansa Aviation Training Operations Germany GmbH, Berlin	100.00	100.00
Lufthansa Aviation Training Pilot Academy GmbH, Frankfurt/Main	100.00	100.00
Lufthansa Aviation Training USA Inc., Goodyear, USA	100.00	100.00
Lufthansa Blues Beteiligungs GmbH, Frankfurt/Main	100.00	100.00
Lufthansa Cagri Merkezi ve Müsteri Hizmetleri A.S., Istanbul, Turkey	100.00	100.00
Lufthansa Cargo India (Priv) Ltd., New Delhi, India	100.00	100.00
Lufthansa Cargo Servicios Logisticos de Mexico, S.A. de C.V., Mexico City, Mexico	100.00	100.00
Lufthansa City Center International GmbH, Frankfurt/Main	50.00	50.00
Lufthansa Consulting Brasil Ldta., Rio de Janeiro, Brazil	99.90	99.90
Lufthansa Consulting GmbH, Frankfurt/Main	100.00	100.00
Lufthansa Consulting Managementbeteiligungs GmbH & Co. KG i.L., Cologne	79.01	79.01
Lufthansa Engineering and Operational Services GmbH, Frankfurt/Main	100.00	100.00
Lufthansa Global Business Services Hamburg GmbH, Hamburg	100.00	100.00
Lufthansa Global Business Services Ltd., Bangkok, Thailand	100.00	100.00
Lufthansa Global Business Services S.A. de C.V., Mexico City, Mexico	100.00	100.00
Lufthansa Global Business Services Sp. z o.o., Krakow, Poland	100.00	100.00
Lufthansa Global Tele Sales GmbH, Berlin	100.00	100.00
Lufthansa Industry Solutions TS GmbH, Oldenburg	100.00	100.00
Lufthansa Innovation Hub GmbH, Berlin	100.00	100.00
Lufthansa International Finance (Netherlands) N.V., Amsterdam, Netherlands	100.00	100.00
Lufthansa Job Services Norderstedt GmbH, Norderstedt	100.00	100.00
Lufthansa Malta Blues General Partner GmbH & Co. KG, Frankfurt/Main	100.00	100.00
Lufthansa Malta Pension Holding Ltd., St. Julians, Malta	100.00	100.00
Lufthansa Pension Beteiligungs GmbH, Frankfurt/Main	100.00	100.00
Lufthansa Pension GmbH & Co. KG, Frankfurt/Main	100.00	100.00
Lufthansa Services Philippines, Inc., Manila, Philippines	100.00	100.00
Lufthansa Services (Thailand) Ltd., Bangkok, Thailand	100.00	100.00
Lufthansa Super Star gemeinnützige Gesellschaft mit beschränkter Haftung, Berlin	100.00	100.00
Lufthansa Systems 25. GmbH, Raunheim	100.00	100.00
Lufthansa Systems Asia Pacific Pte. Ltd., Singapore, Singapore	100.00	100.00
Lufthansa Systems FlightNav AG, Opfikon, Switzerland	100.00	100.00
Lufthansa Systems Hungaria Kft, Budapest, Hungary	100.00	100.00
Lufthansa Systems Poland sp. z o.o., Danzig, Poland	100.00	100.00
Lufthansa Systems Verwaltungs GmbH, Raunheim	100.00	100.00
Lufthansa Technical Training GmbH, Hamburg	100.00	100.00
Lufthansa Technik Brussels N.V., Steenokkerzeel-Melsbroek, Belgium	100.00	100.00
Lufthansa Technik Component Services Asia Pacific Limited, Hong Kong, China	100.00	100.00
Lufthansa Technik Intercoat GmbH, Kaltenkirchen	51.00	51.00
Lufthansa Technik Logistik of America LLC, New York, USA	100.00	100.00
Lufthansa Technik Middle East FZE, Dubai, United Arab Emirates	100.00	100.00
Lufthansa Technik Milan s.r.l., Somma Lombardo (VA), Italy	100.00	100.00
Lufthansa Technik Services India Private Limited, New Delhi, India	100.00	100.00
Lufthansa Technik Shenzhen Co. Ltd., Shenzhen, China	80.00	80.00
Lufthansa Technik Turbine Shannon Limited, Shannon, Ireland	100.00	100.00
Lufthansa Technik Vostok Services OOO, Moscow, Russia	100.00	100.00

T202 MISCELLANEOUS EQUITY INVESTMENTS AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %
Lufthansa UK Pension Trustee Limited, West Drayton, Middlesex, UK	100.00	100.00
LZ-Catering GmbH, Hamburg	100.00	100.00
Malta Pension Investments, St. Julians, Malta	0.00	100.00
Maptext, Inc., Princeton, USA	100.00	100.00
Marriott Export Services, C.A., Caracas, Venezuela	99.99	100.00
Marriott International Trade Services, C.A., Caracas, Venezuela	99.99	100.00
Quinto Grundstücks-Verwaltungsgesellschaft mbH, Grünwald	94.80	94.80
Reservation Data Maintenance India Private Ltd., New Delhi, India	51.00	51.00
Retail inMotion Asia Pacific Limited, Hong Kong, China	100.00	100.00
Servicios Complementarios de Cabina, S.A. de C.V., Mexico City, Mexico	51.88	99.80
Shared Services International India Private Limited, Gurgaon, India	100.00	100.00
Shared Services International, Singapore PTE. LTD, Singapore, Singapore	100.00	100.00
Skeyos GmbH, Hamburg	100.00	100.00
Star Risk Services Inc., Southlake, USA	100.00	100.00
Swiss European Air Lines AG, Kloten, Switzerland	100.00	100.00
Swiss WorldCargo (India) Private Limited, Mumbai, India	100.00	100.00
TATS – Travel Agency Technologies & Services GmbH, Frankfurt/Main	100.00	100.00
THG Grundbuchtreuhandgesellschaft mbH, Cologne	85.00	85.00
time:matters Asia Pacific Pte. Ltd., Singapore, Singapore	100.00	100.00
time:matters Austria GmbH, Vienna Airport, Austria	100.00	100.00
time:matters Belgium BVBA, Mechelen, Belgium	100.00	100.00
time:matters GmbH, Zurich, Switzerland	100.00	100.00
time:matters Netherlands B.V., Luchthaven Schiphol, Netherlands	100.00	100.00
VPF Malta Pension Ltd., St. Julians, Malta	100.00	100.00
Yilu Travel Services GmbH, Berlin	100.00	100.00
ZeroG GmbH, Raunheim	100.00	100.00
Other equity investments		
3D.aero GmbH, Hamburg	50.00	50.00
Aeroxchange Ltd., Wilmington, USA	9.46	9.46
AFS Aviation Fuel Services GmbH, Hamburg	33.33	33.33
Airfoil Services Sdn. Bhd., Kuala Lumpur, Malaysia	50.00	50.00
Airmail Center Frankfurt GmbH, Frankfurt/Main	40.00	40.00
ATLECON Fuel LLC, Atlanta, USA	11.11	11.11
AviationPower GmbH, Hamburg	49.00	49.00
Beijing Lufthansa Center Co. Ltd., Beijing, China	11.23	12.50
Berlin Fuelling Services GbR, Berlin	12.50	12.50
Cargo One GmbH, Berlin	15.69	15.69
Chelyabinsk Catering Service OOO, Chelyabinsk, Russia	26.00	26.00
CommuniGate Kommunikationsservice GmbH, Passau	50.00	50.00
Düsseldorf Fuelling Services (DFS) GbR, Dusseldorf	33.33	33.33
EFM – Gesellschaft für Enteisen und Flugzeugschleppen am Flughafen München mbH, Freising	51.00	51.00
Egyptian Aviation Services Company (S.A.E.), Cairo, Egypt	5.83	5.83
Entebbe Handling Services limited (ENHAS), Entebbe, Uganda	5.00	5.00
FFS Frankfurt Fuelling Services (GmbH & Co.) OHG, Hamburg	33.33	33.33
Finairport Service S.r.l. i.L., Turin, Italy	36.00	36.00
Fleet Logistics Inc., Wilmington, USA	18.33	18.33
Flight Training Alliance GmbH, Frankfurt/Main	50.00	50.00
Flughafen Düsseldorf Tanklager GmbH, Dusseldorf	20.00	20.00
Flughafen München Baugesellschaft mbH, Munich Airport	40.00	40.00
FraCareServices GmbH, Frankfurt/Main	49.00	49.00
FSH Flughafen Schwechat-Hydranten-Gesellschaft Gmbh & Co OG, Vienna Airport, Austria	14.29	14.29

T202 MISCELLANEOUS EQUITY INVESTMENTS AS OF 31.12.2018 (continued)

Name, registered office	Equity stake in %	Voting share in %
GOAL German Operating Aircraft Leasing GmbH, Munich	40.00	40.00
GOAL German Operating Aircraft Leasing GmbH & Co. KG, Grünwald	40.00	39.99
Guangzhou Baiyun International Airport LSG Sky Chefs Co. Ltd., Guangzhou, China	30.00	28.57
Gulf International Caterers, W.L.L., Bahrain, Bahrain	49.00	49.00
Hangzhou Xiaoshan Airport LSG Air Catering Co. Ltd., Hangzhou, China	25.00	28.57
Hydranten-Betriebs OHG, Frankfurt/Main	49.00	20.00
Idair GmbH, Hamburg	50.00	50.00
INAIRVATION GmbH, Edlitz-Thomasberg, Austria	50.00	50.00
Jade Cargo International Company Limited i.L., Shenzhen, China	25.00	28.57
LSG Gate Gourmet Paris S.A.S. i.L., Roissy, France	50.00	50.00
LSG Sky Chefs Catering Egypt S.A.E., Cairo, Egypt	15.00	15.00
Luftfahrzeugverwaltungsgesellschaft GOAL mbH, Grünwald	40.00	40.00
Lufthansa HNA Technical Training Co. Ltd., Meilan Airport, Hainan, China	50.00	1.00
Lufthansa Leasing GmbH, Grünwald	49.00	49.00
Lumics GmbH & Co. KG, Hamburg	50.00	50.00
Lumics Verwaltungs GmbH, Hamburg	50.00	0.00
N3 Engine Overhaul Services Verwaltungsgesellschaft mbH, Hamburg	50.00	50.00
SAEMS Special Airport Equipment and Maintenance Services GmbH & Co. KG, Hamburg	40.00	40.00
S.A.E.M.S. Verwaltungs-GmbH, Hamburg	40.00	40.00
Sanya LSG Air Catering Co. Ltd., Sanya, China	45.00	40.00
SCA Schedule Coordination Austria GmbH, Vienna Airport, Austria	25.00	25.00
Shenzhen Airport International Cargo Terminal Company Limited, Shenzhen, China	50.00	50.00
Sichuan Airlines LSG Air Catering Co. Ltd., Chengdu, China	40.00	40.00
Sky Chefs for Airlines Catering Company, Tripolis, Lybia	44.50	44.50
STARS Special Transport and Ramp Services GmbH & Co. KG, Hamburg	49.00	49.00
S.T.A.R.S. Verwaltungs-GmbH, Hamburg	49.00	49.00
Tanklager-Gesellschaft Tegel GbR, Berlin	12.50	12.50
Terminal One Group Association, L.P., New York, USA	24.75	0.00
Terminal One Management Inc., New York, USA	25.00	25.00
THBG BBI GmbH, Schönefeld	46.45	46.45
Turbo Fuel Services Sachsen (TFSS) GbR, Hamburg	20.00	20.00
UBAG Unterflurbetankungsanlage Flughafen Zürich AG, Rümlang, Switzerland	12.00	12.00
Universal Air Travel Plan, Inc., Washington, USA	5.26	5.26
Verimi GmbH, Frankfurt/Main	6.06	6.06
Xinjiang HNA LSG Sky Chefs Co. Ltd., Urumqi, China	49.00	40.00
Zentrum für Angewandte Luftfahrtforschung GmbH, Hamburg	20.00	20.00

COMBINED NON-FINANCIAL REPORT

This combined non-financial report is based on the Sustainability Reporting Standards of the Global Reporting Initiative (GRI Standards 2016). This information relates to the disclosures displayed in the overview on ↗ **p. 226.** Extensive reporting on non-financial subjects can also be found in the **Annual sustainability report "Balance",** which includes a GRI table of contents. **www.lufthansagroup.com/en/responsibility.html**

Combined non-financial report

Lufthansa Group intends to fulfil its role as a leading player in the aviation industry, also in terms of sustainability. | Corporate responsibility is an integral part of the corporate culture. | The combined non-financial report focuses on the aspects of environmental concerns, customer concerns, employee concerns, anti-corruption and bribery, human rights, social concerns and sustainability in the supply chain as an interdisciplinary topic. | Report is based on the GRI Standards 2016.

About this combined non-financial report

In accordance with CSR Directive Implementation Act (CSR-Richtlinie-Umsetzungsgesetz – CSR-RUG) passed on 19 April 2017, Deutsche Lufthansa AG is again publishing a separate combined non-financial report for the financial year 2018 in accordance with Sections 315b and 315c German Commercial Code (HGB) in conjunction with Sections 289b to 289e HGB. Deutsche Lufthansa AG publishes a separate non-financial report at Company level and a separate non-financial Group report together as a combined non-financial report. It combines aspects and reporting on the following key issues: environmental concerns, customer concerns, employee concerns, anti-corruption and bribery, human rights, social concerns and sustainability in the supply chain as an interdisciplinary topic. In addition, measures and initiatives taken by the Lufthansa Group that demonstrate the Company's wide-ranging commitment to corporate responsibility are described in the combined management report. References to these passages are made in this report.

In its Group risk management system, the Lufthansa Group takes into consideration impacts from non-financial factors and circumstances. ↗ **Opportunities and risk report, p. 61ff.**

Taking into account the measures and concepts described and using the net method, there are currently no indications of risks that would have a severe negative impact on these aspects and that are highly likely to occur. This applies to the Lufthansa Group and also to its supply chain.

Unless otherwise stated, the disclosures made here relate to the group of consolidated companies referred to in the consolidated financial statements. Unless stated otherwise, the disclosures reflect the perspective of both the Group and Deutsche Lufthansa AG. In the reporting year, the Audit Committee looked at the combined non-financial report in great detail and conducted a preliminary review of the report. Furthermore, the Audit Committee commissioned an independent auditor to review the report. This combined non-financial report was subject of a voluntary limited assurance engagement in accordance with ISAE 3000 (revised). ↗ **Independent Practitioner's Report on a Limited Assurance Engagement on Non-Financial Reporting, p. 227f.**

References to disclosures outside the combined management report are additional information and do not form part of the combined non-financial report.

Disclosures on the business model

The Lufthansa Group is a global aviation group with a total of more than 550 subsidiaries and equity investments. The business model of the Lufthansa Group is described in detail in the combined management report. ↗ **Principles of the Group, p. 13ff.**

Sustainability is firmly established within the Company

Responsible conduct in compliance with legislation is a key element of the Lufthansa Group's corporate culture and the principles of its day-to-day work. Since 2002, the Company has applied the principles of the UN Global Compact for sustainable and responsible corporate governance. In addition, it supports the Sustainable Development Goals (SDGs) of the Agenda 2030, as adopted by the UN member states in 2015.

A binding Code of Conduct was introduced in 2017 and refined in 2018 for all bodies, managers and employees of the Lufthansa Group in order to perpetuate the corporate culture of trust and integrity. The Code of Conduct was implemented and improved upon in order to secure the

Company's sustainable success. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/code-of-conduct.html.** The standards at its core are not only the basis for responsible conduct and fair competition, but also seek to identify and avoid legal and reputational risks. The Lufthansa Group also expects compliance with these standards from its business partners and suppliers.

The Lufthansa Group's commitment to sustainability is demonstrated by its climate score of "B" from the international non-profit rating organisation CDP (previous year: "A–") and so is in the management band.

Since 2015, the Group has also been part of the MSCI Global Sustainability Index prepared by MSCI, a US index provider. It tracks companies that are particularly committed to environmental, social and governance (ESG) issues.

The highest monitoring body in the area of sustainable management is the Supervisory Board. Coordinating and developing activities related to sustainability is the task of the Corporate Responsibility Council (CRC), which is chaired by the Head of Group Strategy and reports to the Chairman of the Executive Board. The CRC was established at senior management level and consists of the heads of the Group's Strategy, Policy (Environmental Concepts), Investor Relations, Controlling, Legal, HR, Communications and Corporate Sourcing departments. Individual managers are responsible for implementing concrete activities and projects.

Materiality analysis forms basis for identifying material aspects

Continuous dialogue with stakeholders delivers an important contribution to refining the sustainability strategy of the Lufthansa Group. In October 2018, another wide-ranging stakeholder survey was carried out among customers, employee, neighbours, investors, business partners, policymakers and representatives of NGOs. In addition to approaching approximately 10,000 external individuals personally, the survey was made available to a broad public by means of postings on the Company website and social media channels.

The findings of the stakeholder survey were analysed by management particularly in terms of the materiality criteria defined in Section 289c Paragraph 3 HGB, i.e. to determine which aspects are material for understanding the course of business, the financial results and the position of the Lufthansa Group, as well as their effects on the aspects of sustainability. The result of this materiality analysis forms the basis for selecting the aspects and circumstances described in this combined non-financial report.

Environmental concerns, customer concerns and employee concerns are particularly important for the business of the Lufthansa Group. Existing flight operations are not possible without kerosene and so without CO_2 and noise emissions. As a service company, the financial success of the Lufthansa Group also depends largely on the satisfaction of its customers and on the dedication and motivation of its employees. Furthermore, the materiality analysis shows that the fight against corruption and bribery, respect for human rights and a sustainable supply chain are of great relevance to the Lufthansa Group.

Value-based management is also an integral element of sustainable corporate governance for the Lufthansa Group. The concept and the associated performance indicators are described in detail in the chapter **↗ Financial strategy and value-based management, p. 16ff.**

C29 ASPECTS, ISSUES AND PERFORMANCE INDICATORS

Environmental concerns	Customer concerns	Employee concerns	Fighting corruption and bribery	Respect for human rights	Social concerns [1]
Climate protection CO_2 emissions	**Operational stability** Departure punctuality	**Attractiveness as an employer** Engagement Index	Integral part of the Lufthansa Group Compliance Management System	Important part of the corporate culture – embedded in the Code of Conduct	**Corporate citizenship** help alliance gGmbH
Active noise abatement Percentage of aircraft that meet the 10dB criterion of ICAO Chapter 4	**Product and services** Customer satisfaction level	**Transformation capacity**			
		Health and safety at work Health Index			

Sustainability in the supply chain: interdisciplinary topic, qualitative representation with its own chapter in the non-financial report

[1] Immaterial as defined in Section 289c Paragraph 3 German Commercial Code (HGB), voluntary presentation at specific request of addressees.

Environmental concerns

Concepts

Climate protection and active noise protection are cornerstones of the environmental strategy
Global aviation is a growth industry and for the foreseeable future, it will continue to require the use of fossil fuels and alternative liquid fuels with a corresponding energy density. The material environmental impacts of flight operations are therefore primarily climate effects due to the CO_2 emissions produced by burning kerosene and the noise caused by aircraft taking off and landing.

For many years, the Lufthansa Group has taken steps to minimise the environmental impact of its business operations. This is consistent with its economic interests, since fuel consumption, the purchase of CO_2 certificates and noise-related fees all represent costs for the Company.

The Lufthansa Group therefore has a strategic environmental programme that is applied in all areas of the Group – from operations and technical maintenance to purchasing, facility management and administration.

Its main fields of action are the reduction of emissions, active noise abatement, energy and resource management, investment in research and the successive establishment of environmental management systems.

In the reporting year, the environmental management system at Deutsche Lufthansa AG in Munich was validated in accordance with EMAS and certified compliant with ISO 14001 for the first time. The Lufthansa Technik sites in Tulsa/Oklahoma, Frankfurt/Osthafen and London/Hayes, also had their environmental management systems certified compliant with ISO 14001 for the first time. The engine overhaul plants being established in Wroclaw (XEOS) and Jasionka (EME Aero) are preparing for certification in 2019 and 2020 respectively. Lufthansa Cargo, Lufthansa CityLine and one LSG group site have a certified environmental management system. This demonstrates that they voluntary undertake to work systematically to improve their own environmental performance and to document it credibly to external stakeholders.

Environmental activities are coordinated and managed
The Environmental Issues department reports to the Chairman of the Executive Board and CEO and is responsible for defining, coordinating and determining overarching objectives and measures for the Lufthansa Group regarding the environment. In addition, all larger subsidiaries have their own environmental departments, an environmental officer or a coordinator. The environmental officers and coordinators meet once a year for the Group Environmental Forum. This platform offers the environmental experts in the Lufthansa Group an opportunity to identify potential synergies and to discuss and evaluate new ideas, activities and projects concerned with environmental protection. New and planned legislation and its effects on the Lufthansa Group are also discussed.

For many years, the Lufthansa Group has operated a central environmental database to collect and process relevant information, such as information on CO_2 emissions, and to use it as a relevant factor in commercial decisions.

CLIMATE PROTECTION

Targets

Lufthansa Group supports climate protection goals of the aviation sector
According to the International Energy Agency (IEA), air traffic currently accounts for around 2.7% of anthropogenic CO_2 emissions, making them one of the industry's principal effects on the environment. Given that demand for mobility is predicted to keep growing, air traffic and so emissions will continue to increase in the future. The aviation sector has responded to this and in 2009 agreed on the following global targets:

1. Fuel efficiency (i.e. fuel consumption per revenue tonne-kilometre) is to be improved by 1.5% per year until 2020.
2. Growth in air traffic should be CO_2 neutral from 2020 onwards.
3. By 2050, air traffic's net CO_2 emissions are to decline by 50% compared with 2005.

The Lufthansa Group was closely involved in this and shares the industry's aims of improving fuel efficiency (in terms of cargo tonne kilometres) by 1.5% per year until 2020, to make its transport growth CO_2 neutral from 2020 and to reduce its net CO_2 emissions by 50% compared with 2005 by the year 2050. The steps that the Lufthansa Group has taken in this context and directly implemented in 2018 are described below. The Lufthansa Group also took part in various working groups at the International Air Transport Association (IATA), such as the Environmental Committee and the Industry Affairs Committee, and has a seat on the Board of Governors.

Measures

Four-pillar strategy defines climate protection measures

The targets mentioned above are to be met by combining various activities of different players, such as manufacturers, airports, air traffic control, airlines and policymakers. At the IATA General Meeting in 2007, they were formulated as the four-pillar climate protection strategy for the air transport industry. This strategy also forms the basis of the fuel efficiency activities at the Lufthansa Group.

1. TECHNOLOGICAL PROGRESS

The most important driver for reducing CO_2 emissions from flight operations is investing continuously in modern, particularly fuel-efficient aircraft and engine technologies. In 2018, the airlines in the Lufthansa Group took delivery of 29 new aircraft. Six more Airbus A350-900 went into service, for instance, whose emissions are around 25% lower than those of comparable aircraft types.

By the end of 2025, the Lufthansa Group should receive 193 new aircraft, which are characterised primarily by their low fuel consumption and noise emissions. ↗ **Fleet, p. 20f.**

The Lufthansa Group has also been involved in researching and using alternative fuels in air transport for many years. This includes the research project “airegEM”, which aims to reduce emissions of particulate matter and is sponsored by the Federal Ministry of Economics and Energy. In this context, the project burnt biofuel free from aromatic compounds (ATJ-SPK), which had not previously been mixed with the fossil fuel kerosene, in an engine taken out of normal flight operations and measured the resulting emissions. For particulate matter under ground conditions, the mass of the particles was reduced by up to 50% when a complete flight mission was calculated. In 2018, the Lufthansa Group took part in another cross-sector initiative. It aims to launch and build an international alliance to develop the future strategic importance of synthetic renewable energy sources (PtL – power to liquid), to jointly advance a global market for these energy sources and to accelerate their market development.

2. IMPROVED INFRASTRUCTURE

According to figures from EUROCONTROL, better organisation of European air traffic control systems and authorities, with the aim of creating a single European airspace, would enable airlines to make fuel savings of up to 10% in the European airspace and reduce their CO_2 emissions accordingly. The EU Single European Sky (SES) initiative is intended to realise this. Several legislative packages have already been adopted within this framework. The Lufthansa Group explicitly supports the efforts of the EU and campaigns via the European airline association Airlines for Europe (A4E) for the creation of a dependable and efficient European airspace.

A key milestone for achieving a Single European Sky is the harmonisation and modernisation of the European aviation infrastructure, for which the European Commission has set up the SESAR programme (Single European Sky ATM Research).

SESAR is to develop, test and implement Europe-wide new technologies, procedures and standards that contribute to harmonising and optimising European air traffic management. The Lufthansa Group supports SESAR with the clear expectation that measurable operational improvements in air traffic management are implemented. The aim is to generate direct benefits for customers and the environment and to sustainably reduce air traffic control costs. The implementation of these technologies in daily operations is jointly coordinated by the members of the industry consortium SESAR Deployment Manager (SDM). The Lufthansa Group is a member of this consortium and provides local experts.

Across Europe, the SDM currently coordinates 349 projects. The various airlines in the Lufthansa Group and Lufthansa Systems are also actively involved as IT providers for SESAR research and demonstration projects.

C30 THE FOUR PILLARS FOR ENVIRONMENTAL PROTECTION

Technological progress	Improved infrastructure	Operational measures	Economic measures
Innovation in aircraft and engine technology Alternative fuels	Better use of airspace Needs-based airport infrastructure	Efficient aircraft sizes Optimum flight routes and speeds Optimised processes on the ground	A sensible, global, market-based system of emissions reduction to complement the other three pillars

3. OPERATIONAL MEASURES

The Lufthansa Group's operational measures include the deployment of efficiently sized aircraft, improvements to load factors, testing and introduction of new flight procedures, as well as the determination of optimal flight routes and flight speeds. In the SESAR demonstration "Augmented Approaches to Land-2" (AAL2), current navigation methods are optimised to achieve more efficient approaches with lower emissions. Then there are programmes to sustainably reduce weight and make greater use of flight operating data and software, as well as more efficient ground processes that contribute to reducing kerosene consumption.

A systemic approach is increasingly taken to realise further efficiency gains at the interfaces to system partners such as airports or air traffic control, which includes the system partners in the analysis and definition of activities.

So, in the reporting year, the project EMAS 1 (Early Morning Arrival Stream Frankfurt), in cooperation with DFS Deutsche Flugsicherung GmbH, achieved a more predictable, even and so more efficient arrival stream into Frankfurt Airport in the period from 5.00 a.m. to 6.00 a.m.

The efficiency gains that this delivered also led to a reduction in CO_2 emissions. In EMAS Phase 2, a second demonstration is due to take place in 2019 as part of the European SESAR project xStream, which will be highly automated and include more airlines in Frankfurt.

In financial year 2018, 21 fuel-saving projects were under way across the Group. These projects comprise activities relating to performance and procedures, weight reduction, flight route optimisation and technical developments. In addition to the reductions achieved in 2017, they made it possible to permanently avoid another 24.3 thousand tonnes of CO_2 emissions in the reporting year. The quantity of kerosene saved amounted to around 9.6 million litres – this is equivalent to approximately 90 return flights between Munich and New York with an A350-900 aircraft.

4. ECONOMIC MEASURES

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which was concluded with the International Civil Aviation Organization (ICAO) in October 2016, seeks to offset growth-related CO_2 emissions in international air traffic using climate protection projects from 2021 onwards. From 2021, the Lufthansa Group will therefore have to pay carbon offsetting costs for the increase in CO_2 emissions from international flights, to the extent that it is not possible to limit these emissions to the required extent.

The EU Emissions Trading Scheme for air traffic has managed and limited CO_2 emissions by way of certificate trading since 2012. All flights carried out by the Lufthansa Group within the European Economic Area (EEA) are subject to this system. They emitted around 8.5 million tonnes of CO_2 in 2018, of which 62% is offset and neutralised by the purchase of certificates. For further information on the provisions recognised in connection with the obligation to submit CO_2 emissions certificates to the competent authorities, we refer to ↗ **Notes to the consolidated financial statements, Note 34, p. 149ff.**

In large parts of its operations, the Lufthansa Group already offers a lot of its customers the opportunity to offset their carbon emissions on a voluntary basis. In cooperation with myclimate, customers can calculate online the emissions of their flight with the airlines in the Lufthansa Group and offset them by making a donation to two climate projects chosen by Lufthansa.

Performance indicator

CO_2 emissions up by 7%

The Lufthansa Group calculates the absolute amount of its CO_2 emissions every year. For the aircraft at the Lufthansa Group airlines, they came to 32.6 million tonnes in 2018 (previous year: 30.4 million tonnes). Growth in revenue seat-kilometres and cargo tonne-kilometres in the financial year was 9% and 1% respectively. ↗ **T001, front cover.** CO_2 emissions were offset by positive effects arising from the implementation of operational measures to reduce fuel consumption, as well as further efficiency improvements from the use of new aircraft types and higher average load factors for the aircraft.

ACTIVE NOISE ABATEMENT

Targets

Aircraft noise to be reduced at source

The Lufthansa Group has numerous ongoing activities and measures intended to achieve a noticeable reduction in flight noise. The primary goal is to sustainably reduce aircraft noise at its source (measures 1 and 2) and to develop optimised flight procedures with system partners (measures 4 and 5).

Measures

Active noise abatement comprises five dimensions

Since 2001, the Lufthansa Group has played an active and continuous role in research projects (measure 3) and noise abatement activities organised by dialogue forums, such as the Noise Protection Alliance in Frankfurt. Its members include the Hesse state government, Fraport AG, Deutsche Lufthansa AG representing the Lufthansa Group, the Airport and Region Forum, German air traffic control and the airline association BARIG. Active noise abatement at the Lufthansa Group comprises the following five dimensions.

1. INVESTMENTS IN MODERN AND THUS QUIETER AIRCRAFT

The best method of reducing aircraft noise at the source is the modernisation of the fleet. The Lufthansa Group modernises its fleet continuously. In 2018, 29 new aircraft went into service, including six additional A320neo, six A350 and 13 Bombardier C Series aircraft, which are powered by modern engines. The same applies to the Airbus A350-900, which is one of the most modern and environmentally friendly long-haul aircraft in the world and is much quieter than comparable aircraft types. A total of eleven older aircraft were removed from the Group fleet in exchange. ↗ **Fleet, p. 20f.**

2. RETROFITTING OF AIRCRAFT IN THE EXISTING FLEET

In addition to modernising the fleet, retrofitting existing aircraft also results in measurable noise reduction. At the beginning of 2014, Lufthansa German Airlines became the first airline worldwide to start operations with a new Airbus A320 equipped with noise-reducing vortex generators, thus setting an industry standard. Aircraft with vortex generators are up to four decibels quieter on their approach and so the Company pays lower noise fees in Frankfurt than for comparable aircraft without these components.

In the meantime, all aircraft in the A320 family at Lufthansa German Airlines and SWISS have now been fitted with these vortex generators. By early 2019, all the aircraft in the A320 family at Austrian Airlines at the start of the reporting year had been fitted with this technical improvement. Retrofits are planned for the aircraft delivered in 2018. The modification will be carried out in the course of routine technical maintenance cycles. A large amount of the Eurowings A320 fleet also already has the vortex generators to reduce noise. All the A320 aircraft in the Eurowings Group that do not yet have vortex generators, including aircraft from the former Air Berlin, will be successively retrofitted.

3. PARTICIPATION IN NOISE RESEARCH

For many years, the Lufthansa Group has engaged in noise research via projects such as MODAL (models and data for the development of active noise abatement measures) and EffFlug (efficiency gains in flight operations), which lay the foundations for successful active noise abatement. This intensive research and development work makes a major contribution to optimising the existing fleet.

The EMAS 1 project (Early Morning Arrival Stream Frankfurt; see also the chapter “Climate protection/Operational measures”), supported and funded by the Environmental and Neighbourhood House (UNH) in Kelsterbach as part of the Forum Flughafen und Region in Frankfurt (FFR), was also able to reduce the time during which approaching aircraft are in the vicinity of the airport by up to 20%.

4. DEVELOPMENT OF OPTIMISED FLIGHT PROCEDURES IN COOPERATION WITH SYSTEM PARTNERS

Optimising flight procedures and flight routes also helps to reduce noise. The Lufthansa Group is active in many ways in this area, with international partners such as EUROCONTROL. ↗ **Environmental concerns/Climate protection, p. 209ff.**

C31 ACTIVE NOISE ABATEMENT

Investments in quieter aircraft	Noise-reducing technologies for the existing fleet	Participation in noise research	Optimisation of approach and departure procedures	Dialogue with residents near airports and other stakeholders
Introduction of the latest aircraft, such as the Airbus A320neo and A350-900	Retrofitting of noise-reducing vortex generators to the existing fleet	Continuous collaboration and exchange with partners from research and industry	Cooperation with system partners	Continuous exchange with residents, as in the Airport and Regional Forum (FFR)
Retirement of older models		Development and analysis of new noise-reduction measures	Development and testing of new methods	Active participation to aircraft noise commissions
			Use of new navigation technology	

5. DIALOGUE WITH RESIDENTS
In addition to technical and operating procedures, the Lufthansa Group also takes part in various dialogue forums with residents, including in Frankfurt and Vienna. The focus of these activities is on optimising flight procedures. The Lufthansa Group also works in some of the aircraft noise commissions required in Germany by the Air Traffic Act (Luftverkehrsgesetz).

Performance indicator

99.6% of the operational Group fleet meets standard for aircraft noise
Improvements in noise protection from modernising the operational Group fleet can be seen in the number of aircraft that meet or exceed the ten decibel criterion set by the ICAO Chapter 4 standard. This standard defines noise limits and stipulates that all civil aircraft newly licensed after 2006 must cumulatively fulfil the older Chapter 3 noise limits by a margin of ten decibels or more. Almost the entire operational Group fleet – 99.6% – met this criterion in 2018.

Customer concerns

Concepts

High customer satisfaction is a key success factor for the Lufthansa Group
A clear focus on customers, innovative products and services and a focus on quality are essential for a service provider like the Lufthansa Group. Flight safety always has top priority. In order to meet this elementary requirement, all airlines in the Lufthansa Group have a comprehensive safety management system (SMS). Every two years, independent experts audit the safety standards applied Group-wide in an IATA Operational Safety Audit (IOSA).

All the airlines in the Lufthansa Group endeavour to offer passengers perfect service at all times and to make all facets of flying a lasting and positive experience. This includes completing flights punctually and safely, as well as first-class products and services on the ground and in the air. Capital expenditure on a modern Group fleet, greater comfort on board, numerous innovative products and digital services ensure that flying becomes more and more attractive for the customers of the Lufthansa Group. Regular surveys of passengers help to find out as much as possible about their needs and to include them in the development of innovative new products.

Allocating the airlines in the Lufthansa Group to the Network Airlines and Eurowings segments also represents a customer-centric, differentiated and transparent product and service strategy.

The visible results of this quality strategy include the award from Skytrax, an aviation consultancy company, of the first five-star rating for a European airline to Lufthansa German Airlines for its premium service and top-flight comfort, as well as the Traveller Trust Award given to Eurowings by Skyscanner, a leading global travel search engine.

OPERATIONAL STABILITY

In the reporting year, the passengers of the Lufthansa Group were also subject to a large number of changes to flight timetables, flight cancellations and delays. The causes included bottlenecks at many airports, staff shortages, the challenges connected with rapid growth at Eurowings, strikes by air traffic control and bad weather, which caused many flights to take off late or to be cancelled altogether.

Targets

Ensuring operational stability is a prerequisite for high customer satisfaction
The top priority at all airlines in the Lufthansa Group is safe, punctual and dependable flight operations. Since this cannot be guaranteed by the airlines in the Lufthansa Group alone, however, solutions for further improvements in operational stability are sought with industry representatives and system partners.

Measures

Executive Board position created for Airlines Resources & Operations Standards

Adding a new Executive Board position for Airline Resources & Operations Standards means that from January 2019 onwards, key functions will be pooled at Executive Board level, thus creating the conditions for increasing the operating stability and quality of the Lufthansa Group airlines.

Various measures were introduced to ensure operational stability

The Lufthansa Group has initiated programmes and projects at various levels to analyse airline-specific and Group-wide topics and develop and implement measures accordingly.

So, to improve its operational stability, the Lufthansa Group has bought additional A320ceos to make up for the currently lower productivity of A320neos at Lufthansa German Airlines, which is due to above-average maintenance work, and to compensate for delayed deliveries of A320neos. Following the successive delivery of these aircraft and an increase in the number of reserve aircraft, the Lufthansa Group expects an improvement in punctuality and dependability in 2019. To ensure operational quality, 600 employees were newly recruited and some 500 pilots were trained to increase the number of reserve crews.

The programme "Operational Excellence 2019" was also launched in the reporting year under the lead of the Executive Vice President Strategy & Fleet, with the aim of making structural improvements to the operational stability of all the airlines in the Lufthansa Group. This programme will report to the new Executive Board position Airline Resources & Operations Standards in the future.

In addition, the Network Airlines in the Lufthansa Group have set up individual projects to optimise their operations at the respective hubs. They are based on an analysis of big data, which enabled specific causes of delays and flight cancellations to be found by combing through millions of data points from recent years. Specific projects were initiated in response, such as adjusting the crew rostering process at Lufthansa German Airlines.

The flight operations of the Network Airlines are steered from their respective traffic centres in Frankfurt, Munich, Zurich and Vienna. Regular reports about the current situation and any unusual events are prepared here and provided to management. At the monthly Operations Board meetings, the CEOs of the airlines discuss the results and activities along with the responsible heads of flight operations, ground operations and technical fleet management.

Eurowings is also steered by way of such traffic centres and has also adopted a wide-ranging package of measures to increase the reliability and punctuality of its flight operations. They include greater reserves, additional buffer time when turning aircraft around by increasing ground times and the separate planning of flight turnarounds within Germany, in order to shield them from turnarounds in other European countries that are more likely to experience delays. The successive roll over of older aircraft, detailed technical analyses and a corresponding increase in maintenance activities also contribute to improving operational stability.

Wide-ranging initiatives were launched with system partners

The airlines in the Lufthansa Group work closely with system partners, such as airport operators and German air traffic control, to find solutions for significantly reducing existing bottlenecks, particularly involving staff at the security gates, ground services and air traffic control centres. As a result, at the Hamburg Aviation Summit in October, attended by the Lufthansa Group, representatives of the German aviation industry and policymakers, a wide range of measures were adopted to improve the reliability and quality of air traffic in Germany.

A package comprising around two dozen individual measures was adopted, which is intended to prevent massive disruption to air traffic in the future. They include eliminating bottlenecks at state air traffic controls and border controls at the major airports, as well as recruiting additional staff for ground handling.

This is also the goal of the industry initiative Airlines for Europe, in which the Lufthansa Group and other well-known European airlines campaign for better infrastructure at airports and European air traffic control (EUROCONTROL). Numerous steps have already been taken with the airports and German air traffic control, such as optimising control logic for air traffic in Germany.

Performance indicator

Punctuality of Lufthansa Group airlines declined in the reporting year

The core performance indicator for judging operational stability is the airlines' punctuality of departures. Flights are defined as punctual if they are taxiing to the runway no later than 15 minutes after the planned departure time. This performance indicator is monitored continuously by top management. In addition to daily reports from the hub control centres, weekly conference calls take place with Executive Board members to analyse the current situation and decide on the action to be taken.

The punctuality of the Lufthansa Group airlines fell significantly in 2018 following the start of the summer flight timetable in April. The measures taken only resulted in slightly improved punctuality in August. A significant improvement only came in October 2018 with the transition to the winter flight timetable, which has significantly fewer flights in Germany and so reduced pressure on German airspace. On average over the year, the punctuality of the Passenger Airlines in the Lufthansa Group fell to 72% (previous year: 77%).

PRODUCT AND SERVICES

Strict focus on the customer is vital for a service company like the Lufthansa Group. For this reason, all the products and services along the travel chain are continuously reviewed and new, innovative in-flight and ground products and services are developed that put the customer at their core.

Digitalisation and sustainability aspects play an important role in better meeting differentiated customer needs. The travel experience for the customer should become even more convenient, especially through greater personalisation of the products and services along the entire travel chain.

The Lufthansa Group invests continuously in its employees, products and systems in order to offer every customer the appropriate product.

Targets

Raising customer satisfaction is an integral part of airline strategy
Customer needs play a vital role for ensuring the long-term success of the Lufthansa Group. The Lufthansa Group therefore takes a systematic approach to a better understanding of customer needs. Their needs along the travel chain are identified by means of customer surveys. The results form the basis for strategic decisions.

Measures

New products and services continuously improve the travel experience
In the reporting year, the Lufthansa Group introduced new aircraft, products and services intended to further improve the travel experience. For example, the new A350-900 at Lufthansa German Airlines has a wider cabin and an innovative lighting concept that offers passengers greater comfort.

SWISS expanded its flagship fleet in the reporting year by two more Boeing 777-300s to a total of ten and is also planning to complete five A340-300 aircraft with a new cabin product in all three travel classes. Austrian Airlines completed the integration of the new Premium Economy Class in its entire long-haul fleet for the start of the summer flight timetable 2018 and added another B777-200. Lufthansa German Airlines is also planning to introduce a completely new Business Class with the new Boeing 777-9X from 2020, which will offer customers optimal sleeping conditions and a high degree of privacy, as well as more individual seating arrangements.

The Network Airlines are focussing on the strategic vision of “New Premium” to fulfil customer needs along the entire travel chain and to improve weak points. In the reporting year, focus initiatives were launched for customer-centric process improvement in the event of flight irregularities and of baggage handling processes.

Eurowings became the first low-cost airline to introduce a “BIZclass” on selected long-haul routes in the reporting year, which includes classic Business Class product components such as a fully flat seat that opens to 180 degrees, lounge access, fast-tracked security checks and other amenities. These services are supplemented by new, up-to-date in-flight catering trends, partly in cooperation with innovative start-ups. Eurowings also offers fast broadband internet access on more and more short- and medium-haul flights.

Employees at all levels made aware of customer satisfaction
Development and training courses for employees on increasing customer satisfaction are continuously updated and expanded. They include the Management in Practice programme that encourages managers to work for one day in operational, customer-facing areas of the Lufthansa Group once a year. In competition with other traditional full-service carriers, on the one hand, and low-cost airlines, on the other hand, the Network Airlines must develop an understanding of premium that meets customer requirements and that enables them to differentiate themselves further. Various customer profiles were drawn up with the help of “Personas” to clarify the structure of their requirements. Work started in the financial year on training employees at the Network Airlines on customer-centric methods as part of the “New Premium” initiatives. In training courses and on the job, they learnt, for example, the main concepts for analysing, designing and sustainably improving customer experiences using the innovative method of Design Thinking. Along with the Personas, these can be used in the future to develop tailor-made products and services for individual customer needs.

Customers are involved early

Customers are included at a very early stage in the development process, in order to decide faster whether the new concepts meet their needs; the new Business Class seat was tested by 200 customers during the development process, for example. Customer panels have been set up in Frankfurt, Munich, Zurich and Geneva: a panel in Vienna will be set up next year. With the help of these customer panels, the airlines are able to get very rapid feedback from customers for specific lines of enquiry, understand customers' expectations and needs better and faster, and proactively fulfil the "New Premium" approach by actively involving customers in the process of product and service optimisation.

By measuring customer satisfaction, in surveys for instance, the airlines in the Lufthansa Group evaluate the acceptance of product enhancements as well as of new products and services.

Digitalisation and innovation support the development of new products and services

Digitalisation and innovation initiatives help the Lufthansa Group to keep developing customer-centric new products and services. By 2020, the Lufthansa Group plans to invest EUR 500m in the development and enhancement of personalised and digital services at its airlines.

At the Lufthansa Innovation Hub, the Company drives the systematic use of the innovative online business model for the airlines in the Lufthansa Group and develops digital solutions along the travel chain for passengers and tour operators.

All flight attendants at Lufthansa German Airlines are equipped with mobile devices that enable them to report on passenger satisfaction even faster. Furthermore, broadband internet was installed on 69 short- and medium-haul aircraft in the reporting year alone; by the end of the reporting year, this brought the total figure to 238 short- and medium-haul aircraft.

Establishing Eurowings Digital GmbH in 2018 pooled all customer-facing digital activities at Eurowings under one roof. This will advance the development of innovative products and services for travellers, particularly in the form of software solutions and mobile applications. The focus is on refining the digital customer interface eurowings.com and turning it into a growing travel platform that acts as a digital travel companion, going beyond the flight to offer personalised services such as tailor-made hotel bookings, car rentals and tickets to events.

Data protection and data security play an increasingly important role

The secure handling of data in accordance with data protection legislation forms the basis for a trust-based relationship with our customers and is an increasingly important success factor for the Group. The new EU General Data Protection Regulation came into effect in the EU on 25 May 2018. The Lufthansa Group has adapted its existing data protection management system to this harmonised European data protection legislation and has completed projects to implement it in the Group companies concerned.

The Group has established an organisational structure for data protection that is dedicated to ensuring compliance with the rights of data subjects and the duties of controllers. This entailed creating easily reachable points of contact, both internally and externally, and establishing processes to fulfil information requests by data subjects within the required period, for example. Current information about the processing of personal data is also provided on the Group companies' websites.

The increasing digitalisation of business processes in the Lufthansa Group also makes it more necessary to avert cyber-risks. At the Group level, it is the responsibility of the IT Security function to meet IT security requirements. This includes the development of appropriate concepts and measures such as email encryption, a cybercrime awareness campaign and protection from criminal activity over the internet. The risk and security management systems and other selected measures are regularly reviewed by the internal audit function to ensure their effectiveness. ↗ **Opportunities and risk report, p. 61ff.**

Increasing demand for sustainable products and services

The Lufthansa Group is responding in various ways to customers' wishes for sustainability aspects to play a greater role in products and services. As a result of this wish, passengers on flights with the Lufthansa Group airlines are increasingly offered organic and fair trade food and drink, and the recycling of in-flight waste is being expanded. At the LSG subsidiary SPIRIANT, a leading global provider of in-flight service products and equipment, the range of reusable and recycled or low-waste products for airlines is also expanded continuously.

Pooled responsibility for customer concerns ensures fast and effective implementation

Responsibility for products and services for all the Network Airlines in the Lufthansa Group is pooled centrally and reports are adressed to the Executive Board member for Hub Management. This ensures effective, efficient implementation in the airlines by using synergies and continuously improving products and services for customers.

Responsibility for the in-flight and ground products for all the airlines in the Eurowings Group lies with the Customer Experience & Product department, which reports to the Commercial Director.

Performance indicator

Customer satisfaction is at a high level
The Network Airlines in the Lufthansa Group track customer satisfaction on a regular basis and use in-depth surveys to obtain information about the travel experience of their passengers that is as granular as possible. Customer satisfaction levels are made available to the responsible departments and managers on a monthly basis in various reports, so that they can be taken into account when carrying out new measures.

Since 2018, Lufthansa German Airlines, SWISS and Austrian Airlines have harmonised their methods and processes for measuring customer satisfaction in terms of both content and methodology. Customer satisfaction data is tracked separately for different service aspects along the entire travel chain (in-flight and ground products).

The main performance indicator for measuring satisfaction at the Network Airlines is overall satisfaction with products and services. This is the percentage of customers surveyed who said that they were satisfied or very satisfied with the quality of the in-flight and ground products and services offered by the Network Airlines.

This performance indicator is derived from the Passenger Satisfaction Tracking (PST) study and is shown for all three Network Airlines.

In the reporting year, the Network Airlines had a customer satisfaction figure of 74, which is at a high level, even if the level declined over the course of the year due to the challenges described above.

Employee concerns

Concepts

Focus on employer attractiveness and employee health
The success of the Lufthansa Group depends largely on the ideas, the competence, the enthusiasm, the commitment and the health of its employees. It is therefore particularly important to reinforce the commitment of its employees, to have a modern human resources strategy and to take steps to make Lufthansa even more attractive as an employer. The Lufthansa Group therefore places great importance on offering its employees an attractive working environment with transparent structures and processes in order to be able to meet future requirements and to help the Company innovate and put new ideas into practice.

Ability to transform requires continuous training of staff competencies
Continuous change in market conditions makes it necessary for employees to keep their knowledge and skills, which they have learnt in their vocational training and career up to date. The Lufthansa Group has offered a wide range of digital and non-digital training opportunities for many years.

Reorganisation of the Lufthansa Group moves forward
The process-based reorganisation of the Lufthansa Group, which pools responsibilities and streamlines hierarchies, should be completed by the end of 2019. This allows the different units in the Lufthansa Group to be managed consistently and based on defined processes by maintaining uniform standards.

ATTRACTIVENESS AS AN EMPLOYER

Targets

The Lufthansa Group positions itself as an attractive long-term employer
The employees in the Lufthansa Group make a decisive contribution to customer satisfaction and thus to the success of the Company. Since many business areas are still very staff-intensive and since demand for qualified staff is increasing, especially in the newly created roles, the Lufthansa Group aims to establish itself permanently as an attractive employer.

Measures

A number of steps have been taken to further increase staff satisfaction and so to increase the Lufthansa Group's attractiveness as an employer. With a total of 162 nationalities in its global workforce, the Lufthansa Group has represented the core principle of diversity for a long time. With the combination of administrative employees and very different operating employee groups, this means that expectations of what makes an attractive employer can differ greatly. ↗ **Employees, p. 21ff.**

Flexible working conditions and employment terms

For many years, the Lufthansa Group has supported its employees and managers by offering flexible working time models, including various arrangements for part-time and remote work. For the cabin crew at Lufthansa German Airlines alone there are more than 100 different models for part-time work. Sabbaticals and shared leadership models are also offered and encouraged for managers.

Retaining and promoting talent

To ensure that all employees have the opportunity to shape their career within the Group in line with their individual talents and interests, there is a standard process for potential identification for most of the administrative staff; regular, standardised potential identification and feedback processes are also established for other groups of professionals.

New programmes also help to identify employees showing particular promise. For example, a recently initiated programme used a Group-wide platform to enable employees to propose and assess colleagues for a "Makers of Tomorrow" campaign, identifying them as talents with abilities that are particularly valuable for the future. Other activities aim to promote female managers, with the objective of also securing a balance between men and women in leadership positions.

These measures increase the visibility of talented staff. By encouraging people to change jobs between different companies in the Lufthansa Group, it is also possible to strengthen their loyalty to the Company. Transparency about job vacancies plays a key part in enabling staff to switch.

Talent retention is also supported by having sufficient management positions for them to develop into. This requires a fluctuation rate of 9%, which is achieved by consistent application of a rotation policy for managers and the offer of early retirement packages for managers. The aim is to have the potential to fill all lower management positions with talents from within the Company. The Lufthansa Group is on track to achieve this goal.

Making the employer brand stronger and more visible

By fundamentally reworking its digital presence as an employer, the Lufthansa Group is able to make its employer brand significantly more visible. Activities in social media and career development networks are generating increasing interest. To avoid staff shortages, the Lufthansa Group practises an active sourcing approach for certain professional groups and addresses potential candidates directly. Additional advertising for the employer brand is also carried out ahead of potential applications in various formats, for example at universities. Internship experiences help to strengthen the employer brand and there are programmes in place to retain interns once they have completed their internship with the Lufthansa Group.

Performance indicator

Engagement Index creates transparency regarding attractiveness as an employer

The Engagement Index also provides information about the Company's attractiveness as an employer. It is measured by the annual employee survey, "involve me!", and enables a comparison with employers in many different sectors. It measures the extent to which employees identify with the Company, as well as their commitment and willingness to recommend the Company to others. A standardised voluntary staff survey was conducted for the first time in 2015 and it was extended to the main companies in the Group in 2018 (excluding the foreign sites of the LSG group). The results are measured on a scale from 1 (best) to 5 (worst).

An Engagement Index of 2.2 was recorded for the reporting period. Compared to the previous year, this was a further improvement of 0.1 points, so achieving the target for 2020 a full two years earlier than planned. The index is now at the average level for similar companies in Germany. While the staff survey in 2018 only asked a reduced set of questions, a comprehensive staff survey will be conducted again in 2019. This alternation between comprehensive and shorter surveys corresponds to past practice.

The results of the employee survey are also presented to the Supervisory Board and the Executive Board. The results are also communicated and discussed at management level and within individual teams, in order to identify and implement corresponding measures.

Employer ranking shows Lufthansa's attractiveness for potential applicants

The ranking of German employers is done through a representative analysis of more than 200 companies carried out by the renowned market research institute YouGov. The Lufthansa Group aims always to be among the five most popular employers in Germany. During the reporting year 2018, the Lufthansa Group found itself in 2nd place (previous year: 3rd place).

TRANSFORMATION CAPABILITY

Targets

Continuous change requires the capacity for transformation from employees and the Company

A market that undergoes permanent and ever faster changes requires continuous adjustments from companies. This in turn means that employees must be given the corresponding competencies and must always be willing and able to transform themselves. Initiatives aimed at achieving this are managed by the relevant process owners and by process domain owners at the next level, and are closely coordinated with the Executive Board member for Human Resources and the HR Strategy department. A separate process domain owner is responsible for cultural aspects of the transformation, who reports directly to the Executive Board member for Corporate Human Resources and Legal Affairs and is in charge of a department of several process owners.

Measures

Expand professional training opportunities

Well-qualified, committed employees are indispensable for the sustainable success of the Lufthansa Group. Because it is not possible to simply draw on knowledge acquired at one point in time to sustain an entire career, employees have to expand their knowledge and abilities continuously and keep them up to date at all times. Apart from regular training courses, especially in safety-related areas, a committee consisting of HR staff from the top management of large Group companies meets regularly to discuss in a structured process the effects of the current transformation on the competence profiles required of existing employee groups.

In this context, a process is established that is intended to enable administrative staff in particular to analyse their own competencies and compare them with current and future requirements of their role. Any gaps can be closed through innovative learning opportunities on the in-house learning platform, which supplements the existing range of training courses.

The Lufthansa Group CAMPUS is also open to all employees and offers various strategic measures for cultural and organisational development. Qualification courses for managers and top management support a modern corporate culture of collaboration and assist with team development and organisational change.

Developing working environments

Mobile, flexible working basics are the foundation for the future of work. For this reason, and with the active involvement of employees, the Lufthansa Group started to roll out the Microsoft Office 365 software – which enables transparent and efficient collaboration – in the reporting year, with a focus on the administrative areas. Communication is networked and made more transparent across hierarchical levels and the Group by the introduction of a social network. These innovations benefit 45,000 employees and should be completed in 2019. They are accompanied by the distribution of new mobile devices. Operational employees who work at least some of the time on a computer will also benefit from the new software.

Detailed survey seeks to provide comprehensive information about capacity for transformation

In the future, the comprehensive employee survey that is conducted every two years allows us to draw conclusions on the capacity for transformation of the Company. The next survey is planned for 2019.

HEALTH AND SAFETY AT WORK

Occupational health and safety has been a core action area at the Lufthansa Group for several decades; it is managed jointly by the Medical Services (including psychosocial counselling), health and safety officers and the health management function. These three areas report directly and regularly on current developments to the Executive Board member responsible for Corporate Human Resources and Legal Affairs. In addition to individual meetings, this takes place as part of the regular “Health” steering committee.

Targets

Health management to be further developed across the Group

The core responsibility of the Medical Services is to maintain and improve the health and working capacity of the Lufthansa Group's employees and so to safeguard its business activities and reliable flight operations. Occupational health and safety continues to have the absolute goal of preventing accidents at work and, if they should still occur, of drawing the necessary conclusions from accidents to prevent them, as far as possible, from happening again.

Its activities and initiatives are closely coordinated with the individual business units and aim to protect the workforce. In particular, this means avoiding and reducing incidents relating to occupational health and safety.

The programme Health Management@Lufthansa Group was established in 2016 to further develop health management for all the companies in the Group. It aims to maintain the long-term health and productivity of employees and to encourage them to take responsibility for their own well-being. To make responsibility for health and well-being clearer and more visible, over 35 occupational health officers were nominated in the major Group companies to act as a permanent contact person in their own company and to liaise with Group health management.

Measures

Medical Services managed as holistic centres of excellence

The Medical Services at Lufthansa German Airlines, SWISS and Austrian Airlines are permanent holistic centres of excellence, offering the full range of services for aviation and occupational medicine, vaccinations and travel medicine, outpatient care, a comprehensive social and medical advisory service and other preventive and healthcare treatments. Beyond these individual treatments, the Medical Services provide advice to decision-makers, committees and employee representatives concerning all issues of occupational health and safety.

Psychological and psychosocial factors have an important influence on health, safety and productivity at work. Thus, for more than thirty years, the Lufthansa Group has offered confidential individual advice to employees, teams and organisational units, referring individuals to other services or for other treatment as well as providing various psychosocial advisory services.

Following comprehensive preparations and the training of employees as quality management officers, all the sites and areas were successfully recertified in accordance with the quality management system DIN ISO 9001:2015 (previously 2008) in August 2018.

The revised German Air Traffic Control Act required a flight medicine database to be set up on a central server at the German Federal Aviation Office. In autumn 2018, the Medical Centres of Deutsche Lufthansa AG completed all the work necessary to comply with this revised legislation.

Preventive measures taken to safeguard occupational health and safety

The occupational safety function has existed for many years; it consistently implements preventive measures to avoid accidents, health risks and occupational illnesses. By means of risk assessments and regular safety inspections, the Group's occupational safety experts review all professional activities in the Group companies in Germany.

A central steering body for all issues concerning health and safety in the Lufthansa Group is the Occupational Safety Committee (OSC), which meets regularly and monitors the implementation of all aspects of health and safety across the Group.

Managers' awareness of their responsibility for health and safety was reinforced by concrete and repeated mandatory training sessions, which will be promoted by special campaigns in the year ahead.

The Group health and safety function also prepared a global survey in 2018 to improve the transparency of occupational health and safety in the entire Lufthansa Group. It is due to be conducted in 2019.

Health management helps to deal with health challenges

The programme Health Management@Lufthansa Group creates a framework and structures that have a particular influence on the development of the organisation and the leadership skills of managers. They include advisory services and information events for employees and managers.

For example, courses are offered on the Group-wide focus topics of stress management and recuperation, as well as seminars and learning modules corresponding with individual aspects of the health index. In addition, a central eHealth platform was introduced with internal and external health services in January 2019. These activities were derived partly from the results of the employee survey “involve me!”.

Performance indicator

Health Index is now the key performance indicator for employee health

A Health Index was compiled for the first time in 2017 (excluding the foreign sites of the LSG group), as the primary performance indicator for measuring the individual health levels of all employees. It is based on the relevant questions in the "involve me!" employee survey. The results serve to identify aspects of work that require adjustment and to develop focused measures to strengthen individual health resources and to minimise the risk of occupational hazards. As with the Engagement Index, they are communicated to top management, team managers and the entire workforce, and also form the basis of the joint development of measures in the central steering committee, "Health", which was established in 2016. The Health Index uses a scale from 1 (best) to 5 (worst).

In 2018, the Health Index, which is also recorded as part of the short version of the employee survey every other year, declined slightly across the Group by 0.1 to 2.4, which is not a significant change from the previous year's figure of 2.3, however. The activities served initially to make employees aware of health topics; positive effects on the Health Index are expected when they have been running for longer. The comprehensive survey, which takes place every two years, is planned for 2019.

Fighting corruption and bribery

Concepts

Fighting corruption and bribery is an integral part of the Lufthansa Group Compliance Management System

The Lufthansa Group endeavours to manage the Company effectively, as required by the principles of good corporate governance. In particular, the employees' integrity is a prerequisite for the Company's sustainable success.

Its global operations mean that the Lufthansa Group is obliged to comply with national anti-corruption legislation around the world and as much as with extraterritorially applicable anti-corruption laws, that have extraterritorial application. Infringements may not only result in criminal and civil penalties for the individuals and companies involved, but may also result in incalculable reputational damage. Combating and preventing corruption and bribery is also an integral part of the Lufthansa Code of Conduct and is essential for the business operations of the Lufthansa Group. ↗ **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/code-of-conduct.html.**

A compliance management system prevents employees and the Company from breaking the law and helps them to apply statutory regulations correctly. It is made up of the following elements: Competition Compliance, Capital Market Compliance, Integrity (Anti-Corruption) Compliance and Embargo Compliance. ↗ **Corporate Governance report, p. 82ff.**

The Group-wide implementation, development and communication of the Lufthansa Group Compliance Management System is the responsibility of the Corporate Compliance Office, which is part of the central Legal department. The head of the Legal department and Chief Compliance Officer reports directly to the Executive Board member for Corporate Human Resources and Legal Affairs and presents two Compliance Reports per year to the Executive Board and Supervisory Board. The Corporate Compliance Office is supported by a worldwide network of compliance managers at the Group companies.

Targets

Compliance Management System aims to prevent unlawful conduct

The aim of the Compliance Management System is to ensure lawful conduct throughout the Group and so to avoid unlawful conduct that, in addition to reputational and financial risks, may also have personal consequences regarding criminal and labour law. ↗ **Opportunities and risk report, p. 61ff.**

Measures

Anti-corruption training raises awareness

All managers, team leaders and employees from relevant areas undergo mandatory IT-based anti-corruption training every two years to raise awareness of potential risks.

Ombudsman system enables confidential handling of suspicious incidents
The Lufthansa Group set up an ombudsman system in 2008 to enable information to be provided confidentially about suspected criminal offences, particularly potential breaches of anti-corruption legislation and regulations. An external, independent lawyer who is not an employee of the Lufthansa Group acts as the ombudsman. Whistle-blowers can provide information to the ombudsman by phone, in writing or in person. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/ombudssystem.html.**

Risk-based, third-party due diligence aims to ensure integrity of suppliers and service providers
A risk-based, third-party due diligence process is intended to ensure the integrity of suppliers and service providers. In the course of the review, the employees in the Corporate Compliance Office carry out compliance screenings. First of all, this entails determining the identity of the business partner in order to then carry out a check against databases in the compliance, embargo, sanctions, PEP (politically exposed person) and watch lists categories, ensuring that there are no relevant entries. Depending on the result, various measures proposed jointly by the Corporate Compliance Office and Corporate Security may be necessary for dealings with the business partner.

All Group companies worldwide are assessed for corruption risks
All Group companies worldwide were reviewed for corruption and antitrust risks by means of a compliance risk assessment. A report with recommended measures was prepared for every company in the reporting year. These recommendations will be implemented in the respective companies on the basis of a structured plan. In addition to the risk areas identified here, Group-wide risk assessments are conducted regularly in all Group companies to identify areas which are potentially critical for integrity and competition compliance and to take preventive measures aimed at mitigating potential vulnerabilities. The risk assessments consist of interviews with managers and written self-assessments.

Respect for human rights

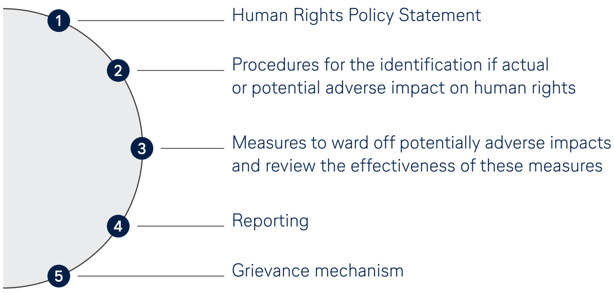
Concepts

Respect for human rights is embodied in the Code of Conduct
As a company that acts with integrity and responsibility, respect for human rights is self-evident for the Lufthansa Group. As a signatory of the UN Global Compact, Lufthansa attaches great importance to conducting its business in line with internationally acknowledged principles and commitments and embedded respect for human rights as an integral element of its corporate culture. This is also reflected in working conditions, the freedom of association and assembly, rules to ensure gender equality and the inclusion of minorities as a matter of course.

Consequently, the Code of Conduct stipulates that the Group always acts in compliance with human rights, the principles of the UN Global Compact and acknowledged international labour and social standards. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/code-of-conduct.html.**

In the reporting year, the Lufthansa Group also signed the Resolution against Trafficking in Persons from the International Air Transport Association (IATA). It supports this industry initiative, in particular by making operational staff, cabin crew and ground staff at the stations aware of the issue of human trafficking.

C32 CORE ELEMENTS OF THE GERMAN NATION ACTION PLAN FOR BUSINESS AND HUMAN RIGHTS



Targets

Respect for human rights is the overarching goal

The overarching goal is to avoid human rights breaches in the Company and the supply chain by means of organisational and process-based measures. The Code of Conduct is binding for all bodies, managers and employees of the Lufthansa Group. With regard to protecting human rights, the Lufthansa Group is guided by the recommendations of the National Action Plan for Business and Human Rights (NAP) adopted by the federal government in late 2016. With regard to corporate respect for human rights, the Federal Government expects all enterprises to comply with human rights due diligence and to respect human rights along their supply and value chains. The National Action Plan describes five core elements of due dilligence in the field of human rights. These core elements comprise a policy statement, procedure for identifying actual or potential adverse impacts on human rights, measures and effectiveness audits, reporting and a grievance mechanism.

All the measures listed below can be attributed to one of these core elements.

The Group's procurement policy (↗ **Sustainability in the supply chain, p. 225**) also states that the Lufthansa Group expects its suppliers to respect human rights. Contracts should therefore include the possibility of penalties up to and including the immediate termination of the business relationship.

Measures

Human rights working group acts as a point of contact and influencer

The human rights working group, established in 2017 in the Human Resources and Legal Affairs Division of the Executive Board, continued its work in the reporting year and includes representatives of all relevant head office functions and Group companies potentially at risk. Its regular meetings serve to communicate information and develop a uniform, Group-wide position and strategy. In the future, the development of a structured media monitoring process is planned. In addition, selected contacts advise, support and follow up on the topic at the main companies in the Lufthansa Group.

International reporting obligations are also dealt with by the working group. The Lufthansa Group will publish a mandatory declaration for the financial year 2018 as required by the UK Modern Slavery Act 2015.

Targeted group-specific awareness campaigns for managers and employees

Based on an analysis carried out by Verisk Maplecroft, an advisory company, an overview was drawn up of all Group companies operating in high-risk and extreme-risk countries, i.e. where the risk of human rights violation is particularly high. The country overview is regularly updated. Managers and Human Resources departments at Group companies in these countries should be made aware of their duty of care to avoid human rights abuses. From this year onwards, a specific annex will successively be added to the employment contracts with these managers.

In addition, awareness is heightened by means of focused intranet communications to all the employees in the Group. This includes a statement by the Executive Board member for Corporate Human Resources and Legal Affairs emphasising the responsibility of the Lufthansa Group as a global company to respect human rights. Further information on this topic is available to all employees.

Processes for reporting human rights violation implemented

The companies are obliged to identify human rights risks and report the type and number of suspicious incidents. Individual complaints can be made also by third parties to the external ombudsman – confidentially if so desired. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/ombudssystem.html.**

Employees of the Lufthansa Group can also report to their manager, Human Resources management or the employee representative. A works agreement with regard to procedures for grievances is already in place for all employees in Germany. It is already used for many different kinds of complaints and can also be used for to complaints regarding human rights violations.

"Zero tolerance" for cases of sexual harassment

Respect for one another is particularly important to the Lufthansa Group. This includes ensuring a working environment for all employees that is free of discrimination, harassment and unequal treatment. The Lufthansa Group expects that this principle is reflected globally in the conduct of all employees towards one another. A corresponding clause was added to the Code of Conduct in 2018 and an extensive communications campaign to raise awareness was carried out using various internal and external communications channels. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/code-of-conduct.html.** For those employees affected, the Lufthansa Group also expanded its range of options for providing support.

Social concerns

Concepts

Lufthansa Group expands social responsibility
As an international aviation business, the Lufthansa Group also assumes responsibility for social concerns. Since 2016, the Company has increasingly based its activities on the Sustainable Development Goals (SDGs) defined in the United Nations Agenda 2030, particularly concentrating on the core topics of Education/Enabling and Life/Health (for immediate humanitarian aid missions).

The focus of the corporate citizenship activities is in social and humanitarian projects around the world, pooled and managed by the help alliance, the Lufthansa Group's aid organisation. The help alliance is a non-profit entity (gGmbH) held by the Lufthansa Group and based in Frankfurt am Main. **www.helpalliance.org.** Its importance is emphasised by the fact that the company reports to the Chairman of the Executive Board and CEO.

In 2018, the Lufthansa Group began to refine its concept for social commitments at the hubs of the Network Airlines. It essentially consists of establishing or building on local help alliance projects and sponsoring other regional projects with a link to the Lufthansa Group that focus on the core topic of Education/Enabling. Implementation is to take place in 2019.

Targets

A contribution to sustainable social development
The aim of the Group's charitable activities and projects is to make a contribution to the sustainable development of society that reflects the importance and size of the Lufthansa Group and is transparent, credible and verifiable all at the same time.

Measures

help alliance focuses on social and humanitarian projects
The help alliance acts as a catalyst for greater social engagement, combining proven projects initiated by employees with the power and network of the Lufthansa Group. Defined criteria ensure that the supported projects are sustainable.

The focus on social and humanitarian projects in the field of Education/Enabling makes it possible to deploy the available funding in an efficient and targeted way. The main objective is to help disadvantaged people lead a successful, healthy and self-sufficient life. This help primarily takes the form of educational opportunities. In the reporting year, the help alliance was responsible for 41 aid projects with a volume of EUR 2m and helped some 23,000 people around the world. Focus was once again on the biggest help alliance project so far, the “iThemba” project in South Africa, which enables children in the Capricorn township of Cape Town to receive a high-quality primary education. The iThemba primary school was opened in January 2018 and teaches more than 100 children in three classes.

Permanent monitoring and regular evaluation of the projects using a fixed catalogue of criteria ensure that the sponsored projects and programmes improve the living conditions of children, their families and the community sustainably and effectively and that the funding is used effectively and efficiently.

In the second field of Life/Health, the Group has for many years used its flights to provide fast and professional emergency relief during humanitarian crises and disasters. Lufthansa Cargo cooperates with well-known aid organisations to provide quick, straightforward assistance in the logistics of initial relief.

Other donations used fully for aid projects
In 2018, the Lufthansa Group covered all of the costs of administration, project assistance, fundraising and communication at help alliance gGmbH. This ensures that 100% of all other donations can be used to fund aid projects. This also applies to voluntary donations made via salary deduction by employees of the Lufthansa Group.

Sustainability in the supply chain

Concepts

Sustainability in the supply chain is bolstered by organisational structure

To meet the standards the Lufthansa Group sets for the sustainability of its own products, the Lufthansa Group relies on close collaboration with suppliers who share and implement these standards. This also forms part of the Lufthansa Group's Code of Conduct. **https://investor-relations.lufthansagroup.com/en/corporate-governance/compliance/code-of-conduct.html.** Since October 2017, the purchasing units in the Lufthansa Group have been organised within a single reporting line under the Chief Financial Officer. They inform the Executive Board about current developments on a regular basis. In some cases, the purchasing units are centralised, especially for airline-specific actions such as purchasing aircraft or kerosene, and in others, they are decentralised throughout the Group companies (for more specialised products). Reporting lines are based on responsibilities for different product groups and Group companies. Defining product groups optimises the purchasing function in the procurement markets. Reporting on the basis of Group companies ensures the security of supply.

Building and expanding a sustainable supply chain is of strategic importance to the Lufthansa Group

The process-based matrix organisation makes it easier to establish sustainability standards because standardised processes and IT systems are increasingly used. Defining responsibilities within the Group also ensures efficient collaboration. The goal is also to improve the enforcement of sustainability standards.

Targets

Compliance is expected from suppliers

The Lufthansa Group demands of its suppliers that they fully comply with current law, guidelines and regulations concerning fair competition, integrity and responsible practices.

Measures

The Group procurement policy includes the obligation to assume social and ecological responsibility

To identify the type and level of supplier risks, the procurement units responsible for product groups carried out a risk assessment for the suppliers. The outcome is included in the result of Group risk management.

The Group procurement policy also includes the obligation to assume social and ecological responsibility. It is to be understood as an overriding specification for all procurement guidelines at the Group companies. In addition, it serves as a handbook for buyers and all employees with contacts in the procurement markets. Among other considerations, it requires that these obligations be included in contracts with suppliers:

- to comply with the ten principles of the UN Global Compact;
- to comply with the four basic principles of the International Labour Organisation (ILO);
- to consent to announced and unannounced audits by companies of the Lufthansa Group;
- to accept the termination of the contract in the event that these contractual obligations are breached.

By imposing these obligations, the Lufthansa Group endeavours to ensure responsible practices by its direct suppliers and so to meet its own standards for corporate responsibility.

Lufthansa Group's sustainability commitments are confirmed by EcoVadis

In order to demonstrate its sustainability and responsibility towards its customers, the Lufthansa Group participates in EcoVadis, a sustainability assessment platform for global supply chains. In the reporting year, EcoVadis once again confirmed the commitment of the Lufthansa Group with its "Silver Status".

Summary

The responsible and sustainable treatment of resources, the environment, customers, employees and suppliers is a prerequisite for the long-term financial stability and attractiveness of the Lufthansa Group for its customers, employees, investors and partners.

With the activities and concepts described above, the Lufthansa Group aims to consolidate its position as a leading player in the airline industry, including in terms of corporate responsibility.

This combined non-financial report is based on the GRI Standards 2016. The information in this report relates to the following disclosures and management approaches.

T203 GRI CONTENT INDEX

	Disclosures refer to		Page
About this combined non-financial report	GRI 102-1	Name of the organisation	↗ p. 207
	GRI 102-50	Reporting period	↗ p. 207
	GRI 102-56	External assurance	↗ p. 207
	GRI 102-16	Values, guidelines, standards and behavioural norms	↗ p. 207f.
	GRI 102-46	Defining report content and topic boundaries	↗ p. 208
Environmental concerns			
Climate protection	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 209f.
	GRI 305-1	Direct GHG emissions Scope 1	↗ p. 211
	GRI 305-5	Reducing GHG emissions	↗ p. 210f.
Active noise abatement	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 211f.
	Performance indicator	Percentage of aircraft that meet the 10dB criteria of ICAO Chapter 4 standard	↗ p. 213
Customer concerns			
Operational stability	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 213f.
	Performance indicator	Departure punctuality	↗ p. 214f.
Product and services	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 215f.
	GRI 416-1	Assessment of the health and safety impacts of product and service categories	↗ p. 213
	Performance indicator	Customer satisfaction level	↗ p. 217
Employee concerns			
Attractiveness as an employer	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 217f.
	Leistungsindikator	Engagement Index	↗ p. 218f.
Transformation capacity	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 219
Health and safety at work	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 219f.
	Performance indicator	Health Index	↗ p. 221
Fighting corruption and bribery	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 221f.
	GRI 205-1	Operations assessed for risks related to corruption	↗ p. 222
	GRI 205-2	Communication and training on anti-corruption policies and procedures	↗ p. 221
Respect for human rights	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 222f.
Social concerns	GRI 103-1, 103-2, 103-3	Management approach	↗ p. 224
Sustainability in the supply chain	GRI 103-1, 103-2	Management approach	↗ p. 225

Independent Practitioner's Report on a Limited Assurance Engagement on Non-Financial Reporting[1]

To Deutsche Lufthansa AG, Cologne

We have performed a limited assurance engagement on the combined separate non-financial report pursuant to §§ (Articles) 289b Abs. (paragraph) 3 and 315b Abs. 3 HGB ("Handelsgesetzbuch": "German Commercial Code") of Deutsche Lufthansa AG, Cologne, (hereinafter the "Company") for the period from 1 January 2018 to 31 December 2018 (hereinafter the "Non-financial Report").

Responsibilities of the Executive Directors
The executive directors of the Company are responsible for the preparation of the Non-financial Report in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB.

This responsibility of Company's executive directors includes the selection and application of appropriate methods of non-financial reporting as well as making assumptions and estimates related to individual non-financial disclosures which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal controls as they have considered necessary to enable the preparation of a Non-financial Report that is free from material misstatement whether due to fraud or error.

Independence and Quality Control of the Audit Firm
We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis – IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's Responsibility
Our responsibility is to express a limited assurance conclusion on the Non-financial Report based on the assurance engagement we have performed.

Within the scope of our engagement, we did not perform an audit on external sources of information or expert opinions, referred to in the Non-financial Report.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the Company's Non-financial Report for the period from 1 January 2018 to 31 December 2018 has not been prepared, in all material aspects, in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB.

In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement, and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner's judgment.

[1] PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the combined separate non-financial report and issued an independent assurance report in German language, which is authoritative. The following text is a translation of the independent assurance report.

Within the scope of our assurance engagement, we performed amongst others the following assurance procedures and further activities:

— Obtaining an understanding of the structure of the sustainability organization, of the stakeholder engagement and of the conduction of the materiality analysis

— Inquiries of relevant personnel involved in the preparation of the Non-financial Report regarding the preparation process, the internal control system relating to this process and disclosures in the Non-financial Report

— Identification of the likely risks of material misstatement of the Non-financial Report

— Analytical evaluation of disclosures in the Non-financial Report

— Comparison of disclosures with corresponding data in the annual and consolidated financial statements and in the group management report which is combined with the Company's management report

— Evaluation of the presentation of the information

Assurance Conclusion

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the Company's Non-financial Report for the period from 1 January 2018 to 31 December 2018 has not been prepared, in all material aspects, in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB.

Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company about the results of the limited assurance engagement.

The report is not intended for any third parties to base any (financial) decision thereon. Our responsibility lies only with the Company. We do not assume any responsibility towards third parties.

Frankfurt/Main, 5 March 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Nicolette Behncke ppa. Mirjam Kolmar
Wirtschaftsprüfer
[German public auditor]

FURTHER INFORMATION

Ten-year overview

T204 TEN-YEAR OVERVIEW

		2018	2017 [7]	2016
Income statement Lufthansa Group				
Revenue	€m	35,844	35,579	31,660
Result				
Adjusted EBIT (since 2014)/Operating result (until 2013)	€m	2,836	2,969	1,752
Adjusted EBIT margin (since 2014)/Operating margin (until 2013)	%	7.9	8.3	5.5
Profit/loss from operating activities	€m	2,800	3,140	2,190
Profit/loss before income taxes [1]	€m	2,784	3,158	2,248
Income taxes [1]	€m	-588	-784	-445
Net profit/loss attributable to shareholders of Deutsche Lufthansa AG	€m	2,163	2,340	1,776
Main cost items				
Staff costs	€m	8,811	8,172	7,354
Fees and charges	€m	4,457	6,357	5,736
Fuel for aircraft	€m	6,087	5,232	4,885
Depreciation, amortisation and impairment	€m	2,205	2,383	1,769
Net interest	€m	-144	-195	-218
Balance sheet Lufthansa Group				
Asset structure				
Non-current assets	€m	27,559	24,749	24,504
Current assets	€m	10,654	11,029	10,193
of which liquid assets	€m	3,235	3,948	3,937
Capital structure				
Shareholders' equity	€m	9,573	9,110	7,149
of which issued capital	€m	1,217	1,206	1,200
of which reserves	€m	6,083	5,461	4,084
Liabilities	€m	28,640	26,668	27,548
of which pension provisions	€m	5,865	5,116	8,364
of which borrowing	€m	6,685	6,814	6,575
Total assets	€m	38,213	35,778	34,697
Other financial data Lufthansa Group				
Capital expenditure	€m	3,805	3,529	2,231
of which on tangible and intangible assets	€m	3,709	3,338	2,160
of which on financial investments	€m	96	191	71
Cash flow from operating activities	€m	4,109	5,368	3,246
Free cash flow	€m	250	2,117	1,138
Indebtedness				
gross	€m	6,724	6,832	6,638
net	€m	3,489	2,884	2,701
Deutsche Lufthansa AG				
Net profit/loss for the year	€m	339	2,455	1,169
Transfer to/from reserves	€m	-41	2,078	-935
Dividends proposed/paid	€m	380	377	234
Dividend per share proposed/paid	€	0.80	0.80	0.50

	2015	2014[6]	2013[5]	2012[4]	2011	2010[3]	2009
	32,056	30,011	30,027	30,135	28,734	26,459	22,283
	1,817	1,171	699	839	820	1,020	130
	5.7	3.9	2.3	2.8	2.9	3.9	0.6
	1,555	879	851	1,622	773	1,386	271
	2,026	180	546	1,296	446	1,134	–134
	–304	–105	–220	–91	–157	–161	–112
	1,698	55	313	1,228	–13	1,131	–34
	8,075	7,335	7,356	6,741	6,678	6,491	5,996
	5,651	5,265	5,167	5,167	5,000	4,318	3,762
	5,784	6,751	7,115	7,392	6,276	4,964	3,645
	1,715	1,528	1,767	1,839	1,722	1,654	1,475
	–170	–256	–346	–372	–288	–346	–325
	23,526	22,227	19,419	18,782	18,627	18,963	17,696
	8,936	8,247	9,689	9,777	9,454	10,357	8,696
	3,093	2,738	4,698	4,966	3,998	5,380	4,439
	5,845	4,031	6,108	4,839	8,044	8,340	6,202
	1,189	1,185	1,180	1,177	1,172	1,172	1,172
	2,881	2,728	4,563	2,374	6,790	5,939	4,956
	26,617	26,443	23,000	23,720	20,037	20,980	20,190
	6,626	7,231	4,718	5,844	2,165	2,571	2,710
	6,370	5,958	6,337	6,910	6,424	7,184	6,802
	32,462	30,474	29,108	28,559	28,081	29,320	26,392
	2,568	2,773	2,499	2,358	2,560	2,271	2,304
	2,454	2,699	2,444	2,291	2,445	2,222	2,177
	114	74	55	67	115	49	127
	3,393	1,977	3,290	2,842	2,356	2,992	1,991
	834	–297	1,307	1,397	713	1,542	251
	6,440	6,156	6,393	6,919	6,440	7,207	6,860
	3,347	3,418	1,695	1,953	2,328	1,596	2,195
	1,034	–732	407	592	–116	483	–148
	–802	732	–200	–592	230	–208	148
	232	–	207	–	114	275	–
	0.50	–	0.45	–	0.25	0.60	–

T204 **TEN-YEAR OVERVIEW** (continued)

		2018	2017[7]	2016
Operational ratios Lufthansa Group				
Return on sales (Profit/loss before income taxes[1]/revenue)	%	7.8	8.9	7.1
Return on capital employed (Profit/loss before income taxes[1] plus interest on liabilities/total assets)	%	7.8	9.9	7.3
Return on equity (Profit/loss after income taxes/shareholders' equity)	%	22.9	26.1	25.2
Return on equity (Profit/loss before income taxes[1]/shareholders' equity)	%	29.1	34.7	31.4
Equity ratio (Shareholders' equity/total assets)	%	25.1	25.5	20.6
Gearing (Net indebtedness plus pension provisions/shareholders' equity)	%	97.7	87.8	154.8
Leverage (Net indebtedness/total assets)	%	9.1	8.1	7.8
Internal financing ratio (Cash flow/capital expenditure)	%	108.0	152.1	145.5
Adjusted net debt/Adjusted EBITDA (since 2017) Debt repayment ratio (until 2016)	%	1.8	1.5	28.7
Revenue efficiency (Cash flow/revenue)	%	11.5	15.1	10.3
Net working capital (Current assets less current liabilities)	€bn	-5.6	1.6	-0.8
Non-current asset ratio (Non-current assets/total assets)	%	72.1	69.2	70.6
Depreciation ratio for aircraft/reserve engines (Accumulated depreciation/accumulated acquisition costs)	%	51.7	52.5	49.7
Staff ratios				
Average number of employees	number	134,330	128,856	123,287
Revenue/employee	€	266,835	276,114	256,799
Staff costs/revenue	%	24.6	23.0	23.2
Traffic figures Lufthansa Group[2]				
Passengers	millions	142.3	129.3	109.7
Available seat-kilometres	millions	349,489	322,875	286,555
Revenue seat-kilometres	millions	284,561	261,149	226,639
Passenger load factor	%	81.4	80.9	79.1
Available cargo tonne-kilometres	millions	16,431	15,754	15,117
Revenue cargo tonne-kilometres	millions	10,907	10,819	10,071
Cargo load factor	%	66.4	68.7	66.6
Number of flights	number	1,228,920	1,128,745	1,021,919
Aircraft in service	number	763	728	617

[1] Until 2008 including the discontinued business segment Leisure Travel.
[2] Lufthansa German Airlines, SWISS, Austrian Airlines and Lufthansa Cargo.
[3] The income statement for the financial year 2010 has been adjusted in line with IFRS 5 Discontinued Operations because of the planned disposal of bmi.
[4] The figures for the financial year 2012 were adjusted retrospectively due to the application of the revised IAS 19.
[5] The figures for the financial year 2013 were adjusted retrospectively due to IFRS 11.
[6] The figures for the financial year 2014 were adjusted retrospectively due to the new reporting method.
[7] The figures for financial year 2017 were adjusted retrospectively to reflect the restated capitalisation of engine maintenance events and IFRS 9.

2015	2014[6]	2013[5]	2012[4]	2011	2010[3]	2009
6.3	0.6	1.8	4.3	1.6	4.3	–0.6
7.3	2.0	3.6	6.4	3.3	5.7	1.4
29.5	1.9	5.3	25.6	0.0	13.7	–0.4
34.7	4.5	8.9	26.8	5.5	13.6	–2.2
18.0	13.2	21.0	16.9	28.6	28.4	23.5
170.6	264.2	105.0	161.1	55.9	50.0	79.1
10.3	11.2	5.8	6.8	8.3	5.4	8.3
132.1	71.3	131.7	120.5	92.0	131.7	86.4
30.7	20.8	37.0	34.4	49.7	59.7	38.1
10.6	6.6	11.0	9.7	8.8	11.9	8.9
–3.5	–2.7	–1.3	0.0	–0.3	0.5	–0.1
72.5	72.9	66.7	65.8	66.3	64.7	67.1
51.6	51.4	52.6	54.2	54.4	53.9	54.2
119,559	118,973	117,414	118,368	119,084	117,066	112,320
268,119	252,251	255,736	254,587	241,292	226,018	198,384
25.2	24.4	24.5	22.4	23.2	24.5	26.9
107.7	106.0	104.6	103.6	100.6	92.7	77.3
273,975	268,104	262,682	260,169	258,263	234,377	208,226
220,396	214,643	209,649	205,015	200,376	186,452	162,286
80.4	80.1	79.8	78.8	77.6	79.6	77.9
14,971	14,659	14,893	14,749	16,260	15,298	14,372
9,930	10,249	10,285	10,240	10,861	10,429	8,706
66.3	69.9	69.1	69.4	66.8	68.2	60.6
1,003,660	1,001,961	1,028,260	1,067,362	1,050,728	1,008,988	899,928
600	615	622	627	696	710	722

Glossary

Aviation terminology

Hub In air traffic a hub refers to an airline's transfer airport, a central connecting point for different routes. Passengers and goods are transported from the original starting point to the airport's hub. From there they are carried to their destination by a second flight alongside passengers and goods from other departure points.

IATA International Air Transport Association – the international trade association for the airline industry.

Low-cost carrier Low-cost carrier are airlines which offer largely low ticket prices but with reduced service levels and sometimes additional charges on board and on the ground. Flights are mostly from secondary airports outside the major cities (e.g. Hahn in the Hunsrück area outside Frankfurt).

MRO Short for maintenance, repair and overhaul of aircraft.

Network airlines In contrast to low-cost carriers these airlines offer a wide-ranging, normally global route network via one or more hubs, with synchronised connecting flights.

Passenger-kilometre/tonne-kilometre Standard output units for air transport. An available seat-kilometre (ASK) denotes one seat offered flown for one kilometre; a revenue passenger-kilometre (RPK) denotes one paying passenger transported for one kilometre. An offered tonne-kilometre (TKO) denotes the offered capacity equivalent of one tonne of load (passengers and/or cargo) for one kilometre; a revenue tonne-kilometre (RTK) denotes one tonne of load (passengers and/or cargo) transported one kilometre.

Passenger load factor/cargo load factor Measure of capacity utilisation in per cent. The cargo load factor expresses the ratio of capacity sold to available capacity. The passenger load factor refers to passenger transportation and the cargo load factor to freight transport or total traffic.

Unit costs/unit revenues Key performance indicator for air transport. Unit costs (CASK) denote the operating expenses divided by offered seat kilometres. Unit revenue (RASK) denotes the revenue divided by offered seat kilometres.

Yields Average traffic revenue earned per unit of output; normally based on total passenger-kilometres or tonne-kilometres sold, but they can also be calculated per unit of traffic volume, e.g. per passenger carried or per kilometre flown.

Financial terminology

Adjusted EBIT Main earnings metric for the Company's forecast. This relates to EBIT adjusted for asset valuations and disposals and for the measurement of pension provisions. ↗ p. 32ff.

Adjusted Net Debt/Adjusted EBITDA Measure of the Group's debt-servicing capacity. By using adjusted net debt, it also includes pension provisions as well as classic net indebtedness.

Call option The right to purchase a specific underlying security within a specified period of time at an agreed price.

Cash flow Measure of a company's financial and earnings potential. It is calculated as the difference between the inflow and outflow of cash and cash equivalents generated from ongoing business activities during the financial year. ↗ T067 Consolidated cash flow statement, p. 105.

Compliance Institutionalised arrangements for ensuring that a company's management and staff duly comply with all statutory provisions and prohibitions.

Deferred taxes A balance sheet item used to show taxable and deductible temporary differences. Deferred taxes reflect the temporary differences between assets and liabilities recognised for financial reporting purposes and such amounts recognised for income tax purposes.

Directors' dealings Transactions by members of a company's supervisory, executive or divisional boards, or their family members, involving shares in "their" company.

Dividend yield Indicator for assessing the profitability of an investment in shares. It is determined by dividing the dividend by the share price at the close of the reporting year and then multiplying it by 100.

EBIT Financial indicator denoting earnings before interest and taxes. From financial year 2015 main earnings indicator. This is calculated from total operating income less operating expenses plus the result from equity investments.

EBITDA Financial indicator denoting earnings before interest, taxes, depreciation and amortisation. Depreciation relates to items of property, plant and equipment and amortisation to intangible assets – both terms apply equally to non-current and current assets. The figure also includes impairment losses on equity investments accounted for under the equity method and on assets held for sale.

Equity method Accounting method for measuring income derived from a company's investments in associated companies and joint ventures. Under this method, investment income equals a share of net income proportional to the size of the equity investment.

Equity ratio Financial indicator expressing the ratio of shareholders' equity to total assets.

Free cash flow Financial indicator expressing the cash flow from operating activities remaining in the reporting period after deducting net cash used for investing activities.

Group of consolidated companies Group of subsidiaries included in a company's consolidated financial statements.

Impairment Losses recognised on the carrying amount of assets. Impairment charges are recognised when an asset's "recoverable value" (the higher of fair value less costs to sell and value in use) is below its carrying amount. By contrast, depreciation or amortisation is the systematic allocation of the depreciable amount of an asset over its useful life.

Jet fuel crack Price difference between crude oil and kerosene.

Net indebtedness/net liquidity Financial indicator denoting non-current borrowing less cash, cash equivalents and current securities.

Rating A standardised measure used on international financial markets to judge and categorise a company's creditworthiness. A rating can enable conclusions to be drawn about whether an issuer is capable of meeting in full its obligations under the terms of the issue.

Registered shares with transfer restrictions Registered shares that may only be transferred with the approval of the company.

Return On Capital Employed – ROCE Indicator of value creation. EBIT, to which interest income on liquidity has been added and taxes of 25 per cent subtracted, is divided by the average capital employed. The resulting value reflects the relative return on the capital employed.

Return on sales Financial indicator expressing the net profit before taxes in relation to sales revenue.

Total shareholder return Financial indicator expressing the overall return that an investor earns from the increase in the market capitalisation or share price, plus the dividend payment. The total shareholder return is calculated from the share price at the close of the reporting year plus the dividend paid in respect of the previous year, multiplied by 100 and divided by the share price at the close of the previous year.

Trade working capital Financial indicator for assessing a company's liquidity, measured as the difference between its current assets and its current liabilities.

Traffic revenue Revenue generated solely from flight operations. It comprises revenue from transporting passengers and cargo as well as related ancillary services.

Weighted Average Cost of Capital – WACC The average return required on the capital employed at a company. The return on capital is calculated using the weighted average return required for both debt and equity.

Wet lease Lease of an aircraft from another airline, including its cockpit and cabin crew as well as maintenance and insurance.

Chart and table overview

Chart

Table

* Cover front

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The latest financial information on the internet:
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Financial calendar 2019

14 March	Release of Annual Report 2018
30 April	Release of Interim Report January – March 2019
7 May	Annual General Meeting
30 July	Release of Interim Report January – June 2019
6 Nov.	Release of Interim Report January – September 2019

Disclaimer in respect of forward-looking statements

Information published in the Annual Report 2018, with regard to the future development of the Lufthansa Group and its subsidiaries consists purely of forecasts and assessments and not of definitive facts. Its purpose is exclusively informational, and can be identified by the use of such cautionary terms as “believe”, “expect”, “forecast”, “intend”, “project”, “plan”, “estimate”, “anticipate”, “can”, “could”, “should” or “endeavour”. These forward-looking statements are based on discernible information, facts and expectations available at the time that the statements were made. They are therefore subject to a number of risks, uncertainties and factors, including, but not limited to, those described in disclosures, in particular in the Opportunities and risk report in the Annual Report. Should one or more of these risks occur, or should the underlying expectations or assumptions fail to materialise, this could have a significant effect (either positive or negative) on the actual results.

It is possible that the Group’s actual results and development may differ materially from the results forecast in the forward-looking statements. Lufthansa does not assume any obligation, nor does it intend, to adapt forward-looking statements to accommodate events or developments that may occur at some later date. Accordingly, it neither expressly nor conclusively accepts liability, nor gives any guarantee, for the actuality, accuracy and completeness of this data and information.

Note

Unless stated otherwise, all change figures refer to the corresponding period from the previous year. Due to rounding, some of the figures may not add up precisely to the stated totals, and percentages may not precisely reflect the absolute figures.

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