1.1 MANAGEMENT REPORT

1.1.1 Report on operations and results

1.1.1.1 Key figures (adjusted)

(in € millions, except earnings per share and dividend in €)	2016	2015	Total change	Organic change
Order intake	16,514	18,880	−13%	−11%
Order book at end of period	33,530	32,292	+4%	+5%
Sales	14,885	14,063	+5.8%	+6.8%
EBIT [(a)] *In % of sales*	1,354 *9.1%*	1,216 *8.6%*	+11% *+0.5 pts*	+15% *+0.6 pts*
Adjusted net income, Group share [(a)]	897	809	+11%	
Consolidated net income, Group share	946	765	+24%	
Adjusted net income, Group share, per share [(a)]	4.25	3.89	+9%	
Dividend per share [(b)]	1.60	1.36	+18%	
Free operating cash flow [(b)]	954	1,110	−14%	
Net cash at end of period	2,366	1,978	+20%	

(a) Non-GAAP measures, see definitions below.
(b) Recommended to the Shareholders' Meeting on 17 May 2017.

In 2016, Thales recorded a high level of order intake, strong sales growth and improved profitability in line with its medium-term objectives.

The Group exceeded all the financial objectives it had set for 2016: an order intake of between €15.5 billion and €16.0 billion, organic sales growth slightly above 5%, and an EBIT of between €1,300 million and €1,330 million, based on February 2016 exchange rates.

1.1.1.2 Presentation of financial information

Accounting policies

Thales' consolidated financial statements are prepared in accordance with IFRS (International Financial Reporting Standards) as approved by the European Union at 31 December 2016.

These principles, described in Note 14 of the consolidated financial statements, are consistent with those applied for the year ended 31 December 2015. In particular, the new mandatory standards applicable as from 1 January 2016 (annual improvements for 2010-2012, then 2012-2014 cycles, amendments to IAS 16 and IAS 38, amendments to IFRS 11 and amendments to IAS 19) have no impact on the Group's financial statements.

Definitions of non-GAAP financial indicators

In order to facilitate monitoring and benchmarking of its financial and operating performance, the Group presents three key non-GAAP indicators, which exclude non-operating and/or non-recurring items. They are determined as follows:

- **EBIT**, an adjusted operating indicator, corresponds to income from operations plus the share in net income of equity-accounted companies, before the impact of entries relating to the amortisation of intangible assets acquired (purchase price allocation – PPA) recorded as part of business combinations. From 1 January 2016, it also excludes the other expenses recorded in income from operations that are directly related to business combinations, which are unusual by nature.
- **Adjusted net income** corresponds to net income, excluding the following items and net of the corresponding tax effects:
  - amortisation of acquired intangible assets (PPA) recorded as part of business combinations,
  - expenses recognised in income from operations, that are directly related to business combinations, which are unusual by nature;
  - gains and losses on disposals of assets, changes in scope of consolidation and other,
  - changes in the fair value of derivative foreign exchange instruments (recognised under "Other financial income and expenses" in the consolidated financial statements),
  - actuarial gains (losses) on long-term benefits (recognised under "Finance costs on pensions and other long-term employee benefits" in the consolidated financial statements);
- **Free operating cash flow** corresponds to the net cash flow from operating activities before contributions to reduce the pension deficit in the United Kingdom, and after deducting net operating investments.

Readers are reminded that only the consolidated financial statements at 31 December were audited by the statutory auditors, including the calculation of EBIT, which is described in Note 2 "Segment Information" to the consolidated financial statements, and free operating cash flow, which is described in Note 11.1. Adjusted financial information other than that provided in the notes to the consolidated financial statements is subject to the verification procedures applicable to all information included in this management report.

The impact of these adjustment entries on the profit and loss account for 2016 and 2015 is presented in the tables on pages 9 and 10. Calculation of free operating cash flow is outlined on page 11.

In this management report, the amounts expressed in millions of euros are rounded to the nearest million. As a result, the sums of the rounded amounts may differ very slightly from the reported totals. All ratios and changes are calculated based on underlying amounts, which feature in the consolidated financial statements.

"Organic change" measures the movement in monetary indicators excluding the effects of changes in exchange rates and scope of consolidation. It is defined as the difference between (i) the indicator for the prior period, recomputed at the exchange rates applicable for the current period to entities whose reporting currency is not the euro, less the contribution of entities divested during the current period, and (ii) the value of the indicator for the current period less the contribution of entities acquired during the current period.

CALCULATION OF EBIT AND ADJUSTED NET INCOME – 2016

		Adjustments				
(in € millions)	**2016 consolidated profit and loss account**	**Amortisation of intangible assets (PPA)** [(a)]	**Income (loss) from disposals and others**	**Change in fair value of FX derivatives**	**Acturial differences long-term benefits**	**2016 adjusted P&L**
Sales	**14,885**					**14,885**
Cost of sales	(11,275)	1				(11,274)
Research and development expenses	(736)	6				(731)
Marketing and selling expenses	(1,025)	6				(1,019)
General and administrative expenses	(544)	7				(537)
Restructuring costs	(101)					(101)
Amortisation of acquisition-related intangible assets (PPA)	(107)	107				0
Income from operations	**1,097**					**N/A**
Impairment of non-current assets [(b)]	0					0
Disposal of assets, changes in scope and other	205		(205)			0
Share in net income of equity-accounted companies	120	11				131
EBIT	**N/A**					**1,354**
Impairment of non-current assets [(b)]	0					0
Cost of net debt	6					6
Other financial income and expenses	(81)			70		(10)
Finance costs on pensions and other long-term employee benefits	(78)				12	(66)
Income tax	(256)	(58)	28	(24)	(4)	(314)
Net income	**1,015**	**79**	**(177)**	**46**	**8**	**970**
Non-controlling interests	(68)	(4)		(1)		(74)
NET INCOME, GROUP SHARE	**946**	**75**	**(177)**	**45**	**8**	**897**
Average number of shares (thousands)	210,872					210,872
NET INCOME, GROUP SHARE, PER SHARE (in €)	**4.49**					**4.25**

(a) Including expenses related to acquisitions recorded in income from operations. See definitions of EBIT and adjusted net income, page 8.
(b) Included in "Share in net income of equity-accounted companies" in the consolidated income statement and in "Net income" in the adjusted income statement.

> CALCULATION OF EBIT AND ADJUSTED NET INCOME – 2015

(in € millions)	2015 consolidated profit and loss account	Adjustments: Amortisation of intangible assets (PPA) [(a)]	Adjustments: Income (loss) from disposals and others	Adjustments: Change in fair value of FX derivatives	Adjustments: Acturial differences long-term benefits	2015 adjusted P&L
Sales	**14,063**					**14,063**
Cost of sales	(10,688)					(10,688)
Research and development expenses	(692)					(692)
Marketing and selling expenses	(981)					(981)
General and administrative expenses	(532)					(532)
Restructuring costs	(94)					(94)
Amortisation of acquisition-related intangible assets (PPA)	(112)	112				0
Income from operations	**965**					**N/A**
Impairment of non-current assets [(b)]	0					–
Disposal of assets, changes in scope and other	53		(53)			0
Share in net income of equity-accounted companies	113	27				140
Income from operations after share in net income of equity-accounted companies	1,131					–
EBIT	**N/A**					**1,216**
Impairment of non-current assets [(b)]	–					0
Cost of net debt	4					4
Other financial income and expenses	(42)			32		(10)
Finance costs on pensions and other long-term benefits	(60)				(12)	(73)
Income tax	(220)	(38)	(1)	(11)	4	(266)
Net income	813	100	(55)	21	(8)	871
Non-controlling interests	(48)	(13)		(2)		(62)
NET INCOME, GROUP SHARE	**765**	**88**	**(55)**	**19**	**(8)**	**809**
Average number of shares (thousands)	208,112					208,112
NET INCOME, GROUP SHARE, PER SHARE (in €)	**3.68**					**3.89**

(a) Including expenses related to acquisitions recorded in income from operations. See definitions of EBIT and adjusted net income, page 8.
(b) Included in "Share in net income of equity-accounted companies" in the consolidated income statement and in "Net income" in the adjusted income statement.

> CALCULATION OF FREE OPERATING CASH FLOW

(in € millions)	2016	2015
Operating cash flow before interest and tax	**1,698**	**1,643**
Change in working capital and reserves for contingencies	(63)	143
Payment of pension benefits, excluding contributions related to the reduction of the UK pension deficit	(102)	(124)
Net interest (paid)/received	(8)	9
Income tax paid	(99)	(102)
Net cash flow from operating activities, excluding contributions related to the reduction of the UK pension deficit	**1,426**	**1,569**
Net operating investments	(472)	(458)
FREE OPERATING CASH FLOW	**954**	**1,110**
Net (acquisitions)/disposals	(94)	37
Contributions related to the reduction of the UK pension deficit	(88)	(101)
Dividends paid	(297)	(234)
Changes in exchange rates and other	(87)	159
CHANGE IN NET CASH	**388**	**971**

1.1.1.3 Order intake

2016 **order intake** amounted to **€16,514 million, down 13%** on 2015 (down 11% at constant scope and currency[1]). The **book-to-bill** ratio was **1.11** for the year, compared to **1.34** in 2015.

(in € millions)	2016	2015	Total change	Organic change
Aerospace	5,872	6,281	−7%	−6%
Transport	1,504	2,826	−47%	−44%
Defence & Security	9,052	9,701	−7%	−6%
Total – operating segments	**16,427**	**18,809**	**−13%**	**−12%**
Other	87	71		
TOTAL	**16,514**	**18,880**	**−13%**	**−11%**
Of which mature markets[a]	10,138	12,701	−20%	−19%
Of which emerging markets[a]	6,376	6,179	+3%	+4%

(a) Mature markets: Europe, North America, Australia, New Zealand. Emerging markets: all other countries.

The order intake significantly outperformed sales for the third consecutive year. Powered by this strong sales momentum, the consolidated **order book** was **€33.53 billion** at 31 December 2016, an increase of €9.06 billion over three years (from €24.47 billion at 31 December 2013).

Thales received **14 large orders with a unit value of over €100 million**, representing a total amount of €4,665 million:

- One contract booked in Q1 2016, covering support for the Watchkeeper unmanned aerial vehicle for the British army;
- Two contracts booked in Q2 2016: one covering the security of 170 Ministry of Defence locations in the Netherlands and the other relating to the production of a military satellite for a Middle East customer;
- Three contracts booked in Q3 2016:
  - one relating to the order of 36 Rafale fighter aircraft by the Indian government,
  - one to provide satellite operator SES with a satellite specifically designed for onboard internet connectivity (SES 17), and
  - in-flight entertainment systems (IFE) for Emirates' future Boeing 777X aircraft;
- Eight contracts booked in Q4 2016:
  - four additional tranches of contracts with the European Space Agency and the European Commission in the fields of observation (Sentinel 1C/1D and Sentinel 3C/3D), space exploration (Exomars) and navigation (Galileo program),
  - one signalling contract for the extension of the Dubai metro;
  - one contract to modernise civil and military air traffic management across Bolivia,
  - one contract to supply airborne radars to the UK Ministry of Defence (Crowsnest project), and
  - one additional contract within the scope of the Franco-British MMCM autonomous mine countermeasures programme.

Orders with a unit value of less than €100 million remained robust, growing 8% year-on-year.

The total order intake was as expected down on 2015, which had been boosted by an exceptional volume of large orders with a unit value of over €100 million (€7.9 billion). These included in particular

(1) Taking into account a negative exchange rate effect of €316 million and a net positive scope effect of €81 million, mainly related to the consolidation of Vormetric as of March 2016 (Defence & Security segment).

five major contracts (with a unit value of over €500 million): orders placed by Egypt and Qatar for Rafale fighter aircraft, the signalling of four lines of the London underground, an order from the Australian army for over 1,000 Hawkei vehicles, and a military satellite communications system for France (ComSat NG).

From a geographical point of view, orders fell as expected in mature markets (€10,138 million, a decrease of 20%), where the clients of three of the five major 2015 orders listed above were located. Emerging markets continued to report a solid order intake (€6,376 million, up 3%), driven by good momentum in both the Middle East and Asia.

Order intake in the **Aerospace** segment fell 7% to **€5,872 million**, compared to €6,281 million in 2015. Avionics continued to report a good level of orders in both civil and military segments. In-flight entertainment (IFE) posted an excellent commercial performance, announcing two major airline successes: Singapore Airlines and Emirates. The Space segment benefited from good commercial momentum, although the order intake was understandably down on the high 2015 figure.

Order intake in the **Transport** segment represented **€1,504 million**, down 47% on 2015. The Group landed a large contract (worth over €100 million) in the United Arab Emirates, to supply leading-edge signalling, surveillance and telecommunications technologies for the extension of the Dubai metro. In 2015, the order intake had been driven by three large urban signalling contracts (Doha, Hong Kong and London).

Order intake in the **Defence & Security** segment remained very high, at **€9,052 million**. The 7% year-on-year decline reflects fewer large contracts booked in this segment (six large contracts in 2016 versus nine in 2015).

1.1.1.4 Sales

(in € millions)	2016	2015	Total change	Organic change
Aerospace	5,812	5,387	+7.9%	+8.5%
Transport	1,603	1,519	+5.5%	+8.3%
Defence & Security	7,383	7,079	+4.3%	+5.0%
Total – operating segments	**14,798**	**13,985**	**+5.8%**	**+6.7%**
Other	87	78		
TOTAL	**14,885**	**14,063**	**+5.8%**	**+6.8%**
Of which mature markets [a]	10,395	10,101	+2.9%	+3.9%
Of which emerging markets [a]	4,490	3,962	+13.3%	+14.0%

(a) Mature markets: Europe, North America, Australia, New Zealand. Emerging markets: all other countries.

Sales for 2016 were **€14,885 million**, compared to €14,063 million in 2015, up 5.8% on a reported basis, and up **6.8% at constant scope and currency** [1] ("organic" change), driven by very good momentum in all segments.

As expected, sales fell slightly in the fourth quarter (down 1.6% based on reported figures, down 0.7% on an organic basis), affected by a strong basis of comparison, particularly in the Transport and Defence & Security segments.

From a geographical perspective, this good performance reflects both continued strong growth in emerging markets (up 14.0%, following on from 16.0% in 2015) and a return to organic growth in mature markets (up 3.9%, after 0.5% in 2015). Emerging markets accounted for 30% of the Group's sales, up from 28% in 2015 and 25% in 2014.

Sales in the **Aerospace** segment came in at **€5,812 million**, up 7.9% compared to 2015 (up 8.5% at constant scope and currency). Sales of commercial and military aircraft avionics and in-flight entertainment proved particularly buoyant. However, sales of helicopter avionics, and of microwave and imaging systems were down. Sales in the Space segment experienced strong growth, lifted by the ramp-up of contracts signed in 2014 and 2015 in both observation and telecommunications activities.

In the **Transport** segment, sales totalled **€1,603 million**, up 5.5% compared to 2015 (up 8.3% at constant scope and currency). This growth reflects the start of invoicing on the three major projects won in 2015, combined with the recovery of activity after the execution difficulties that had impacted 2015. The decline in sales in the fourth quarter was not a reflection of a slowing momentum, but of a tough comparison basis, due particularly to the catch-up impact of certain project execution delays.

Sales in the **Defence & Security** segment were **€7,383 million**, up 4.3% compared to 2015 (up 5.0% at constant scope and currency). Almost all businesses contributed to this momentum. The Land & Air Systems segment posted strong growth, specifically in air defence, civil and military radars, optronics and missile electronics. The Defence Mission Systems segment delivered vigorous growth in fighter aircraft systems, surface ship systems and in intelligence, surveillance and reconnaissance (ISR) solutions. Only the Secure Communications and Information Systems segment witnessed a slowdown, due mainly to the delivery in 2015 of several large military network projects such as the new French Ministry of Defence site ("Balard").

As expected, sales for this segment fell slightly in Q4 2016 (down 3.5% based on reported figures and down 2.7% on an organic basis). This is explained by a contract phasing effect and a tough prior-year comparative basis.

(1) Taking into account a negative exchange rate effect of €192 million and a net positive scope effect of €76 million, mainly related to the consolidation of Vormetric as of March 2016 (Defence & Security segment).

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1.1.1.5 Adjusted results

EBIT

In 2016, consolidated **EBIT**[1] was **€1,354 million**, or 9.1% of sales, compared to €1,216 million (8.6% of sales) for the same period in 2015. EBIT advanced by 11% based on reported figures, and by 15% on an organic basis.

(in € millions)	2016	2015	Total change	Organic change
Aerospace	**571**	**518**	**+10%**	**+11%**
In % of sales	*9.8%*	*9.6%*	*+0.2 pts*	*+0.3 pts*
Transport	**11**	**(37)**	**NM**	**NM**
In % of sales	*0.7%*	*−2.4%*	*+3.1 pts*	*+3.3 pts*
Defence & Security	**788**	**760**	**+4%**	**+8%**
In % of sales	*10.7%*	*10.7%*	*−0.1 pts*	*+0.3 pts*
Total – operating segments	**1,371**	**1,241**	**+10%**	**+14%**
In % of sales	*9.3%*	*8.9%*	*+0.4 pts*	*+0.6 pts*
Other – excluding DCNS	(50)	(47)		
Total – excluding DCNS	**1,321**	**1,194**	**+11%**	**+14%**
In % of sales	*8.9%*	*8.5%*	*+0.4 pts*	*+0.6 pts*
DCNS (35% share)	34	22		
TOTAL	**1,354**	**1,216**	**+11%**	**+15%**
In % of sales	*9.1%*	*8.6%*	*+0.5 pts*	*+0.6 pts*

The **Aerospace** segment posted EBIT of **€571 million** (9.8% of sales), versus €518 million (9.6% of sales) in 2015. The EBIT margin was driven by a good performance in the Avionics and Space segments. Margin growth was slowed down by a rise in restructuring costs, particularly for microwave and imaging systems activities, and by a change in the rules for allocating shared sales and marketing expenses to operating segments[2].

EBIT for the **Transport** segment increased sharply, at **€11 million** (0.7% of sales), compared to a negative €37 million (negative 2.4% of sales) in 2015. The operational recovery plan implemented by the new management team continued on track, but low or zero margin contracts still weighed on profitability. Ongoing transformation efforts and the gradual phasing-out of low-margin contracts should help this business regain its past profitability levels by 2018/2019.

EBIT for the **Defence & Security** segment was **€788 million** (10.7% of sales), compared to €760 million (10.7% of sales) in 2015. On a reported basis, the EBIT margin for this segment remained stable (down 0.1 points), affected namely by the sale of interests in two joint ventures[3]. The EBIT margin gained 0.3 points on an organic basis.

The contribution made by **DCNS** to EBIT stood at **€34 million** in 2016, compared to €22 million in 2015, benefiting from the gradual upturn in its profitability, and from a non-recurring, non-operating item.

Adjusted financial income

Net interest income remained low at **€6 million** versus €4 million in 2015. The same can be said for **other adjusted financial income (expense)**[4], which represented a **net expense of €10 million** in both 2016 and 2015. Adjusted finance costs on pensions and other employee benefits[4] decreased (**€66 million** versus €72 million in 2015), due mainly to the fall in the deficit between 1 January 2015 and 1 January 2016, and changes in the EUR/GBP exchange rate.

Adjusted net income

Adjusted net income, Group share[5] stood at **€897 million** versus €809 million in 2015, taking into account an adjusted tax charge[4] of €314 million (€266 million in 2015). The effective tax rate was up slightly, at 27.2% compared to 26.7% in 2015. Following the French parliament's adoption of a reduction in corporate income tax as from 2020, the Group recognised a one-off tax charge of €18 million reflecting the revaluation of its net deferred tax position. The effective tax rate would have declined if this one-off item had not been recorded.

Adjusted net income, Group share, per share[4] came out at **€4.25**, up 9% on 2015 (€3.89).

1.1.1.6 Consolidated results

Income from operations

Income from operations amounted to **€1,097 million** versus €965 million in 2015, up 14%. This increase reflects the improvement in gross margin and greater discipline over indirect costs, which were up just 4% despite the increase in R&D expenses.

Income from operations after share in net income of equity-accounted companies

Income from operations after share in net income of equity-accounted companies advanced 26% year on year to **€1,422 million** from €1,131 million in 2015. In addition to the increase in EBIT, it was also boosted by disposal gains, including the Raytheon (€92 million) and Hanwha (€114 million) joint ventures. The share in net income of equity-accounted companies came in slightly higher year on year at €120 million, with the impact of the disposal of the two above-mentioned joint ventures offset by higher contributions of the Group's other equity-accounted companies.

(1) Non-GAAP measure, see definition and computation on pages 8 and 9.
(2) Negative 0.2-point impact on the EBIT margin in this segment, offset by a non-material improvement in the other segments.
(3) Negative impact on EBIT: €19 million.
(4) See tables on pages 9 and 10.
(5) Non-GAAP measure, see definition on page 8.

Net income

Consolidated net income, Group share climbed **24%** to **€946 million**, buoyed by EBIT growth and by the sharp rise in disposals of assets.

1.1.1.7 Financial position at 31 December 2016

Free operating cash flow, at **€954 million** (€1,110 million in 2015) remained high, lifted by EBIT growth and by advance payments received on orders during the year. The Group slightly increased its operating investments as part of the optimisation of its industrial base (€472 million, up from €458 million in 2015). The cash conversion rate from adjusted net income into free operating cash flow was 106%.

At 31 December 2016, **net cash amounted** to **€2,366 million** compared to €1,978 million at end-2015, after the distribution of €297 million in dividends (€234 million in 2015).

The net balance of acquisitions and disposals is an expenditure of €94 million: the acquisition of Vormetric, finalised in March (€372 million expense) was partly offset by the balancing cash payment received in connection with the change in scope of the Thales Raytheon Systems joint venture (€81 million) and by cash received in relation to the sale of the shareholding in Hanwha Thales (€204 million). In November 2016, the Group entered into exclusive negotiations with a view to selling its ticketing business[1], which reported sales of €190 million in 2016. This project is currently in consultations with employee representative bodies, and will be subject to customary closing procedures.

Equity, Group share remained stable year-on-year at **€4,640 million**, compared to €4,646 million at 31 December 2015, as the rise in the net pension obligation and the dividend payout offset the impact of consolidated net income, Group share (€946 million).

1.1.1.8 Proposed dividend

At the Annual General Meeting on 17 May 2017, the Board of Directors will propose the distribution of a **dividend** of **€1.60** per share, an increase of 18% on 2015.

If approved, the ex-dividend date will be 31 May 2017 and the payment date will be 2 June 2017. The dividend will be paid fully in cash and will amount to €1.20 per share, after deducting the interim dividend of €0.40 per share paid in December 2016.

1.1.1.9 Outlook

In 2017, Thales should benefit from positive trends in most of its markets. Although below the highs recorded in 2015 and 2016, the order intake in 2017 should remain brisk, at around €14 billion.

Sales should see mid-single digit organic growth compared to 2016.

This positive trend, combined with continuing efforts to improve competitiveness, should result in Thales delivering between €1,480 and €1,500 million in EBIT (based on February 2017 scope and exchange rates), representing an increase of 9% to 11% versus 2016.

Thales also confirms its mid-term objectives of a mid-single digit organic sales growth on average in the 2016 2018 period, and an EBIT margin of between 9.5% and 10% in 2017/2018.

1.1.2 Risk factors

Thales is exposed to numerous risks and uncertainties which could materially affect its business, reputation, financial position, results or ability to achieve its objectives. The risks described below are not the only ones that Thales faces. Other risks, currently unknown to Thales, or which presently appear to be non-significant, could also have an unfavourable impact on the business, profitability and financial position of the Group or its ability to achieve its objectives.

Generally, Thales may be faced with a number of operational and strategic risks (Section 1.1.2.1), legal risks (Section 1.1.2.2) and financial risks (Section 1.1.2.3).

See also Section 3.2 "Chairman's report of 17 May 2017, on corporate governance, internal control and risk management".

1.1.2.1 Operational and strategic risks

1.1.2.1.1 Control of bids and programmes

Many of Thales' products and systems are highly complex due to their advanced technology content, the rigorous operational constraints and harsh environments in which they operate (which require them to be extremely reliable), and the contractual arrangements surrounding their sale (comprehensive prime contractorships for large-scale systems, public-private partnerships or their equivalent, local shares, compensation commitments (see Section 1.1.2.1.11), etc.).

The actual cost of design, development and manufacture may therefore exceed initial cost estimates, which in turn may adversely impact Thales' results and financial position, especially considering that the associated contracts are generally based on a fixed, all-inclusive price. In addition, many contracts include stringent performance levels and/or tight delivery schedules for the products or systems sold, particularly given the increased competition. If Thales is unable to deliver these products or systems in line with the required level of performance and/or delivery schedule, customers may demand penalty payments or even decide to terminate the contract.

(1) Payment collection for Transport operators, road toll and car park management systems.

Bid and project management is therefore subject to a detailed risk management and assessment process. Thales ranks the various levels of criticality. Critical bids and projects are specifically monitored at the management level of the operating entities (Business Lines and Global Business Units) and, as needed, by Group management.

Contractual risk assessment is an integral part of the tendering process. Depending on the complexity of the bid, this procedure involves a number of steps which progressively sharpen the estimated level of profitability and the associated risks to be assessed.

Numerous Thales contracts, particularly those that involve the most complex products and services, run for several years. Their economic contribution to the Group's result over a given period is therefore assessed, in accordance with applicable accounting standards, based on an estimate of their cost to completion.

These assessments can result in uncertainties that require subsequent correction despite the careful attention that is paid to estimates for each project through regular reviews to measure the technical, contractual and financial progress made.

The Group pays special attention to analyses and action plans for efficiently managing bids and projects by measuring and monitoring financial variance on the projects as well as appropriately applying corrective actions.

As part of the Ambition Boost performance programme (see also Section 1.1.2.1.8 "Risk of lower impact of performance improvement measures"), the Group has also implemented action plans to improve the management of bids and projects, engineering and the supply chain. These actions aim in particular to:

- improve product policy and ensure it is better adapted to customer needs in order to streamline new developments and thus reduce risks;
- improve the management of commitments made, with the widespread use of independent peer reviews, closer involvement of Engineering, Purchasing, Production, Legal and Quality Control, and the introduction of Product and Project Design Authorities responsible for developing the technical solutions for products and projects (during the bid or execution phase);
- improve the supply chain, by increasing its global dimension and enhance the increasing maturity of emerging countries in project implementation;
- improve methods, practices and tools to make them more relevant to international products/projects (e.g., through the implementation of a project management tool adapted to emerging countries, SAP by Design);
- introduce advanced training for project managers to obtain International Project Management Association (IPMA) certification. At the end of 2016, nearly 1,200 project managers within the Group had gained IPMA certification, with approximately 180 certified during the year.

1.1.2.1.2 Supplier risk

Purchases constitute a very significant proportion of Thales' business, representing nearly half its sales with purchases ranging from industrials to services, equipment and sub-systems. Thales is therefore exposed to the risk of the industrial, technical or financial failure of any of its suppliers, which in turn could affect the Group's profitability and performance.

There are two major types of supplier risk:

- legal or regulatory non-compliance (ethics, export control, intellectual property, etc.); these risks are handled by the departments concerned using the Group Risk Management system with the support of the Purchasing department;
- structural and operational risks that could disrupt supply, which are dealt with by the Purchasing department using the Group Risk Management system. The Purchasing department has identified two key triggers: supplier default and economic dependence.

Risk of supplier default

Supplier default could be caused by a major incident at one of its sites, by its external environment (shortage of raw materials or components, major political instability, natural disaster, etc.) or through mismanagement. The supplier's management performance is monitored both in operating terms (poor procurement planning, failure to manage tier 2 suppliers, loss of control over industrial processes, plant obsolescence, etc.) and in cross-disciplinary and financial terms (poor skills management, loss of know-how, fall in sales, mismanagement of working capital requirement, cash flow problems, administration or bankruptcy protection, etc.). A combination of problems could lead to the disappearance of a company or its takeover by investors with different interests from those of Thales.

Consequently, faced with this risk of a supply shortage, Thales implements a dual sourcing (or alternative-source) policy as frequently as possible for each technology family, regularly updated and accompanied by buffer stocks that cover its requirements until customer contracts have been fulfilled.

In addition, given the increased risk of fragility of certain suppliers in the current economic climate, Thales has introduced a special approach. Based on close cooperation between buyers and financial teams, it is aimed at identifying, from among its critical suppliers, those that would be particularly susceptible financially and implementing an appropriate action plan to ensure continuity of supply. Apart from individual monitoring, an analysis is carried out by technology field in conjunction with the professional bodies concerned, to identify appropriate solutions.

Alongside these financial supervision measures, Purchasing and Quality Control have stepped up their appraisal, accreditation and management of supplier performance to better identify structural risks. Supplier performance audits are broad-based (covering quality control, industrial maturity, flow optimisation, compliance with environmental regulations, expertise in technical and technological processes, financial strength, etc.) and therefore allow a complete risk analysis to be carried out. When executing a purchasing contract, Thales closely monitors the implementation by the supplier of measures aimed at tackling the risks identified during the selection process.

Risk of economic dependence

The economic dependence of Small and Medium-sized Enterprises (SMEs) on Thales is considered a separate risk in its own right. It is particularly significant now that the economic crisis has disrupted the sales portfolios of a number of them, jeopardising the operating cycle with Thales and potentially leading to a supply shortage.

In order to mitigate this risk, the commitment rate (orders placed by Thales as a percentage of the supplier's total annual sales) is monitored for each panel of suppliers by market segment (vertical approach) and for the main countries where the Group is established (France, the UK, the Netherlands, etc.).

If the commitment rate exceeds 50% for more than two consecutive years, an action plan coordinated with internal specifiers and internal users is drawn up and implemented in order to return to a commitment rate of 25%.

The purchasing policy, supplier selection and performance monitoring processes and supervisory and risk mitigation measures are also all designed to reduce these risks, during both the bidding phase and the project implementation phase.

1.1.2.1.3 Human resources risk

a) Workplace health and safety

Ensuring a healthy and safe working environment for its employees pursuant to the laws in force, monitoring procedures, preventing health and professional risks and employee training are key priorities for Thales.

These principles are reflected in a structure designed to prevent risks related to health and safety in the workplace, whether on Thales sites or external sites, and to manage major health crises that could occur internationally.

Regular monitoring of the risks to which the Group's employees may be exposed is performed each year.

Practical measures are also implemented by the Group's Human Resources department and Health, Safety and Environment department in relation to employee health and safety in the workplace. Thales is also committed to increasing the quality of life in the workplace. In France, for example, a three-year Group agreement on "quality of life at work" was signed on 4 February 2014. Continuing the approach adopted in the agreement signed in 2009 on the same subject, the agreement defines a general framework for prevention and aims to place particular focus on psycho-social risks by implementing individual and collective preventive actions.

Proof of the Group's continuing commitment to certification, 106 Thales entities (representing 82% of the workforce) had obtained OHSAS 18001 certification by the end of 2016.

b) Talent development

If Thales is not attractive enough to recruit the qualified staff it needs in a timely manner and to retain and motivate its employees to develop and run its business, sales and operating profitability could be negatively affected.

Thales' success and performance effectively depend on:

- its capacity to recruit employees in the different employment markets, in France and abroad;
- the quality of the key skills and the commitment of its employees; and
- its capacity to globally manage the talent required for the development of its activity worldwide.

Thales therefore attaches great importance to its attractiveness and positioning as a top employer, ensuring a positive external image which will boost recruitment and an internal work environment that will contribute to retain employees.

As an attractive and recognised employer in France, Thales is also building up its image in all the countries where the Group is already present or plans to develop, notably through communication campaigns and partnerships with leading universities. In addition, a global recruitment function, attached to the HR general management has been created to help the Group develop in these geographical zones.

The global process of identifying and managing talent within the Group has also been reinforced by encouraging interaction between management teams in different parts of the organisation.

Thales is also continuing its proactive skills management policy for the Group's main professional families. A Steering committee per family, composed of operational and HR managers, conducts a yearly analysis of changes in jobs, expertise, and the needs of the Company, and establishes action plans (for training, anticipated management of internal mobility, external recruitment, etc.). To complement this tool, each year the Group's internal university updates key training programmes in response to changing needs. Significant work has been carried out to pinpoint employee soft skills, namely for those employees attached to the R&D Systems, R&D Hardware and R&D Software job families. This work helps to more precisely identify training and recruitment requirements. This approach is now being extended to other job families such as Purchasing, Engineering and Project Management.

Lastly, in 2013, the Group signed a series of agreements with the unanimous support of the trade union organisations in France that encourage the integration of young people, either on work-study training schemes or post-qualification, and the transfer of knowledge (the Generation Contract); that develop diversity (the Gender Equality Agreement); and that take a forward-looking approach to jobs and skills.

These agreements will allow the Group to better manage the integration of young graduates in France, improve the development of its critical skills, promote diversity and better anticipate changes within the Group.

1.1.2.1.4 Environmental risks

For many years, Thales has conducted a regular analysis and update of environmental risks in accordance with its business activities, scientific and technical developments as well as with current regulatory change.

This analysis is aimed at:

- regularly ensuring that employees and neighbouring residents are not exposed to health and environmental risks (pollution, asbestos, etc.) through their activities or work environment, whether on Thales or external sites;
- ensuring the compliance of activities and products (substances, waste, etc.);
- analysing the impact of new regulations (e.g., REACH in Europe) on the supply chain and on product design;
- analysing the impact of the environment on activities (water stress, climatic events, etc.);
- identifying an appropriate organisational structure and associated action plans, either at Group level or locally, based on the results of this analysis.

To support this analysis, an Environmental Management System has been rolled out at all sites in order to ensure that the environmental impacts of products and operations are controlled and limited. Part of the Group reporting arrangement, this management system encompasses the different functions, such as engineering, manufacturing, supply chain, purchasing, contract management, auditing and risk management, etc. Special training, communication tools and shared experience are used to support the approach.

At the end of 2016, 120 entities had been certified ISO 14001, representing 89% of the Group's workforce.

Thales also regularly assesses the risks linked to climate change in order to evaluate their impact on activity and costs. The main risks identified are:

- regulatory change (reporting, carbon taxes, etc.) which has a very limited impact for Thales (not affected by the EU Emissions Trading Scheme). Nevertheless, Thales closely monitors current and future laws and regulations in order to analyse and anticipate their impact and set in place the requisite measures;

- climate change (floods, hurricanes, earthquakes, water stress, etc.) that can lead to damages and a continuous disruption in activity at Thales sites as well as the sites of its subcontractors and partners.

  To manage this risk and reduce its vulnerability, Thales has carried out regular assessments of the exposure of its different sites to natural disasters and their consequences for several years now. Action plans linked to these assessments have been defined in order to attenuate this risk (see Section 5.2.4), and the Group's insurance policies (see Section 1.1.2.4 Insurance) are also based on these assessments.

  A risk mapping linked to water shortages has also been carried out. The majority of Group sites in vulnerable areas are offices that have very limited risk exposure given their low water consumption.

  An analysis of "natural disaster" and "water stress" risks is now included in the regular prevention visits at the Group's sites and those of its critical subcontractors;
- any failure by Thales to implement adequate measures in the fight against climate change that would have a negative impact on its corporate image. As a Group that is regularly consulted by increasingly exacting stakeholders (customers, investors, civil society, etc.) regarding its carbon strategy, Thales publishes information on the measures in place and the results obtained (see also Section 5.2.4). In 2016, it was awarded a rating of A- for its "climate change" performance (Carbon Disclosure Project), making it one of the best-performing companies listed.

At 31 December 2016, reserves for environmental contingencies amounted to €6.7 million.

1.1.2.1.5 Security breaches in respect of sites and employees

Thales is exposed to attempts to breach the security of its sites (attempts by unauthorised persons to access confidential information, threats to the physical security of sites and facilities, etc.). The occurrence of such events could affect the rollout of the Group's activities and its reputation and, consequently, its results and financial position.

In order to minimise this risk, the Group Security department has drafted a policy for regulating access to and movement around all Group sites. This policy is applied by the Group's network of security officers. In its defence businesses, the Group is subject to different national regulations requiring it to implement measures to protect its employees and industrial assets.

The Group is therefore required to undergo to a large number of audits and inspections by the national supervisory authorities.

It has also implemented a global procedure for employee safety and protection in all of the countries in which they perform their work. In certain countries, this global procedure runs alongside a local intervention system, which ensures a quick response to incidents.

Lastly, faced with the current heightened terrorist threat, the Group has also increased the level of security and protection for its most sensitive sites. These measures are particularly important in France given the number and nature of sites in the country.

1.1.2.1.6 Risk of IT system failure

The Group operates – whether directly or through service providers – complex IT systems and infrastructures that are essential to the smooth running of its commercial, industrial and financial processes. These information systems include management, development and engineering systems as well as platforms operated on behalf of our customers, and must be protected against any malfunctions, natural disasters, malicious acts or human error at all costs. The malfunction or failure of these systems may have external causes (viruses or hacking, power cuts or network failures, natural disasters, etc.) or internal causes (malicious acts, breaches of data confidentiality, human error or obsolescence). Any such malfunction or failure can have an impact on the Group's operations and its financial results.

To guard against these growing risks, the Group has implemented multi-year plans to deal with part of its IT systems being temporarily or permanently unavailable, as well as any cyber-security threats to these systems.

The plan is completed by efforts to raise employee awareness of these threats.

Lastly, the Thales IT system security strategy has been approved by Group management, in close cooperation with the national and governmental authorities of the countries concerned. Any such incidents could have an impact on the Group's operations and its financial results.

Business continuity

The Disaster Recovery Plan in case of the failure of part of Thales' IT systems has been adapted to the countries in which the Group is present. A methodology to prevent the risk of a failure of the Group's IT systems also exists to ensure disaster recovery solutions are adapted to the degree of risk and their operational impact. More specifically, the plan is based on an analysis of the criticality of the different services given their impact on the Group's operations, and undergoes regular test runs.

Cyber-security

A plan to protect against risks related to cyber-security has been defined and implemented in countries where the Group currently operates. As well as continuing to adapt the means of protection already in place, the plan includes the implementation of new measures to heighten the protection of sensitive information, and the development of systems for early identification and prompt correction of any non-compliances. It is adapted to new regulations and practices (e.g. the use of Cloud computing), uses new technologies (e.g., solutions developed by Vormetric which was recently acquired by the Group), and includes the implementation of "CyberSecurity Operation Centers" so that anomalies and incidents that could affect the security of our systems are identified as early as possible and the appropriate solutions put in place.

In order to ensure the convergence and coherence of cyber-security and defence measures throughout the Group, a number of "key rules" linked to Thales' IT systems have been adopted by the IT departments at a global level. Their effective application is regularly monitored and reporting submitted to the Group IT Security department.

The implementation and control of internal cyber-defence measures benefits from the expertise of the Group teams responsible for the protection of customer IT systems.

Awareness and know-how

The plan is completed by ongoing efforts to raise employee awareness of these threats. Communication campaigns and training are rolled out to remind users of the best practices that will help ensure the security of their IT systems. More recently, regular website forums have also been held in which all employees are encouraged to take part.

While all of the measures and action plans put in place by Thales significantly reinforce the level of protection for the Group's information systems, they do not guarantee complete immunity against failures that may have an impact on business and operations.

1.1.2.1.7 Risk related to failure of equipment or technology

Thales systems and equipment are highly complex and technical and are likely to be integrated within high-value civil or military platforms. A malfunction of any such systems, equipment or technologies could result in client claims or third-party litigation. Thales could therefore be held liable, notably in the event of damage to property or personal injury, or in the event that they result in a disruption in the business and activities of its customers. Were they to occur, such events would be liable to impact Thales' results and financial position, as well as its reputation.

In order to limit the impact, Thales has put Group-wide standards in place (Design Authority, quality, documentation, contractual arrangements and risk management). In addition, Thales follows a policy of maintaining appropriate insurance coverage (see Section 1.1.2.4 "Insurance").

1.1.2.1.8 Risk of lower impact of performance improvement measures

In 2014, to support its medium-term financial targets, Thales launched the "Ambition Boost" performance plan to increase the entire Group's performance.

This global performance plan provides a common framework within which the units can implement plans and initiatives adapted to their own issues in terms of performance improvements. Five new cross-disciplinary initiatives are also now in place to complete and strengthen the performance plans: Going Global; Competitiveness; Leadership Governance; Diversity and Inclusion; and Digital Transformation.

The earnings and financial position of Thales could be negatively impacted if the initiatives planned under the Ambition Boost framework could not be fully implemented or if they failed to generate the expected results according to the original timetable. Moreover, the cost of implementing these initiatives could end up being higher than expected, which is why Thales has introduced specific monitoring for performance improvement initiatives. The Group's corporate management regularly reviews the progress of the main initiatives.

1.1.2.1.9 Competitive environment

Thales operates in highly competitive markets, both in terms of international groups and in terms of local or niche companies in certain market segments. This competitive pressure could negatively impact Thales' commercial position, sales and profits.

It could also intensify in an unfavourable economic environment and there is no guarantee that Thales will be able to position itself successfully against its current or future competitors.

In order to limit the impact of this risk, Thales continues its research and development efforts in order to provide more competitive and differentiating elements, and it also works to structure and upgrade its product offer in order to meet the needs of its customers in both the defence and civil markets.

The Group's success and performance in relation to its competitors also depend on its capacity to recruit and retain quality employees with the requisite skills and commitment. Thales therefore attaches great importance to its attractiveness and positioning as a top employer, ensuring a positive external image which will boost recruitment and an internal work environment that will help retain employees (see Section 1.1.2.1.3-b) "Talent development").

1.1.2.1.10 Offsets

In some countries, the awarding of major contracts, particularly defence contracts, may be dependent on a legal or regulatory requirement to fulfil a direct, semi-direct or indirect offset requirement. The Group's ability to factor this into a proposal can be a major source of differentiation and, as such, have a decisive impact on its commercial success or failure.

The non-fulfilment of contractual offset obligations within the requisite deadlines can result in penalties, the payment of which does not always release the obligor from its obligations. It can also compromise the Group's capacity to develop its activities in a given country.

Thales' order intake in recent years (particularly the order for the Rafale fighter aircraft placed by the Indian authorities in the third quarter of 2016) has led to a substantial increase in its offset obligations.

Faced with these risks, Thales has set in place a dedicated structure, both at a central level and for its exporting units and destination countries, which is responsible for integrating and overseeing these obligations as early as the bid phase. The Group also has a specific unit that is entirely devoted to the management of indirect offsets, Thales International Offsets (TIO).

1.1.2.1.11 Market trends

The markets on which Thales operates are broadly correlated to the current economic backdrop, but can also be impacted by specific factors: technological breakthroughs, drastic changes in Business Models, deregulation, new standards, real or perceived increase in the threat of terrorism, changes in oil prices, conflicts or major political change, epidemics and disasters that could have an impact, however temporary, on these markets. This is particularly true of the civil aviation market. As part of the development of its activities related to in-flight broadband, Thales entered into a strategic agreement with SES to secure bandwidth over the Americas. Under this agreement, Thales committed to an annual bandwidth purchasing programme over the period 2016 to 2028 and the payment to SES of a set minimum fee. The profitability of this business could therefore be affected if the sale of the broadband services was lower than forecast for several consecutive years.

The main risk mitigation factors are Thales' efforts to promote the offer to airlines and the flexibility built into the agreement.

More generally, to limit the impact of market risk, Thales constantly seeks (i) to adapt its product lines to foreseeable changes in demand and to improve their competitive performance and industrial flexibility in line with fluctuations in activity, and (ii) a comprehensive strategy to balance its business portfolio.

1.1.2.1.12 Dependence on public procurement

Thales generates a significant share of its business from governments, particularly in the defence markets in France and the UK, and, to a lesser extent, in the rest of Europe, North America and Australia. In these markets, public spending is dependent on political and economic factors and is therefore likely to fluctuate from one year to the next. A reduction in the budget resources of government customers, for example, could generate delays in order booking, contract execution and payments, or mean a cut in funding for research and development programmes.

Thales has based its strategy on a balanced portfolio of defence operations and civil operations, each accounting for approximately 50% of sales. The overall solidity of the portfolio is underpinned by a diversified order base with a unit value of less than €100 million. Finally, the broad geographic spread of Thales' business, particularly through its international operations, ensures further diversification of its customer base.

1.1.2.1.13 Political risks

A significant proportion of Thales' sales is subject to the risk of economic and/or political instability in the countries in which the Group operates. The materialisation of these risks may affect the Group's financial position and profitability.

In particular, a change in government, major political event, armed conflict, act of terrorism, sharp deterioration in the balance of payments, industrial action, strike or protest could lead to various types of risks. These include:

- more restrictive currency control, with limitations or exclusions on withdrawing currency from a customer country, preventing it from honouring its financial commitments to Thales;
- impairment of assets because of devaluations of the local currency or other measures taken by public authorities that significantly affect the value of operations;
- expropriation (by confiscation, nationalisation, requisition, etc.) or the forced sale of Thales' interest in a local company, or, more broadly, discriminatory measures that compromise Thales' operations in a country;
- a security situation entailing a risk of bodily harm for its employees and/or security breaches at its facilities, which severely limit or prevent Thales from assuming its performance obligations under a contract, or reduce or prohibit the use of its local industrial assets;
- an unexpected breach of a contract or commitment;
- an unfair call of a bond or a guarantee;
- the non-certification of documents eligible for payment, or non-payment on the due dates stipulated in a contract, that prevent the anticipated progress of that contract.

To limit the financial impact of these risks, Thales seeks to protect its interests as far as possible through contractual provisions. In addition, the Group may use government and/or private sector insurers when necessary to provide appropriate cover. If applicable, it may also transfer receivables without recourse to financial institutions.

Lastly, the Group has implemented a global procedure for employee security, crisis detection and response, protection and monitoring (see Section 1.1.2.1.5 Security breaches in respect of sites and staff).

On 23 June 2016, the United Kingdom, which represents approximately 10% of Group sales and 6,500 employees, voted by referendum to leave the European Union. This decision could have a number of consequences on the activities and financial performance of Thales. It could notably lead to a higher degree of volatility between the pound sterling and the euro, in interest rates and in the value of plan assets covering the Group's pension commitments in the United Kingdom. The management of these financial risks is part of the procedures set in place by the Group and described in Section 1.1.2.3 on Financial risks. The risk of an increase in tariff barriers is automatically reduced by Thales' predominant use of local country production resources, a strategy which also tends to reduce the effects of greater volatility in the pound since sales and production costs are essentially denominated in the same currency. In the long term, the hardest risk to assess relates to the possible impact of this decision on UK economic growth and its defence budget. The geographic diversification of Thales' activities limits the potential impact of this risk.

1.1.2.1.14 Risks relating to strategic acquisitions and investments

Thales regularly looks to acquire new companies (as well as making strategic investments and combining business activities through joint ventures, etc.) in order to round out its technological portfolio and strengthen its presence in certain markets. Integrating these businesses into Thales could prove more difficult and take longer than envisaged, requiring more significant involvement by senior managers and the teams concerned and, in turn, negatively impacting the Group's results and financial position.

In addition, there are no guarantees that the newly acquired companies will perform as well as expected in accordance with the initial business plans, which form the basis of the investment decision. This type of variance could lead to the recognition of impairment losses on goodwill and other intangible assets, thereby negatively impacting Thales' results and financial position.

Before any planned acquisitions, Thales conducts audits and due diligence with the assistance of external consultants where necessary, in order to analyse the fundamentals of the target company. A review is also conducted at each key stage in the acquisition process to confirm Thales' interest and set the necessary conditions and parameters to ensure a successful outcome. The newly acquired company is then integrated into Thales' financial reporting system so that its performance can be monitored.

An internal audit is carried out for all major acquisitions within 18 months of the finalisation of the operation. These audits assess the different stages of the transaction, the strength of the business plans that led to the decision, the implementation of the initial synergies and the level of performance in relation to the commitments made.

1.1.2.1.15 Risks related to minority investments

Thales generates part of its sales from companies in which control is shared with, or exercised by, other partners; in accordance with the accounting principles in force on 1 January 2016, these companies are consolidated using the equity method[1].

The share in net income of equity-accounted companies is included in Thales' EBIT[2] and adjusted net income[2]. A deterioration in the performance of these companies may therefore impact on the Group's income and financial position.

Since Thales' influence over these minority investments varies, decisions that are detrimental to the interests of Thales may be taken, without Thales necessarily having the means to oppose them.

In addition, the risk of disagreement or deadlock, inherent in any jointly-controlled entity, exists, particularly in those where important decisions require the unanimity of members or where there are limited exit rights.

Lastly, the application of management rules and principles in these entities may differ from those adopted by Thales for entities over which it exerts exclusive control. This also means that the ability to carry out analyses and give instructions regarding financial or operational data, or even to access this data, may be more limited than in the entities over which Thales exerts exclusive control.

As a result, the Group aims to define appropriate governance methods by seeking to be represented on the Board of Directors (or a similar decision-making body), and more generally, to negotiate contractual provisions that are in Thales' best interests.

(1) See the list of companies accounted for under the equity method on page 70.
(2) Non-GAAP measures, see definition and computation in Section 1.1.1.2, pages 8 to 11.

1.1.2.2 Legal and compliance risks

1.1.2.2.1 Compliance with laws and regulations

The Group operates its business in a strict and evolving complex legal and regulatory environment, both nationally and internationally.

Thales' international activities mean that, although it must monitor developments in the legal and regulatory environments in which it operates, it is not always able to foresee them which may affect its business.

Despite the steps taken by Thales to comply with all applicable legislation, risks still exist due to their inherent nature, the interpretative powers of regulatory agents, the extraterritorial reach of certain regulations, and changes in legal/judicial precedent and sanctioning powers.

In most cases, regulators in conjunction with the judicial authorities have the right to initiate legal proceedings, which could expose the Group or its employees to civil, administrative or criminal rulings. Such rulings could, if applicable, involve a temporary ban on trading, which would in turn have an adverse impact on the Group's profitability and financial position.

Using a risk map, the Audit, Risks & Internal Control Department carries out assessments and audits of the implementation and improvement of compliance plans within the Group's units. Compliance measures rely for these needs on networks of compliance officers who may be specialists (in export control) and on risk advisors responsible for the prevention of each of the major risks identified and monitored by the Risk Assessment Committee.

The Audit, Risks & Internal Control department takes into account these compliance areas when preparing its audit plan.

a) Business ethics

Thales' business encompasses a variety of sectors in more than 50 countries. Infringement of applicable laws and regulations may have severe legal and financial consequences and seriously harm the Group's reputation.

An integrity programme linked to corruption risk prevention has been in place in all Group entities for more than 15 years. A Code of Ethics exists for all Group employees that is regularly updated in line with external and internal reference systems and is posted on the Group intranet. With a preface by the Chairman and CEO, it reaffirms in particular the principle of zero tolerance for any act of corruption. Thales' integrity programme was certified by independent third parties Mazars and ADIT in 2014. It is currently being updated following the publication of the French law on Transparency, the fight against corruption and the modernisation of the economy, known as the *Loi Sapin II* law, in order to ensure that the measures taken by the Group are in line with the latest legal requirements.

The risk factors inherent in business are handled by the various processes that govern the management of bids and projects in the Thales reporting system (Chorus 2.0). From the preliminary phase of a project, these operating processes envisage action plans to mitigate business risks, focusing particularly on the prevention of corruption.

Thales strictly supervises the use of agents and consultants by means of a very detailed procedure that provides for in-depth upstream checks and controls (due diligence) – backed by an analysis of the risk factors at play – and all appropriate declarations and undertakings on the part of these agents or consultants. Designed by the Group's Ethics & Corporate Responsibility department, this procedure is regularly revised in conjunction with the Group's Legal department and International Development department.

The players in the supply chain are also stakeholders in the integrity policy: at the end of 2016, 10,500 suppliers and subcontractors in the portfolio pledged to adhere to the terms of the Thales Company Purchasing and Corporate Responsibility charter.

Thales is particularly keen to make its employees aware of ethical business conduct as soon as they join the Group. Adherence and accountability are key to the awareness and training model designed by the Ethics and Corporate Responsibility department. A wide range of guides (reference guide and ethical business conduct guides) and training (both face-to-face and via e-learning) is available to employees throughout their careers. More than 8,000 employees have been trained since 2008, including 1,346 in 2016.

In order to reinforce the Thales approach to Ethics & Corporate Responsibility, and to ensure that each employee is involved in the prevention of risks, a set of ethics alerts is available to all of the Group's employees.

In addition to its rigorous internal control procedures, the Audit, Risks & Internal Control Department conducts regular compliance and integrity audits on the various components of the model.

The Thales integrity programme has been recognised by stakeholders, and Thales' listing on the DJSI (Dow Jones Sustainability Indices) Europe and World has been confirmed for the second year in a row. The Group is one of the four leading European companies in Transparency International's "Corruption Perceptions Index" covering companies in the defence sector. Moreover, the Group has renewed its support for the principles of the United Nations Global Compact. It is one of 600 companies around the world to have submitted their Communication on Progress to the UN with Global Compact Advanced status.

The overall system is completed by Thales' active participation in various initiatives in the fight against corruption. Thales also actively participates in national professional organisations (including MEDEF, GIFAS and ADS[1]) and international organisations (Business Ethics committee of ASD[2], ICC[3], B20[4], IFBEC[5], etc.) dealing with business ethics, and has an active presence within the working groups of intergovernmental organisations (OECD, United Nations, etc.).

b) Export control

Exports account for a significant proportion of Thales' business. Many of the Group's products and systems are designed for military or dual use applications. Consequently, the export of these products or systems to customers located outside Thales' domestic markets where they are manufactured, particularly in the defence sector, may be subject to limitations, export licences or specific export controls (imposed by the countries in which Thales operates, as well as by other countries where the suppliers of component products or technologies are based, most notably the United States).

(1) Association of UK Aerospace, Defence Security & Space Industries.
(2) AeroSpace and Defence Industries Association of Europe.
(3) International Chamber of Commerce.
(4) International business community bringing together 22 employer organisations.
(5) International Forum on Business Ethical Conduct.

There are no guarantees that (i) the export controls to which Thales is subject will not be tightened; (ii) new-generation products or systems developed by Thales will not be subject to similar or tighter controls; and (iii) geopolitical factors will not make it impossible for Thales or its suppliers to obtain export licences for certain customers or make it more difficult for Thales to execute previously signed contracts. Further limitations on access to military markets would thus have a negative impact on Thales' business, profitability and financial position.

Thales has introduced systems and formal procedures to ensure compliance with applicable regulations and controls, and reinforces these measures through awareness-raising programmes with dedicated e-learning modules and alerts on legislative and regulatory changes relating to export control that are relevant to Thales' business. Operating units have access to a network of specialists within the Group, who are responsible for monitoring the application within operating units of compliance rules decided at Group level as well as monitoring the necessary authorisations and the conformity of their implementation.

c) Competition law

Thales' business activities are subject to a wide range of national and international regulations mainly aimed at combating anti-competitive practices.

Infringement of these rules could lead to severe sanctions, such as fines, payment of damages and interest, and legal bans, and could also have a serious impact on the Group's reputation.

To avoid any such infringements, Thales has initiated a programme to raise awareness of these rules, in particular through dedicated training programmes.

d) Intellectual property

Thales is exposed to two main types of intellectual property risk: dependence on third-party technology and third-party actions against the Company for perceived infringement of their intellectual property rights.

To reduce the risk of reliance on critical third-party technology, Thales has implemented a process to identify and manage each situation with a precise, strategic "Make/Team/Buy" (MTB) plan.

Given the nature of its activities and the specific features of its products, Thales conducts most of its research and development work in-house and controls the technology which is critical to the business. Thales' extensive intellectual property portfolio (over 16,500 patents, as well as software and know-how) and its presence throughout the value chain (equipment, systems and systems of systems) reduce its reliance on third-party technology. As a result, Thales' dependence on such technology can be considered very low.

To reduce the risk of third-party actions for alleged infringement of their intellectual property rights by Thales entities, the Group identifies and analyses this risk in the context of its own patent filing procedures and/or when embarking on technical research or product development.

In the event of a third-party infringement claim against a Thales company, the legal and technical analysis of the allegedly infringing products and intellectual property rights are handled centrally by Thales experts, with the assistance of specialist external consultants where needed.

1.1.2.2.2 Litigation

Due to the nature of its business activities, Thales is exposed to the risk of technical and commercial litigation.

To prevent disputes or limit their impact, Thales' policy is to systematically seek alternative dispute resolution mechanisms. This policy is reviewed on a regular basis to take into account changes in the Group's core areas of business and is backed by employee training programmes.

In addition, Thales implemented a procedure several years ago to centralise all civil commercial and criminal litigation and claims. These are handled by the Corporate Legal Affairs department, with the support of the Group companies involved.

At the end of 2002, a group of French manufacturers, including Thales and one of its subsidiaries, collectively received a request for arbitration from a shared customer claiming an amount which allegedly should be no less than $260 million and for which the group of French manufacturers might be jointly liable towards the claimant. This request for arbitration is related to the execution of old contracts by the group of French manufacturers. Pursuant to an agreement signed by all of the parties in June 2003, the claimant withdrew its request for arbitration. In November 2012, the claimant filed a new request for arbitration for a revised amount of €226 million of which Thales' share would be around 28% of the amount claimed. The manufacturers are strongly disputing this demand and at this date it is not possible to evaluate any potential financial risk. Accordingly, Thales has not set aside a provision in respect of this dispute. Proceedings are ongoing.

There are no other government, judicial or arbitration claims of which the Group is aware, which are pending or threatened and which could have or have had, any significant effect on the financial position or profitability of the Company and/or the Group in the last 12 months.

1.1.2.3 Financial risks

1.1.2.3.1 Liquidity

The Group's liquidity risk is the risk of it being unable to meet its cash needs out of its financial resources. In particular, it relates to Thales' level of exposure to changes in the main market indicators that could lead to an increase in the cost of credit, or even to a temporary limitation of access to external sources of financing.

The Group manages this risk by trying to anticipate its cash needs and ensures that these are covered by the short-term and long-term financial resources, as follows:

- shareholders' equity, listed by heading in Note 8 to the consolidated financial statements;
- gross debt, listed by maturity in Note 6 to the consolidated financial statements;
- committed, undrawn credit facilities granted by banks as backup to the commercial paper programme and acting as a financial reserve. These are described in more detail in Note 6 to the consolidated financial statements.

The principle of centralising the entities' short-term assets and liabilities (cash pooling) is applied to the combination of entities in the same currency zone (eurozone, sterling zone, dollar zone and Australian dollar zone, etc.) and, in some cases, in the same country.

By consolidating and centralising the cash requirements and surpluses of its units, the Group is in a position to:

- simplify cash management and match the cash positions of units to produce a single consolidated position that is easier to manage; and
- gain prime access to financial markets through the parent company's financing programmes, rated by Standard & Poor's and Moody's (see below).

At 31 December 2016, cash recorded under consolidated assets amounted to €3,616.9 million (compared with €3,450.2 million at end-2015), including:

- €3,183.1 million held by the parent company and available for immediate use (€2,949.8 million in 2015);
- €433.8 million in the bank credit balances of subsidiaries (€500.4 million in 2015), most of them outside of France. This figure includes, inter alia, payments received in the last few days of the financial year and subsequently transferred to the corporate treasury account.

Cash at bank and equivalents at year-end is invested solely in bank deposits, in very short-term bank certificates of deposit with first-tier banks or in money market funds. At the date of publication, Thales' credit risk ratings were as follows:

	Moody's	Standard & Poor's
Medium & long-term loans	A2	A-
Outlook	Stable	Stable
Commercial paper & short-term loans	Prime-1	A-2

The decrease of Thales' credit risk rating would not trigger the financial covenants included in its financing contracts. The coming into effect of the unique clause providing for accelerated repayment would only apply in the event that the French State no longer held its golden share and, simultaneously, the ratio of consolidated net financial debt to EBITDA (earnings before interest, taxes, depreciation and amortisation) were to exceed 3.

A lower rating would result in an increase (capped) in the margins applicable to the committed credit facility of €1.5 billion (described in Note 6 to the consolidated financial statements); at the same time, these margins would be improved (with a minimum threshold) in the event of a rating upgrade.

1.1.2.3.2 Interest rates

Thales is exposed to interest rate volatility and in particular its impact on the conditions associated with variable-rate financing. To limit this risk, Thales operates an active interest rate hedging policy.

The Corporate Financing and Treasury department consolidates data on Thales' exposure to interest rate risk and uses appropriate financial instruments to hedge those risks.

Thales policy is to control interest rate and counterpart risks and to optimise its funding and banking operations.

The breakdown of Thales' debt by type of interest rate is described in Note 6 to the consolidated financial statements. The table below summarises the Group's exposure to interest rate risk before and after hedging. Based on the average net cash (taking into account hedging instruments), a 1% rise in interest rates would increase the financial interest, net by €21.6 million in 2016 (€11.4 million in 2015).

(31/12/2016, in € millions)	< 1 year		> 1 year		Total	
	Fixed rate	Variable rate	Fixed rate	Variable rate	Fixed rate	Variable rate
Financial liabilities	(14.5)	(96.8)	(1,387.1)	(18.7)	(1,401.6)	(115.6)
Financial assets	–	3,882.8	–	–	–	3,882.8
Net exposure before impact of derivative instruments	**(14.5)**	**3,785.9**	**(1,387.1)**	**(18.7)**	**(1,401.6)**	**3,767.2**
Derivatives	(4.0)	4.0	991.2	(991.2)	987.2	(987.2)
Net exposure after impact of derivative instruments	**(18.5)**	**3,789.9**	**(395.9)**	**(1,009.9)**	**(414.4)**	**2,780.0**

1.1.2.3.3 Foreign exchange

Due to the international nature of its business, Thales is exposed to the risk of exchange rate fluctuations.

a) Business-related currency risk

Business-related currency risk occurs when some of the business is billed in a currency other than that of the related costs.

a. As a general rule, Thales is structurally immune to exchange rate fluctuations for a significant part of its business activity. Around 40% of Thales' sales are generated in the eurozone, which a significant portion of its industrial operations are located. More generally, the reinforcement of the Group's international industrial footprint allows it to manufacture and invoice in local currency, which helps to reduce exchange rate risk on local sales.

b. The accounts of Thales subsidiaries located in countries where the official currency is not the euro are translated into euros in the Group's consolidated financial statements. A fall in these currencies against the euro is likely to have a negative impact on the accounts. Its impact on profitability is limited, however, since the cost base of these subsidiaries is essentially in the same currency as their sales. The main currencies are the pound sterling, the US dollar, the Canadian dollar and the Australian dollar.

c. For certain Group businesses (civil avionics and microwave systems, civil space, etc.), the US dollar ("$" or "USD") is the reference transaction currency. For business activities outside the dollar zone (the in-flight entertainment and connectivity business is based essentially in the United States and is therefore naturally immune to this risk), a specific currency risk hedging policy is implemented:

- for equipment transactions (avionics and microwave systems), this policy is defined on the basis of sales forecasts in USD, after accounting for corresponding purchases in USD. For these transactions, net exposure to dollar risk represents around 3.5% of the Group's total sales for 2016;

- for longer-term programmes in markets traditionally denominated in USD (primarily in civil space), each bid is examined for profitability in light of the effect of currency fluctuations, after accounting for corresponding purchases in USD, and, if necessary, is specifically hedged through market transactions (forward exchange-rate contracts and options).

  Where necessary, a similar approach is adopted for other Thales activities if a customer specifically requires a contract denominated in USD on an ad hoc basis.

  Overall, net exposure amounted to around 2.5% of the Group's total sales for 2016;
- as well as this direct dollar risk, which concerned around 6% in total of consolidated sales at end-2016, the Group is also exposed to an "indirect" dollar risk on contracts denominated in currencies other than the dollar. This occurs when it is bidding against companies that benefit from a cost base in dollars. Approximately one quarter of total sales may be exposed to this "indirect" dollar risk.

The "dollar risk" is thus the main currency risk that Thales needs to hedge. The figures corresponding to the hedging of business-related dollar risk are as follows:

- $2,985 million, the amount of financial instruments hedging net firm commitments (US dollar risk against the euro, Canadian dollar and pound sterling) at 31 December 2016 compared with $3,309 million at 31 December 2015;
- $310 million, the amount of financial instruments hedging bids in US dollars against the euro, Canadian dollar and pound sterling at 31 December 2016 compared to $124 million at 31 December 2015.

Operating receivables and payables denominated in foreign currency are exchange-rate hedged and therefore not exposed to currency risk.

The change in value of financial instruments (forward transactions) used as cash flow hedges is recognised in shareholders' equity. A decrease (increase) of 5% in the US dollar compared to the euro, pound sterling and Canadian dollar, would have increased (decreased) shareholders' equity by approximately €153 million at 31 December 2016 and 31 December 2015. The premium/discount component is not eligible to cash flow hedge accounting and is recognised through profit and loss. In 2016, the change in market value of the premium/discount was a negative €54.0 million (compared to a negative €15.5 million in 2015).

The change in value of financial instruments matched with portfolios of sales offers which are not eligible for hedge accounting is recognised in profit and loss. A decrease (increase) of 5% in the US dollar compared to the euro, pound sterling and Canadian dollar, would have had no impact at 31 December 2016 and would have increased (decreased) income by approximately €1 million at 31 December 2015.

Foreign currency-denominated financial debt does not generate any exposure in profit and loss, as it is either denominated in the functional currency of the entity in which it is recognised, or is used as a net foreign investment hedge.

b) Management of risks relating to foreign currency-denominated assets

The Group may hedge a portion of its foreign currency-denominated assets, mainly those likely to be disposed of at a future date. The main criteria for determining whether or not a given foreign currency denominated asset should be hedged are as follows:

- the nature of the business operations involved;
- the structure of Thales' commitment with respect to jointly held companies, in particular the specific features of the shareholders' agreement in each joint venture.

The actual application of this policy also depends on:

- the objective of optimising hedges in light of market conditions (availability of foreign currency, interest rates, hedging rate, etc.);
- the risks inherent in the future value of the assets being hedged and the nature of the business of the corresponding subsidiaries.

> SUMMARY OF ASSET RISKS AT 31 DECEMBER 2016 FOR THE MAIN CURRENCIES

(in € millions)	GBP zone	USD zone	AUD zone	Other currencies & eliminations	Total
Assets	1,945.4	1,744.3	950.6	16,529.6	21,169.8
Liabilities	2,286.6	1,389.7	506.2	12,086.3	16,268.8
Net position before management	**(341.2)**	**354.6**	**444.4**	**4,443.3**	**4,901.0**
Hedge	–	–	–		
NET POSITION AFTER MANAGEMENT	**(341.2)**	**354.6**	**444.4**	**4,443.3**	**4,901.0**

1.1.2.3.4 Shares

Thales was not exposed to any significant equity risk at end-2016, excluding the risk on treasury shares.

At 31 December 2016, Thales held 749,559 treasury shares, representing 0.35% of the share capital.

1.1.2.3.5 Pension commitments

Defined-benefit pension plans are in place for certain Group employees, mainly in the UK, which are financed by the Group under the provisions of the applicable national legislation. As such, at 31 December 2016, Thales' pension commitments in the United Kingdom amounted to €4,605.7 million, hedged by €3,246.2 million in investments, representing an underlying shortfall of €1,359.5 million.

Changing market parameters can lead to a substantial increase or decrease in the amount of the shortfall and the annual costs of defined-benefit plans. At 31 December 2016, the sensitivity factors were as follows:

- a reduction or increase in the discount rate applied to liabilities, which could increase or reduce the underlying shortfall; this variable is partly offset by changes in the value of fixed-rate hedging bonds held as plan assets and interest rate swaps;
- changes in the total return on investments in equities and other assets;
- changes in the forecast inflation rate;
- a substantial change in mortality tables;
- exchange rate fluctuations (mainly sterling against the euro).

Thales has introduced quarterly reporting on its pension plan positions and makes regular projections measuring the sensitivity of underlying shortfalls to possible changes in market parameters taking into account correlation factors. In the UK, Thales plan assets are managed by trustees in accordance with the applicable regulations and in consultation with the Group. Plan assets are allocated with regard to the long-term maturity of the commitments they cover.

Additional information on the amount of commitments and the annual costs linked to pension and other employee benefits, as well as the valuation and allocation of plan assets and the sensitivity of net commitments to different actuarial assumptions is given in Note 9.3 of the consolidated financial statements at 31 December 2016.

1.1.2.3.6 Customer credit

Credit risk relates to the risk that a party to a contract will default on its commitments or fail to pay what it owes.

a) Risk of default by private sector customers

Non-governmental customers (aircraft manufacturers, airlines, private infrastructure operators and industry) account for approximately 25% of Thales' sales. These customers may encounter major and/or prolonged financial difficulties that could lead to payment defaults or order cancellations. Such occurrences could have a negative impact on Thales' sales, profitability and financial position.

To mitigate these risks, Thales conducts regular analyses of the ability of customers to meet their obligations. When necessary, Thales may request bank guarantees or corporate guarantees, or may use credit insurers.

b) Credit risk relating to public sector customers

Public, government and institutional customers account for around 75% of Thales' sales. Thales works with a large number of countries. Some of them could present a significant credit risk which could, for example, lead them to suspend an order in production, or render them unable to pay on delivery, as agreed under the terms of the contract. To limit its exposure to these risks, Thales takes out insurance with export credit agencies (such as BPIFrance) or private insurers.

At 31 December 2016, only three customers accounted for annual sales in excess of €500 million: the French State (around €2.5 billion), the UK government (around €1 billion) and the Australian government (around €0.6 billion). At 31 December 2016, these three countries had first-class or high-quality ratings (France was rated AA by S&P and Aa2 by Moody's, the United Kingdom was rated AA by S&P and Aa1 by Moody's, and Australia was rated AAA by S&P and Aaa by Moody's).

1.1.2.4 Insurance

Thales' Insurance and Risk Management department, based at head office and reporting to the SEVP Finance & Information Systems, is responsible for the Group's insurance activities and insurable risk management. It is in charge of Group operations and oversees policy implementation by Group companies.

The Group covers the financial consequences of the risk of accidental damage suffered or caused by property or people using appropriate insurance policies with leading international insurance and reinsurance companies.

The insurance policies arranged by the Group to cover these major risks relate to areas such as:

- damage to property and consequent operating losses;
- transport;
- assembling and testing;
- civil aviation liability, including civil liability for aeronautical products and hull/test flight insurance;
- civil liability for space products;
- risks of damage to or by naval vessels by subsidiaries, as naval equipment suppliers;
- general third-party liability;
- environmental liability;
- liability of executive officers and directors;
- individual accident – repatriation assistance for employees on assignment.

Whilst certain harmful events were notified to insurers, the Group had no major loss in 2016.

Thales' policy is to arrange cover on the insurance market based on the rates and limits that it considers reasonable, in view of the conditions offered by the market. Limits are applicable to insurance for major risks, while general exclusions for the entire market (e.g., asbestos) also apply to Thales.

In 2016, the maximum coverage limit for insurance against damage to property and consequent operating losses was €1.3 billion. This limit takes into account the estimated maximum possible loss caused to an industrial site which the Group could incur in this regard. In 2016, the Group took out specific cover against cyber incidents and damages that could compromise its internal IT systems.

Levels of liability cover depend on the quantification of a reasonable claim expectancy for Thales, as identified by the risk map of the main business activities and at Group level, and on cover capacity available on the insurance market. The insurance coverage for civil aviation liability commitments, which is covered by a specific programme, amounts to $2 billion.

The insurance industry depends on the financial markets. There are therefore no guarantees that Thales will be able to maintain current levels of insurance under similar financial conditions in the future.

In order to reduce its exposure to insurance market volatility, Thales insures major risks on a two-tier basis:

- the Group's contribution, through captive insurance and reinsurance companies, towards the settlement of claims, to a maximum net retention of €12 million per year, for damage to property and consequent operating losses, Transport, general third-party liability, assembling and testing, development and space risks;
- transfer to insurers of payment for catastrophic losses.

In parallel, an active Prevention and Protection policy for industrial sites is designed to reduce the magnitude and frequency of the accidental risks of fire or explosion and to detect other exposures, such as environmental or natural disasters and the vulnerability of critical industrial facilities. In 2016, more than 66% of the assets insured were the subject of a "multi peril" audit by the insurers during their visits to the principal operating sites and infrared thermography inspections by an outside organisation specialised in the prevention of electrical damage.

In accordance with Group processes, measures were taken to minimise business interruption and the consequences of any unforeseen events. An organisational structure and crisis management tools are in place to deal as efficiently as possible with the immediate consequences of a catastrophic event and to take the necessary emergency measures.

A risk prevention policy for critical supplier sites was also set in place to reduce the risk of operating losses for Thales in the event of an accidental disaster at one of their sites.

Furthermore, Thales continues to roll out an insurance policy for its staff to cover them in the context of their professional activity. Lastly, specific and/or local cover has been arranged to comply with the regulations in force and to satisfy the specific requirements of certain business activities or projects, particularly public-private partnerships.

1.1.3 Human resources, environmental and social information

Table of reconciliation (Articles L. 225-102-1 and R. 225-105-1 of the French Commercial Code)

In accordance with the Articles L. 225-102-1 and R. 225-105-1 of the French Commercial Code on transparency obligations for companies on human resources and environmental matters, in its management report, Thales provides information on the Group's human resources, environmental and social issues. This information is set out in full in Chapter 5 "Corporate responsibility"; an independent third-party verifier has issued a statement of completeness and limited assurance report on the consolidated social, environmental and societal information (see pages 185 *et seq.*).

1.1.4 Events since year-end

The Group is not aware of any significant post-closing events.

1.1.5 Summary statement of transactions indicated in Article L. 621-18-2 of the French Monetary and Financial Code carried out in 2016

Details of the transactions carried out are set out in Section 4.3.3.7, pages 173 and 174.

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1.2 CONSOLIDATED FINANCIAL STATEMENTS

1.2.1 Consolidated profit and loss account

(in € millions)	Notes	2016	2015
Sales	Note 2	**14,884.8**	**14,063.2**
Cost of sales		(11,274.6)	(10,688.1)
Research and development expenses		(736.1)	(692.0)
Marketing and selling expenses		(1,025.4)	(980.9)
General and administrative expenses		(543.5)	(531.8)
Restructuring costs	Note 10.2	(100.5)	(94.3)
Amortisation of intangible assets acquired (PPA)[a]	Note 4.2	(107.3)	(111.6)
Income from operations	Note 2	**1,097.4**	**964.5**
Disposal of assets, changes in scope of consolidation and other	Note 3.2	205.1	53.4
Impairment on non-current assets		–	--
Income of operating activities before share in net income of equity affiliates		**1,302.5**	**1,017.9**
Share in net income of equity affiliates		**119.6**	**112.8**
• of which, share in net income of joint ventures	Note 5.1	72.4	55.8
• of which, share in net income of associates	Note 5.2	47.2	57.0
Income of operating activities after share in net income of equity affiliates		**1,422.1**	**1,130.7**
Interest expense on gross debt		*(11.3)*	*(15.5)*
Interest income on cash and cash equivalents		*17.6*	*19.3*
Interest income, net	Note 6.1	6.3	3.8
Other financial income (expenses)	Note 6.1	(80.6)	(41.8)
Finance costs on pensions and other employee benefits	Note 9.3	(77.6)	(60.1)
Income tax	Note 7.1	(255.6)	(219.9)
NET INCOME		**1,014.6**	**812.7**
Attributable to: **Shareholders of the parent company**		**946.4**	**765.1**
Non-controlling interests		68.2	47.6
Basic earnings per share (in euros)	Note 8.2	4.49	3.68
Diluted earnings per share (in euros)	Note 8.2	4.44	3.63

(a) This item corresponds to the amortisation of acquired intangible assets (Purchase Price Allocation: PPA) of fully consolidated entities. The amortisation of PPA related to equity affiliates is included in the share in net income of equity affiliates and detailed in Note 2.1.

1.2.2 Consolidated statement of comprehensive income

(in € millions)	2016			2015		
	Total attributable to:			Total attributable to:		
	shareholders of the parent company	non-controlling interests	Total	shareholders of the parent company	non-controlling interests	Total
NET INCOME	**946.4**	**68.2**	**1,014.6**	**765.1**	**47.6**	**812.7**
Translation adjustment: subsidiaries (Note 8.1)	32.2	(0.3)	31.9	9.6	1.3	10.9
Deferred tax (Note 7.2)	1.3	–	1.3	(1.3)	–	(1.3)
Joint ventures (Note 5.1)	(26.9)	–	(26.9)	11.6	–	11.6
Associates (Note 5.2)	(30.7)	–	(30.7)	27.6	–	27.6
Net	**(24.1)**	**(0.3)**	**(24.4)**	**47.5**	**1.3**	**48.8**
Cash flow hedge: subsidiaries (Note 8.1)	49.5	3.0	52.5	(186.9)	(4.1)	(191.0)
Deferred tax (Note 7.2)	(17.4)	(1.5)	(18.9)	44.3	1.4	45.7
Joint ventures (Note 5.1)	(0.5)	–	(0.5)	0.8	–	0.8
Associates (Note 5.2)	0.5	–	0.5	(16.5)	–	(16.5)
Net	**32.1**	**1.5**	**33.6**	**(158.3)**	**(2.7)**	**(161.0)**
Available for sale financial assets: subsidiaries	3.5	–	3.5	0.6	–	0.6
Joint ventures (Note 5.1)	6.7	–	6.7	–	–	–
Net	**10.2**	**–**	**10.2**	**0.6**	**–**	**0.6**
Items that may be reclassified to income	**18.2**	**1.2**	**19.4**	**(110.2)**	**(1.4)**	**(111.6)**
Actuarial gains (losses) on pensions: subsidiaries (Note 9.3)	(658.1)	(2.9)	(661.0)	268.9	2.6	271.5
Deferred tax (Note 7.2)	22.6	(0.3)	22.3	5.9	(0.8)	5.1
Joint ventures (Note 5.1)	(12.7)	–	(12.7)	5.1	–	5.1
Associates (Note 5.2)	**0.4**	**–**	**0.4**	**(1.9)**	**–**	**(1.9)**
Items that will not be reclassified to income	(647.8)	(3.2)	(651.0)	278.0	1.8	279.8
Other comprehensive income (loss) for the year, net of tax	**(629.6)**	**(2.0)**	**(631.6)**	**167.8**	**0.4**	**168.2**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	**316.8**	**66.2**	**383.0**	**932.9**	**48.0**	**980.9**

1.2.3 Consolidated statement of changes in equity

(in € millions)	Number of shares outstanding (thousands)	Share capital	Additional paid-in capital	Retained earnings	Cash flow hedge	AFS invest-ments	Cumulative translation adjustment	Treasury shares	Total attributable to shareholders of the parent company	Non-controlling interests	Total equity
AT 1 JANUARY 2015	**205,964**	**623.5**	**3,889.9**	**(421.2)**	**(118.5)**	**1.6**	**(134.7)**	**(58.9)**	**3,781.7**	**299.1**	**4,080.8**
Net income	–	–	–	765.1	–	–	–	–	765.1	47.6	812.7
Other comprehensive income	–	–	–	278.0	(158.3)	0.6	47.5	–	167.8	0.4	168.2
Total comprehensive income for 2015	**–**	**–**	**–**	**1,043.1**	**(158.3)**	**0.6**	**47.5**	**–**	**932.9**	**48.0**	**980.9**
Employee share issues	3,120	9.4	105.5	–	–	–	–	–	114.9	–	114.9
Parent company dividend distribution (Note 8.1)	–	–	–	(234.0)	–	–	–	–	(234.0)	–	(234.0)
Third-party share in dividend distribution of subsidiaries	–	–	–	–	–	–	–	–	–	(51.3)	(51.3)
Share-based payments (Note 9.4)	–	–	–	22.2	–	–	–	–	22.2	–	22.2
Acquisitions/disposals of treasury shares (Note 8.1)	1,038	–	–	(15.0)	–	–	–	33.7	18.7	–	18.7
Other	–	–	–	9.3	–	–	–	–	9.3	0.1	9.4
Changes in scope of consolidation	–	–	–	0.2	–	–	–	–	0.2	–	0.2
AT 31 DECEMBER 2015	**210,122**	**632.9**	**3,995.4**	**404.6**	**(276.8)**	**2.2**	**(87.2)**	**(25.2)**	**4,645.9**	**295.9**	**4,941.8**
Net income	–	–	–	946.4	–	–	–	–	946.4	68.2	1,014.6
Other comprehensive income	–	–	–	(647.8)	32.1	10.2	(24.1)	–	(629.6)	(2.0)	(631.6)
Total comprehensive income for 2016	**–**	**–**	**–**	**298.6**	**32.1**	**10.2**	**(24.1)**	**–**	**316.8**	**66.2**	**383.0**
Employee share issues	1,233	3.7	41.5	–	–	–	–	–	45.2	–	45.2
Parent company dividend distribution (Note 8.1)	–	–	–	(296.8)	–	–	–	–	(296.8)	–	(296.8)
Third-party share in dividend distribution of subsidiaries	–	–	–	–	–	–	–	–	–	(48.3)	(48.3)
Share-based payments (Note 9.4)	–	–	–	16.7	–	–	–	–	16.7	–	16.7
Acquisitions/disposals of treasury shares (Note 8.1)	90	–	–	(13.8)	–	–	–	(36.4)	(50.2)	–	(50.2)
Purchase of Raytheon stake in TRS SAS	–	–	–	(52.8)	–	–	–	–	(52.8)	(85.8)	(138.6)
Other	–	–	–	12.2	(5.8)	–	–	–	6.4	(0.6)	5.8
Changes in scope of consolidation	–	–	–	7.8	(0.2)	–	1.3	–	8.9	(1.5)	7.4
AT 31 DECEMBER 2016	**211,445**	**636.6**	**4,036.9**	**376.5**	**(250.7)**	**12.4**	**(110.0)**	**(61.6)**	**4,640.1**	**225.9**	**4,866.0**

1.2.4 Consolidated balance sheet

Assets

(in € millions)	Notes	31/12/2016	31/12/2015
Goodwill, net	Note 4.1	3,424.4	3,215.9
Other intangible assets, net	Note 4.2	958.8	862.9
Property, plant and equipment, net	Note 4.2	1,798.9	1,696.7
Total non-current operating assets		**6,182.1**	**5,775.5**
Investments in joint ventures	Note 5.1	997.5	1,126.4
Investments in associates	Note 5.2	219.5	359.5
Non-consolidated investments	Note 6.3	82.3	71.1
Other non-current financial assets	Note 6.3	138.3	131.2
Total non-current financial assets		**1,437.6**	**1,688.2**
Non-current derivatives – Assets	Note 6.5	27.9	36.2
Deferred tax assets	Note 7.3	975.8	967.0
NON-CURRENT ASSETS		**8,623.4**	**8,466.9**
Inventories and work in progress	Note 10.1	2,734.6	2,560.8
Construction contracts: assets	Note 10.1	2,331.5	2,042.6
Advances to suppliers	Note 10.1	348.3	383.0
Accounts, notes and other current receivables	Note 10.1	4,547.5	4,404.2
Current derivatives – Assets	Note 6.5	161.7	154.2
Total current operating assets		**10,123.6**	**9,544.8**
Current tax receivable		59.8	70.8
Current financial assets	Note 6.2	265.9	27.5
Cash and cash equivalents	Note 6.2	3,616.9	3,450.2
Total current financial assets		**3,882.8**	**3,477.7**
CURRENT ASSETS		**14,066.2**	**13,093.3**
TOTAL ASSETS		**22,689.6**	**21,560.2**

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Equity and liabilities

(in € millions)	Notes	31/12/2016	31/12/2015
Capital, additional paid-in capital and other reserves		4,811.7	4,758.3
Cumulative translation adjustment		(110.0)	(87.2)
Treasury shares		(61.6)	(25.2)
Total attributable to shareholders of the parent company		**4,640.1**	**4,645.9**
Non-controlling interests		225.9	295.9
TOTAL EQUITY	Note 8.1	**4,866.0**	**4,941.8**
Long-term loans and borrowings	Note 6.2	1,433.7	837.6
Pensions and other long-term employee benefits	Note 9.3	2,785.8	2,318.9
Deferred tax liabilities	Note 7.3	294.6	257.9
NON-CURRENT LIABILITIES		**4,514.1**	**3,414.4**
Advances received from customers on contracts	Note 10.1	4,478.4	4,317.2
Refundable grants	Note 10.1	133.4	127.6
Construction contracts: liabilities	Note 10.1	1,139.4	1,021.0
Reserves for contingencies	Note 10.2	1,037.0	1,022.9
Accounts, notes and other current payables	Note 10.1	5,872.6	5,547.6
Current derivatives – Liabilities	Note 6.5	478.3	405.3
Total current operating liabilities		**13,139.1**	**12,441.6**
Current tax payable		59.0	63.7
Short-term loans and borrowings	Note 6.2	111.4	698.7
CURRENT LIABILITIES		**13,309.5**	**13,204.0**
TOTAL EQUITY AND LIABILITIES		**22,689.6**	**21,560.2**

1.2.5 Consolidated statement of cash flows

(in € millions)	Notes	2016	2015
Net income		**1,014.6**	**812.7**
Add (deduct):			
Income tax expense (gain)		255.6	219.9
Net interest income		(6.3)	(3.8)
Share in net income of equity affiliates		(119.6)	(112.8)
Dividends received from equity accounted: joint ventures		43.6	51.8
Dividends received from equity accounted: associates		29.1	31.6
Depreciation and amortisation of property, plant and equipment and intangible assets	Note 4.2	384.6	381.3
Depreciation and amortisation of intangible assets acquired	Note 4.2	107.3	111.6
Provisions for pensions and other employee benefits	Note 9.3	170.5	165.9
Loss (gain) on disposal of assets, change inscope of consolidation and other	Note 3.2	(205.1)	(53.4)
Provisions for restructuring, net	Note 10.2	(7.4)	(16.8)
Other items		31.4	54.9
Operating cash flows before working capital changes, interest and tax		**1,698.3**	**1,642.9**
Change in working capital and reserves for contingencies	Note 10.1	(63.4)	143.0
Cash contributions to pension plans and other long-term employee benefits	Note 9.3	(190.1)	(225.1)
• *UK deficit payment*		*(88.3)*	*(101.0)*
• *Recurring contributions/benefits*		*(101.8)*	*(124.1)*
Interest paid		(21.1)	(25.3)
Interest received		13.6	34.5
Income tax paid		(99.4)	(102.3)
NET CASH FLOW FROM OPERATING ACTIVITIES	**- I -**	**1,337.9**	**1,467.7**
Acquisitions of property, plant and equipment and intangible assets		(480.3)	(473.4)
Disposals of property, plant and equipment and intangible assets		8.3	15.1
Net operating investments	Note 11.2	**(472.0)**	**(458.3)**
Acquisitions of subsidiaries and affiliates, net	Note 11.3	(391.2)	(51.2)
Disposals of subsidiaries and affiliates, net	Note 11.3	296.9	87.8
Decrease (increase) in loans and non-current financial assets		(26.5)	23.3
Decrease (increase) in current financial assets		(235.6)	15.2
Net financial investments		**(356.4)**	**75.1**
NET CASH FLOW USED IN INVESTING ACTIVITIES	**- II -**	**(828.4)**	**(383.2)**
Parent company dividend distribution		(296.8)	(234.0)
Third party share in dividend distribution of subsidiaries		(48.3)	(51.3)
Capital increase (options exercised)		45.7	116.2
Purchase/sale of treasury shares		(40.8)	9.2
Issuance of debt		641.1	40.4
Repayment of debt		(643.7)	(2.5)
NET CASH FLOW USED IN FINANCING ACTIVITIES	**- III -**	**(342.8)**	**(122.0)**
Effect of exchange rate variations and other	- IV -	–	6.3
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**I + II + III + IV**	**166.7**	**968.8**
Cash and cash equivalents at beginning of period		3,450.2	2,481.4
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**3,616.9**	**3,450.2**

The Group's net cash position and the changes from one period to the next are presented in Notes 6.2 and 11.1.

1.2.6 Notes to the consolidated financial statements

All monetary amounts included in these notes are expressed in millions of euros.

NOTE 1. ACCOUNTING STANDARDS FRAMEWORK

Thales' consolidated financial statements for the year ended 31 December 2016 were approved and authorised for issue by its Board of Directors on 27 February 2017. In accordance with French legislation, the financial statements will be deemed to be definitive once they have been adopted by the shareholders of the Group at the Annual General Meeting to be held on 17 May 2017.

Thales (parent company) is a French joint-stock company (*société anonyme*) registered with the Nanterre Trade and Companies' Register under number 552 059 024.

1.1 Basis of preparation for the 2016 consolidated financial statements

Thales' consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) approved by the European Union at 31 December 2016.

These accounting policies, described in Note 14, are consistent with those applied by the Group for the year ended 31 December 2015.

Furthermore, the new standards that were mandatory from 1 January 2016 (2010-2012 Annual Improvements Cycle, 2012-2014 Annual Improvements Cycle, and the amendments to IAS 16, IAS 38, IAS 19 and IFRS 11) have no impact on the Group's financial statements.

1.2 New standards effective from 31 December 2016

The following standards have been adopted by the IASB and will be effective for the periods indicated below pending their adoption by the European Union:

Accounting standard	Description	First-time application	EU endorsement
IFRS 15 (Revenue from Contracts with Customers)	Supersedes standards IAS 18 (Revenue) and IAS 11 (Construction contracts) and the related interpretations	1 January 2018	Yes[a]
IFRS 9 (Financial Instruments)	Supersedes all existing standards related to Financial instruments	1 January 2018	Yes
IFRS 16 (Leases)	Supersedes IAS 17. Removes the distinction between operating leases and finance leases, all contracts now being recognised on the balance sheet	1 January 2019	In progress
IFRIC 22 (Foreign Currency Transactions and Advance Consideration)	Clarifies the accounting for transactions that include the receipt or payment of advance consideration in a foreign currency	1 January 2018	In progress
IAS 12 amendments (Income Tax)	Clarifies deferred tax accounting for debt instruments measured at fair value	1 January 2017	In progress
IAS 7 amendments (Cash Flow Statement)	Requires the reconciliation of liabilities whose cash flows were, or future cash flows would be, classified as financing activities in the statement of cash flows	1 January 2017	In progress
IFRS 2 amendments (Share-based Payments)	Provides a narrow-scope amendment for the classification and measurement of share-based payment transactions	1 January 2018	In progress

(a) Clarifications to IFRS 15 still in progress.

The assessment of the potential impacts of these new standards for the Group's consolidated financial statements is underway.

Thales Group has a dedicated project team responsible for analysing the differences between IFRS 15 (Revenue from Contracts with Customers) and existing standards (IAS 18 – Revenue and IAS 11 – Construction Contracts) which continued to carefully monitor the possible implications for the Aerospace and Defence sectors throughout 2016.

In particular, the new standard provides for:

- the unbundling of multiple performance obligations within a single contract;
- the recognition of revenue based on the transfer of control of goods and services to the customer: this transfer can occur at a given point in time or over time;
- new criteria proving the transfer of control over time and allowing for the recognition of revenue under the percentage of completion method. For the vast majority of Group construction contracts, Thales must be able to demonstrate that the goods sold have no alternative use and that it has an irrevocable right to payment for the work performed to date in the case of termination for convenience by the customer;
- appropriate methods to determine the stage of completion of contracts (or of each performance obligation). In this respect, the Group is currently assessing the implications of switching to the cost to cost method.

The Group will comment on the impacts of IFRS 15 in the second half of 2017 and confirm its choice in respect of the transition method.

(1) Available from http://ec.europa.eu/finance/company-reporting/index_en.htm.

1.3 Conversion

The principal exchange rates used to translate financial statements of entities with a functional currency different from the euro are as follows:

	31 December 2016		31 December 2015		31 December 2014	
Euro	**Closing rate**	**Average rate**	**Closing rate**	**Average rate**	**Closing rate**	**Average rate**
Australian Dollar	1.4596	1.4852	1.4897	1.4837	1.4829	1.4723
Pound Sterling	0.8562	0.8227	0.7340	0.7242	0.7789	0.8031
U.S. Dollar	1.0541	1.1032	1.0887	1.1046	1.2141	1.3211

1.4 Main sources of estimates

The preparation of the Group's consolidated financial statements involves making estimates and assumptions, which have an impact on the valuation of the Group's performance and its consolidated assets and liabilities. These estimates are based on past experience and factor in the economic conditions prevailing at the end of the reporting period and any information available as of the date on which the financial statements are prepared.

In today's global economic environment, the degree of volatility and subsequent lack of visibility are particularly high. Future facts and circumstances could lead to changes in these estimates or assumptions which would affect the Group's financial situation, profit and loss and cash flows, notably with regard to:

Construction contracts (Note 10.1)

The recognition of income and expenses relating to construction contracts is based on estimates of the overall profit or loss on their completion (see Note 14-c). These estimates are performed by project managers under the supervision of General Management and in accordance with Group procedures.

Goodwill (Note 4.1)

Goodwill is subject to impairment tests. The recoverable amount of goodwill is assessed based on forecast data from the strategic plans prepared in accordance with Group procedures. Sensitivity tests are carried out on key assumptions which lend greater weight to the conclusions reached.

Development costs (Note 4.2)

Development costs that meet the criteria for capitalisation (Note 14-e) are recognised as intangible assets and amortised over their useful lives. Compliance with the criteria is assessed in line with forecast activity and the profitability of the corresponding projects.

Pensions and other long-term employee benefits (Note 9.3)

Pensions and other long-term employee benefit commitments are estimated on statistical and actuarial bases in accordance with the policies outlined in the Note 14-j. Actuarial assumptions made by the Group (discount rates, inflation rate, mortality tables, etc.) are reviewed each year with the Group's actuaries.

Deferred tax assets (Note 7)

Deferred tax assets are recognised for tax loss carryforwards and temporary differences between the book value and the tax value of assets and liabilities. Recovery of these assets is assessed on the basis of the forecast data in the strategic plans of each of the tax groups considered, and generally over a period of five years.

Litigation (Note 12)

The Group regularly identifies and reviews litigation in progress and recognises the accounting provisions that it considers to be reasonable in light of the circumstances. Any uncertainties concerning litigation in progress are described in Note 12.

Purchase price allocation in respect of business combinations

Business combinations are accounted for in accordance with the purchase accounting method described in Note 14-b: on the date of the takeover of a company, the acquiree's identifiable assets, liabilities and contingent liabilities are measured at their fair value. These valuations are performed by independent experts who base their work on assumptions and estimate the effects of future events, which are uncertain at the acquisition date.

NOTE 2. SEGMENT INFORMATION

2.1 Information by business segment

The operational segments presented by the Group are as follows:

- the **Aerospace** segment, which combines the "Avionics" and "Space" Global Business Units that develop on-board systems, solutions and services, mainly for private sector customers (aircraft manufacturers, airlines, satellite operators, etc.) but also to a lesser extent for government/defence customers (states, space agencies and other semi-public organisations);
- the **Transport** segment, which comprises the "Ground Transportation Systems" Global Business Unit that develops systems and services for an exclusively civilian customer base of ground transportation infrastructure operators;
- the **Defence and Security** segment, which combines the "Secure Communications and Information Systems", "Land and Air Systems" and "Defence Mission Systems" Global Business Units that develop equipment, systems and services for the armed and security forces and for the protection of networks and infrastructures, mainly for a government/defence customer base.

In order to monitor the operating and financial performance of the Group entities, the Group's executives regularly consider certain key non-GAAP indicators as defined in Note 14-a, which enable them to exclude certain non-operating and non-recurring items.

In particular, EBIT, presented by business segment below, corresponds to income from operations plus the share in net income of equity affiliates, excluding amortisation of acquisiton-related intangible assets (purchase price allocation – PPA) reported under business combinations. From 1 January 2016, it also excludes other expenses booked to income from operations that are directly linked to business combinations, which are unusual by nature.

2016	Aerospace	Transport	Defence & Security	Other, elim., and unallocated	Thales
Order backlog – non-Group	9,913.6	4,567.1	18,964.3	85.2	33,530.2
Order intake – non-Group	5,872.3	1,503.5	9,051.6	86.9	16,514.3
Sales – non-Group	5,812.0	1,602.8	7,383.1	86.9	14,884.8
Sales – intersegment	93.9	5.6	293.4	(392.9)	–
Total sales	**5,905.9**	**1,608.4**	**7,676.5**	**(306.0)**	**14,884.8**
EBIT	571.3	11.3	788.2	(16.3)	1,354.5
Of which, DCNS	–	–	–	33.8	33.8
Of which, excluding DCNS	571.3	11.3	788.2	(50.1)	1,320.7
Capital expenditures	147.0	10.3	126.4	196.6	480.3
Depreciation and amortisation of property, plant and equipment and intangible assets	182.5	8.3	94.9	98.9	384.6

2015 restated (a)	Aerospace	Transport	Defence & Security	Other, elim., and unallocated(b)	Thales
Order backlog – non-Group	9,778.6	4,841.5	17,598.9	73.1	32,292.1
Order intake – non-Group	6,281.3	2,826.0	9,701.2	71.4	18,879.9
Sales – non-Group	5,387.2	1,519.2	7,078.5	78.3	14,063.2
Sales – intersegment	81.9	10.4	252.9	(345.2)	–
Total sales	**5,469.1**	**1,529.6**	**7,331.4**	**(266.9)**	**14,063.2**
EBIT	517.8	(36.9)	760.1	(25.3)	1,215.7
Of which, DCNS	–	–	–	21.9	21.9
Of which, excluding DCNS	517.8	(36.9)	760.1	(47.2)	1,193.8
Capital expenditures	162.4	11.4	104.0	195.6	473.4
Depreciation and amortisation of property, plant and equipment and intangible assets	163.3	7.9	105.1	105.0	381.3

(a) 2015 figures have been restated following a transfer between two segments.
(b) Data related to order backlog, order intake and sales included in the "Other, elim and non-allocated" column relate to Corporate activities (Thales parent company, Thales Global Services, Group R&D centers, facilities management) and the elimination of transactions between the business segments.

Non-allocated EBIT includes the Group's share (35%) in the net income of DCNS, corporate income from operations not assigned to the segments and the cost of vacant premises. Other costs (mainly the costs of foreign holding companies not invoiced and expenses related to share-based payments) are reallocated to the business segments proportionally to their respective sales (excluding Group).

The reconciliation between income from operations and EBIT is analysed as follow:

	2016	2015
Income from operations	1,097.4	964.5
Share in net income of equity affiliates	119.6	112.8
Sub-total	**1,217.0**	**1,077.3**
PPA amortisation related to fully consolidated entities	107.3	111.6
PPA amortisation related to equity affiliates	11.2	26.8
Expenses linked directly to business combinations	19.0	–
EBIT	**1,354.5**	**1,215.7**

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2.2 Information by destination

Consolidated order intake (direct and indirect) by destination	2016	2015
France	3,509.2	4,101.9
United Kingdom	1,003.2	2,226.6
Rest of Europe	3,646.3	3,483.2
Europe	**8,158.7**	**9,811.7**
United States and Canada	**1,215.6**	**1,364.0**
Australia and New Zealand	**763.7**	**1,525.2**
Middle East	2,043.2	3,726.4
Asia	3,708.5	1,982.3
Rest of the world	624.6	470.3
Emerging markets	**6,376.3**	**6,179.0**
TOTAL	**16,514.3**	**18,879.9**

Sales (direct and indirect) by destination	2016	2015
France	3,580.6	3,420.5
United Kingdom	1,272.3	1,382.1
Rest of Europe	3,227.2	3,039.8
Europe	**8,080.1**	**7,842.4**
United States and Canada	**1,555.9**	**1,533.4**
Australia and New Zealand	**759.2**	**725.6**
Middle East	1,887.2	1,430.6
Asia	2,047.9	1,898.3
Rest of the world	554.5	632.9
Emerging markets	**4,489.6**	**3,961.8**
TOTAL	**14,884.8**	**14,063.2**

2.3 Sales by category of contracts

More than half of the Group's sales come from contracts specifically negotiated with the customer, who draws up the technical specifications and defines the specific provisions linked to the contract. These contracts meet different needs depending on the customer, and are generally long-term contracts.

	2016	2015
Construction contracts	7,312.7	7,009.8
Sales of goods and equipment	3,549.3	3,405.9
Services	3,951.3	3,550.5
Other	71.5	97.0
TOTAL	**14,884.8**	**14,063.2**

NOTE 3. IMPACT OF CHANGES IN SCOPE OF CONSOLIDATION

3.1 Main changes in scope of consolidation

In 2016:

- At the end of March 2016, Thales finalised the acquisition of Vormetric, a leading provider of data protection solutions for a total of $408 million (€372.4 million). Vormetric has been consolidated since its acquisition. The purchase price was allocated to amortisable intangible assets in the amount of $243.6 million (technology and customer relationships acquired) net of a deferred tax liability of $85.3 million. Residual goodwill amounted to €208.1 million (€189.9 million).

  As part of the transaction, Thales signed compensation agreements with key managers subject to their remaining with the company until 2020. The related amounts are being taken to income on a straight-line basis in tranches over the vesting period.

  These amounts are recognised in income from operations, but excluded from EBIT as they concern an event that is unusual nature (€19 million in 2016, Note 2.1).

- At the end of June 2016, Thales signed an agreement with Raytheon to reduce the scope of their joint venture, Thales-Raytheon Systems, which specialises in control systems and air operation command, surveillance radars, and ground-based weapon-locating radars. As of 1 July 2016, the scope of this joint venture extends only to NATO customers and programmes.

  As part of the agreement, Thales acquired Raytheon's non-controlling interest in French company TRS SAS and sold its stake in US company TRS LLC to Raytheon. Taken together, these transactions resulted in a net gain of $90 million (€81 million) in Thales' consolidated financial statements.

  In Thales' consolidated financial statements, the acquisition of Raytheon's non-controlling interest in TRS SAS led to a reclassification in equity. The disposal of the interest in TRS LLC resulted in a disposal gain of €91.8 million. Thales-Raytheon Systems Air and Missile Defense Command remains jointly owned by the Group and is accounted for under the equity method.

- In October 2016, Thales sold its interest in Hanwha Thales, a jointly-owned company that specialises in defence electronics in Korea, for €204.4 million. The disposal gain recognised in the consolidated financial statements amounted to €113.8 million.
- In mid-November 2016, Thales entered into exclusive negotiations to sell its payment collection and road toll and car park management systems business. The transaction was still in progress at the closing date.

In 2015:

- In August 2015, Thales sold its 30% stake in ESG Elektroniksystem-und Logistik GmbH to Munich investment holding for €75.2 million. The disposal gain recognised in the consolidated financial statements amounted to €47.2 million.

3.2 Disposal of assets, changes in scope of consolidation and other

	2016	2015
Disposal of investments	**200.5**	**42.3**
Hanwha-Thales (50%)	113.8	–
Thales Raytheon Systems LLC (50%)	91.8	–
ESG Elektroniksystem-und Logistik GmbH (30%)	–	47.2
Other	(5.1)	(4.9)
Disposal of other assets	**4.6**	**1.0**
Real estate assets	8.0	0.7
Movable assets	(3.4)	0.3
Impact of settlements/amendments to pensions plans (Note 9.3)	**–**	**10.1**
TOTAL	**205.1**	**53.4**

NOTE 4. PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

4.1 Goodwill

a) Change in goodwill

Goodwill is allocated to cash-generating units (CGUs) or groups of CGUs corresponding to Thales' Global Business Units (GBU). The changes in goodwill attributable to fully consolidated subsidiaries is presented below.

	31/12/2015	Acquisitions	Disposals	Impairment	Changes in exchange rates and other	31/12/2016
Avionics	472.0	–	–	–	4.1	476.1
Space	472.7	11.1	–	–	(2.0)	481.8
Aerospace	**944.7**	**11.1**	**–**	**–**	**2.1**	**957.9**
Transport	**875.3**	**–**	**–**	**–**	**–**	**875.3**
Secure Communications & Information Systems	625.1	189.9 [(a)]	–	–	4.4	819.4
Land and Air Systems	309.8	–	–	–	–	309.8
Defence Mission Systems	461.0	–	–	–	1.0	462.0
Defence and Security	**1,395.9**	**189.9**	**–**	**–**	**5.4**	**1,591.2**
TOTAL	**3,215.9**	**201.0**	**–**	**–**	**7.5**	**3,424.4**

	31/12/2014	Acquisitions	Disposals	Impairment	Changes in exchange rates and other	31/12/2015
Avionics	456.7	3.6	–	–	11.7	472.0
Space	467.0	5.2	–	–	0.5	472.7
Aerospace	**923.7**	**8.8**	**–**	**–**	**12.2**	**944.7**
Transport	**875.3**	**–**	**–**	**–**	**–**	**875.3**
Secure Communications & Information Systems	642.5	(19.0) [(b)]	–	–	1.6	625.1
Land and Air Systems	309.9	–	–	–	(0.1)	309.8
Defence Mission Systems	461.2	–	–	–	(0.2)	461.0
Defence and Security	**1,413.6**	**(19.0)**	**–**	**–**	**1.3**	**1,395.9**
TOTAL	**3,212.6**	**(10.2)**	**–**	**–**	**13.5**	**3,215.9**

(a) Goodwill on Vormetric after purchase price allocation.
(b) Allocation of goodwill of cyber securitiy and communication security activities.

b) Impairment tests

Goodwill is subject to annual impairment tests in accordance with the Group's budgetary timetable. Value in use is determined on the basis of discounted future operating cash flows over a three-year period and a terminal value. This calculation is based on data from the strategic plans prepared in accordance with Group procedures. In certain specific cases (recent acquisitions, non-typical annual results, etc.), the terminal value is determined based on forecasts over an appropriate period of time.

At end-2016 and end-2015, impairment tests were performed with the initial assumption of a 8.5% discount rate for all CGUs (each of which presented a similar degree of risk given that the specific CGU risks are factored into forecasts).

The assumptions used concern growth in sales and terminal values and are based on reasonable estimations in line with specific data available for each business sector (generally, terminal value is based on the average income from operations over the three years of the strategic plan, with growth capped at 2%).

At end-2016, the overall value in use of the Group CGUs was higher than its carrying amount.

c) Sensitivity of values in use

The Group also tests the sensitivty of values in use based on reasonable key assumptions. At the end of 2016, a 1% increase in the discount rate, a 1% decrease in the growth rate or a 2% decrease in operating profitability of the Group CGUs would not require any additional impairments.

4.2 Plant, property and equipment and other intangible assets

a) Change in net assets

	Acquired intangible assets (PPA)	Development costs	Other intangible assets	Property, plant and equipment	Total
Net value at 1 January 2015	**715.5**	**147.2**	**83.5**	**1,557.0**	**2,503.2**
Acquisitions/increases	–	15.0	54.9	403.5	473.4
Disposals	–	–	–	(15.1)	(15.1)
Amortisation of acquistion-related intangible assets	(111.6)	–	–	–	(111.6)
Other depreciation and amortisation	–	(42.0)	(38.2)	(301.1)	(381.3)
Changes in scope, exchange rates and other	45.3	3.1	(9.8)	52.4	91.0
Net value at 31 December 2015	**649.2**	**123.3**	**90.4**	**1,696.7**	**2,559.6**
Acquisitions/increases	–	6.6	45.1	428.6	480.3
Disposals	–	–	–	(8.3)	(8.3)
Amortisation of acquistion-related intangible assets	(107.3)	–	–	–	(107.3)
Other depreciation and amortisation	–	(48.1)	(39.1)	(297.4)	(384.6)
Changes in scope[(a)], exchange rates and other	232.0	(2.5)	9.2	(20.7)	218.0
NET VALUE AT 31 DECEMBER 2016	**773.9**	**79.3**	**105.6**	**1,798.9**	**2,757.7**

(a) Of which €231 million attributable to Vormetric, including €142.6 million for technology acquired.

b) Breakdown by item

			31/12/2016	31/12/2015	01/01/2015
	Gross	**Depr., amort., and impairment**	**Net**	**Net**	**Net**
Technologies acquired	814.1	(374.5)	439.6	339.7	385.8
Customer relationships acquired	562.2	(284.8)	277.4	239.1	269.0
Order backlog acquired	277.7	(249.2)	28.5	35.3	47.0
Other	74.5	(46.1)	28.4	35.1	13.7
Intangible assets acquired (business combinations)	1,728.5	(954.6)	773.9	649.2	715.5
Development costs	892.6	(813.3)	79.3	123.3	147.2
Other	721.2	(615.6)	105.6	90.4	83.5
Intangible assets	**3,342.3**	**(2,383.5)**	**958.8**	**862.9**	**946.2**
Land	51.1	(0.9)	50.2	51.3	50.1
Buildings	1,547.4	(834.5)	712.9	616.3	600.7
Technical facilities and industrial equipment and tooling	2,457.2	(1,810.6)	646.6	588.7	577.1
Other	1,075.1	(685.9)	389.2	440.4	329.1
Property, plant and equipment	**5,130.8**	**(3,331.9)**	**1,798.9**	**1,696.7**	**1,557.0**

4.3 Lease commitments

Irrevocable lease and rental commitments at 31 December 2016 and 2015 are as follows:

Irrevocable rental commitments	Total	Less than 1 year	1 to 5 years	More than 5 years
31 December 2016	**1,345.4**	**212.5**	**615.9**	**517.0**
31 December 2015	1,361.0	215.2	615.9	529.9

NOTE 5. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

5.1 Joint ventures

a) Group share in net equity and net income of joint ventures

	Investments in joint ventures		Share in net income		Share in comprehensive income	
	31/12/2016	**31/12/2015**	**2016**	**2015**	**2016**	**2015**
DCNS (35%)	713.9	680.9	23.9	(3.5)	26.9	2.2
Other joint ventures [(a)]	283.6	445.5	48.5	59.3	12.1	71.1
TOTAL	**997.5**	**1,126.4**	**72.4**	**55.8**	**39.0**	**73.3**

(a) Not individually material, the value of each investment representing less than 10% of the total.

b) Change in investments in joint ventures

	31/12/2016	31/12/2015
Investment at 1 January	**1,126.4**	**1,104.2**
Share in net income of joint ventures	72.4	55.8
Translation adjustment	(26.9)	11.6
Cash flow hedge	(0.5)	0.8
Available for sale financial assets	6.7	–
Actuarial gains (losses) on pensions	(12.7)	5.1
Share in comprehensive income	**39.0**	**73.3**
Dividends paid	(43.6)	(51.8)
Disposal of Hanwha Thales Co., Ltd	(112.3)	–
Other	(12.0)	0.7
INVESTMENTS AT 31 DECEMBER	**997.5**	**1,126.4**

c) DCNS summary financial information

Thales has a 35% stake in the share capital of DCNS, a subsidiary jointly controlled with the French State. DCNS is a French industrial group specialised in naval defence and marine infrastructures.

The financial statements of DCNS, after Thales restatements (mainly linked to acquisition-related intangible assets) are presented below:

Summary balance sheet based on a 100% interest	31/12/2016	31/12/2015
Non-current assets	2,359.9	2,599.4
Current assets	6,078.9	7,527.4
Total assets	**8,438.8**	**10,126.8**
Restated equity attributable to shareholders of the Company	1,205.3	1,111.2
Non-controlling interests	86.2	22.4
Non-current liabilities	649.6	710.7
Current liabilities	6,497.7	8,282.5
Total equity and liabilities	**8,438.8**	**10,126.8**
Cash and cash equivalents	2,301.9	2,296.3
Available for sale investments	424.4	424.2
Non-current financial liabilities	(200.8)	(192.8)
Net cash	**2,525.5**	**2,527.7**

Consolidation by Thales	31/12/2016	31/12/2015
Restated equity attributable to shareholders of the Company	1,205.3	1,111.2
% of Thales' interests	*35%*	*35%*
Thales' share	421.9	388.9
Goodwill	292.0	292.0
Share in net assets of the joint venture	**713.9**	**680.9**

Summary profit and loss account based on a 100% interest	2016	2015
Sales	3,191.2	3,038.8
Income (loss) from operating activities after impact of equity affiliates [(a)]	4.3	(51.0)
Financial income	23.9	20.8
Tax	33.3	10.3
Restated net income [(a)]	**61.5**	**(19.9)**
• of which, attributable to shareholders of the Company	68.3	(9.9)
• of which, non-controlling interests	(6.8)	(10.0)

(a) After Thales restatements (mainly linked to acquisition-related intangible assets).

Consolidation by Thales	2016	2015
Restated net income attributable to shareholders of the Company	68.3	(9.9)
% of Thales' interests	*35%*	*35%*
Share in income of the joint venture	**23.9**	**(3.5)**
• of which, impact of PPA	(9.9)	(25.4)
• of which, share in income before PPA	33.8	21.9
Dividends received from the joint venture	**–**	**–**

d) Commitments toward joint ventures

At 31 December 2016, outstanding sureties, endorsements and guarantees granted by Thales (parent company) to its joint ventures amounted to €238.3 million (€332.9 million at 31 December 2015).

The Group's policy is to issue guarantees on commitments by joint ventures in proportion to its equity interest, or to secure counter-guarantees from the other shareholders in proportion to their interest.

e) Transactions with joint ventures (related parties)

The volume of transactions with joint ventures and their joint shareholders is as follows:

	2016	2015
Sales	559.7	575.8
Purchases	189.7	178.5
Loans and current accounts receivable	47.5	44.2
Borrowings and current accounts payable	12.4	13.8

5.2 Associates

The main associates are listed in Note 17. None of these companies is individually material with regard to consolidated aggregates. The mandatory disclosures are therefore presented in aggregate form in the table below:

a) Changes in investment in associates

	31/12/2016	31/12/2015
Investments in associates at 1 January	**359.5**	**385.5**
Share in net income of equity affiliates	47.2	57.0
Translation adjustment	(30.7)	27.6
Cash flow hedge	0.5	(16.5)
Actuarial gains (losses) on pensions	0.4	(1.9)
Total comprehensive income	**17.4**	**66.2**
Dividends paid	(29.1)	(31.6)
Changes in scope (TRS LLC in 2016, Cloudwatt and ESG in 2015)	(127.8)	(58.5)
Other	(0.5)	(2.1)
INVESTMENTS IN ASSOCIATES AT 31 DECEMBER	**219.5**	**359.5**

b) Commitments towards associates

The Group has no material off-balance sheet commitments towards associates.

NOTE 6. FINANCING AND FINANCIAL INSTRUMENTS

6.1 Financial income

a) Net interest income

	2016	2015
Interest expense		
• on gross debt	(36.4)	(37.2)
• on interest rate swaps	25.1	21.7
	(11.3)	(15.5)
Interest income/cash and cash equivalents	17.6	19.3
TOTAL	**6.3**	**3.8**

b) Other financial income

	2016	2015
Foreign exchange gains (losses)	(2.4)	4.4
Cash flow hedge, ineffective portion	(5.9)	(6.9)
Change in fair value of currency derivatives [a]	(70.3)	(32.2)
Foreign exchange gains (losses)	(78.6)	(34.7)
Dividends received	2.8	5.0
Impairment of non consolidated investments, loans and other financial assets	(1.4)	(7.9)
Other	(3.4)	(4.2)
TOTAL	**(80.6)**	**(41.8)**

(a) Includes the change in the fair value of premiums/discounts (losses of €54.0 million in 2016 and €15.5 million in 2015), the time value of derivatives documented as future cash flow hedges (losses of €7.3 million in 2016 and €6.3 million in 2015), as well as changes in the fair value of derivatives not documented as hedges.

6.2 Net cash (net debt)

Group net cash is as follows:

	31/12/2016	31/12/2015
Current financial assets	265.9	27.5
Cash and cash equivalents	3,616.9	3,450.2
Cash and other short-term investments (I)	**3,882.8**	**3,477.7**
Borrowings and debt, long-term portion	1,433.7	837.6
Borrowings and debt, short-term portion	111.4	698.7
Fair value of interest rate derivatives [a]	(27.9)	(36.2)
Gross debt (II)	**1,517.2**	**1,500.1**
NET CASH (I -II)	**2,365.6**	**1,977.6**

(a) The value of borrowings documented as fair value hedges takes into account changes in the fair value of the hedged risk. This change in the value of the debt is offset by the remeasurement of interest-rate swaps used as hedges (Note 6.5).

a) Current financial assets

	31/12/2016	31/12/2015
Current accounts receivable with related parties	8.5	17.5
Marketable securities	250.0	6.3
Accrued interest	7.4	3.7
CURRENT FINANCIAL ASSETS	**265.9**	**27.5**

Marketable securities consist of investments in short-term deposits (3 to 12 months) with tier-one banks.

b) Cash and cash equivalents

At 31 December 2016, cash recorded under consolidated assets amounted to €3,616.9 million (€3,450.2 million in 2015) and included:

- €3,183.1 million held by the parent company and available for immediate use (€2,949.8 million in 2015). These amounts include €2,886.2 million (€2,585.2 million in 2015) in very short-term deposits with tier-one banks or money market funds;
- €433.8 million in the credit balances of subsidiaries (€500.4 million in 2015), most of them outside France. This figure includes payments received in the last days of the financial year and subsequently transferred to the cash pooling account.

c) Borrowings and debt

	31/12/2016	31/12/2015
Bond maturing in 2023	595.6	–
Bond maturing in 2021	315.9	314.0
Bond maturing in 2018	502.8	504.3
Bond maturing in 2016	–	605.6
Interest rate derivatives (Note 6.5)	(27.9)	(36.2)
Current accounts in credit with related parties	48.7	28.4
Other debt	82.1	84.0
GROSS DEBT	**1,517.2**	**1,500.1**

Nature of bonds	Nominal value	Maturity	Nature	Nominal rate (excluding impact of hedging)	Effective rate (excluding impact of hedging)
Bond maturing in 2023	€600 million	June 2023	Fixed incl. €400 million swapped at variable rates	0.75%	0.84%
Bond maturing in 2021	€300 million	March 2021	Fixed incl. €300 million swapped at variable rates	2.25%	2.40%
Bond maturing in 2018	€500 million	March 2018	Fixed incl. €300 million swapped at variable rates	1.625%	1.74%
Bond maturing in 2016	€600 million	October 2016	Fixed incl. €400 million swapped at variable rates	2.75%	2.91%

Breakdown of gross debt by maturity

31/12/2016	Total	2017	2018	2019	2020	> 2020
Gross debt[a]	1,517.2	111.4	509.4	4.3	1.4	890.7
Contractual cash flows	1,572.3	106.9	523.4	11.1	8.9	922.0

31/12/2015	Total	2016	2017	2018	2019	> 2019
Gross debt[a]	1,500.1	689.6	7.0	501.7	5.5	296.3
Contractual cash flows	1,543.1	693.4	15.8	514.5	9.5	309.9

(a) After deduction of fair value of interest-rate derivatives.

Breakdown of gross debt by currency

	31/12/2016	31/12/2015
Euro	1,468.6	1,453.6
Pound sterling	13.7	19.8
US Dollar	11.6	7.6
Other	23.3	19.1
TOTAL	**1,517.2**	**1,500.1**

After impact of the related derivative instruments.

6.3 Non-current financial assets

a) Non-consolidated investments

	%	31/12/2016	31/12/2015
Investments held by Thales International Offsets[a]	N/A	28.0	28.2
AvioVision NV (Belgium)[b]	100%	11.0	–
Tronic's Microsystems (France)	21%	10.3	6.0
Other[c]		33.0	36.9
TOTAL		**82.3**	**71.1**

(a) Group subsidiary in charge of negotiating and implementing indirect offset obligations.
(b) Consolidated from 2017.
(c) Investments of less than €10 million.

b) Non-current financial assets

	31/12/2016	31/12/2015
Loans to related parties	86.6	67.5
Loans and other financial assets at amortised cost	37.3	52.1
Loans and other financial assets at market value	19.4	19.4
Gross value	**143.3**	**139.0**
Impairment	(5.0)	(7.8)
NET	**138.3**	**131.2**

6.4 Fair value of financial assets and liabilities

				31/12/2016		31/12/2015	
	At cost/ amortised cost	Fair value through: Equity	Profit or loss	Value in balance sheet	Fair value	Value in balance sheet	Fair value
Non-current financial assets							
Non-consolidated investments	–	82.3	–	82.3	82.3	71.1	71.1
Non-current loans and financial assets	118.9	–	19.4	138.3	138.3	131.2	131.2
Non-current derivatives documented as hedges	–	–	27.9	27.9	27.9	36.2	36.2
Current financial assets							
Derivative instruments documented as hedges	–	154.2	–	154.2	154.2	134.7	134.7
Derivative instruments not documented as hedges	–	–	7.5	7.5	7.5	19.5	19.5
Current financial assets	265.9	–	–	265.9	265.9	27.5	27.5
Cash and cash equivalents	2,546.0	–	1,070.9	3,616.9	3,616.9	3,450.2	3,450.2
Non-current financial liabilities							
Long-term debt	1,405.8	–	27.9	1,433.7	1,477.4	837.6	870.3
Non-current derivative instruments, liabilities	–	–	–	–	–	–	–
Current financial liabilities							
Derivative instruments documented as hedges	–	458.3	–	458.3	458.3	392.7	392.7
Derivative instruments not documented as hedges	–	–	20.0	20.0	20.0	12.6	12.6
Short-term debt	111.4	–	–	111.4	111.4	698.7	711.1

Receivables, payables and refundable grants as detailed in the Note 10.1, are financial assets and liabilities within the meaning of IAS 32/39 and are measured at amortised cost.

IFRS 13 categorises valuation techniques for each financial asset and liabilitiy according to a fair value hierarchy with three levels:

- level 1: valuation is based on quoted (non adjusted) prices in active markets for identical assets or liabilities;
- level 2: valuation is based on information other than quoted market prices that is observable for the asset or liability, either directly or indirectly;
- level 3: valuation is based on unobservable information for an asset or liability.

The fair value of financial assets and liabilities recorded at amortised cost approximates their carrying amount.

The fair value of bond debt is based on quoted prices (level 1). The fair value of other borrowings and debt is determined for each loan by discounting the expected future cash flows at the Euribor interest rate at the closing date, adjusted for the Group's credit risk (level 2).

The fair value of monetary and non-monetary UCITS is measured based on the last known net asset value. The fair value of interest rate products (certificates of deposit, short-term deposits, negotiable medium-term notes, etc.) is based on the discounting of coupons flows (nominal and interest) over the remaining life of the product at the closing date. The discount rate used is the market rate corresponding to the maturity and product characteristics.

The fair value of derivatives is based on models commonly used to measure these financial instruments (models including observable market data). Counterparty defaut risk and credit risk have no material impact on the fair value of derivatives.

6.5 Financial risk

Thales' financial risk management policy is described in detail in the Group management report (section 1.1.2).

a) Market risk

Thales hedges its foreign exchange and interest-rate risk using over-the-counter derivatives from tier-one banks. The book value of derivatives used to manage the Group's market risk is presented below:

	31/12/2016		31/12/2015	
	Assets	Liabilities	Assets	Liabilities
Non-current derivatives:				
• Foreign exchange derivatives	–	–	–	–
• Interest-rate derivatives	27.9	–	36.2	–
Current derivatives:				
• Foreign exchange derivatives	160.4	476.8	154.2	402.0
• Interest-rate derivatives	1.3	1.5	–	3.3
Foreign exchange derivatives, net	(316.4)		(247.8)	
Interest-rate derivatives, net	27.7		32.9	

Foreign exchange risk

Thales hedges currency risks arising in connection with the negotiation of contracts denominated in currencies other than the main production currency, currency risks generated by ordinary commercial operations, risks relating to cash pooling and, in some cases, risks relating to its net investments in foreign operations.

At 31 December 2015 and 2016, the amount of derivatives in the portfolio can be analysed as follows:

Foreign exchange derivatives	31/12/2016					31/12/2015	
	USD	GBP	Other	Total	Market value	Total	Market value
Negotiations and trade operations hedges							
Documented as hedges							
Forward currency sales	4,825.9	738.5	2,146.3	7,710.7	(179.1)	7,794.0	(223.0)
Forward currency purchases	1,552.2	822.6	1,824.4	4,199.2		4,037.4	
Currency sales (call and put options)	90.6	–	–	90.6	0.2	45.9	0.8
Currency purchases (call and put options)	–	–	14.8	14.8		–	
Not documented as hedges							
Forward currency sales	–	–	–	–	–	13.8	(0.7)
Forward currency purchases	–	–	–	–		99.2	
Currency sales (call and put options)	1.4	–	2.1	3.5	0.4	171.8	0.8
Currency purchases (call and put options)	10.4	–	0.7	11.2		98.2	
Hedges related to cash pooling							
Currency sales: currency swaps	65.9	–	247.8	313.7	(13.8)	201.7	7.7
Currency purchases: currency swaps	281.7	181.6	461.7	924.9		1,209.2	
Hedges related to net investments in foreign operations (hedge accounting)							
Currency sales: foreign exchange swaps	716.5	–	–	716.5	(124.1)	517.2	(33.4)
Currency purchases: foreign exchange swaps	–	561.0	–	561.0		339.9	
NET ASSET (LIABILITY)					**(316.4)**		**(247.8)**

Nominal amounts are translated into euros at the closing rate.

The maturity of the derivatives used to hedge commercial contracts is consistent with the average maturities of these contracts, typically less than five years. Other derivatives have a maturity of less than one year.

The change in the value of financial instruments (forward transactions) used to hedge cash flow is recognised in equity for the spot rate component. A decrease (increase) of 5% in the dollar against the main currencies (EUR, GBP and CAD) would have had a positive (negative) impact on equity of approximately €153 million at 31 December 2016 and 2015.

The change in value of derivative instruments matched with commercial tender portfolio, which are not eligible for hedge accounting, is recognised in profit and loss. A decrease (increase) of 5% in the dollar against the main currencies (EUR, GBP and CAD) would have no impact on profit or loss at 31 December 2016, versus an impact of around €1 million at 31 December 2015.

Interest-rate risk

Thales is exposed to interest-rate volatility and in particular its impact on the conditions associated with variable-rate financing. To limit this risk, Thales operates an active interest-rate hedging policy. At 31 December 2015 and 2016, the amount of derivatives in the portfolio was as follows:

Interest-rate derivatives	31/12/2016		31/12/2015	
	Nominal	Market value	Nominal	Market value
Fair value hedge (swaps with variable-rate payable):				
• swaps related to bond maturing in 2023	400.0	0.1	–	–
• swaps related to bond maturing in 2021	300.0	21.6	300.0	19.9
• swaps related to bond maturing in 2018	300.0	6.2	300.0	8.1
• swaps related to bond maturing in 2016	–	–	400.00	8.2
		27.9		**36.2**
Cash flow hedge (financing of projects at variable-rate swapped to fixed-rate)	**12.8**	**(1.3)**	**19.4**	**(2.4)**
Swaps not documented as hedges:				
• cross-currency swap with fixed-rate payable, hedging a loan	15.2	1.3	16.0	(0.5)
• swap with fixed-rate payable, hedging a loan	6.3	(0.2)	8.7	(0.4)
NET ASSET		27.7		**32.9**

The table below summarises the Group's exposure to interest-rate risk before and after hedging.

31/12/2016	< 1 year		> 1 year		Total	
	Fixed-rate	Variable-rate	Fixed-rate	Variable-rate	Fixed-rate	Variable-rate
Gross debt[(a)]	(14.5)	(96.9)	(1,387.1)	(18.7)	(1,401.6)	(115.6)
Financial assets, cash and cash equivalents	–	3,882.8	–	–	–	3,882.8
NET EXPOSURE BEFORE IMPACT OF DERIVATIVE INSTRUMENTS	**(14.5)**	**3,785.9**	**(1,387.1)**	**(18.7)**	**(1,401.6)**	**3,767.2**
Hedging derivatives	(4.0)	4.0	991.2	(991.2)	987.2	(987.2)
NET EXPOSURE AFTER IMPACT OF DERIVATIVE INSTRUMENTS	**(18.5)**	**3,789.9**	**(395.9)**	**(1,009.9)**	**(414.4)**	**2,780.0**

31/12/2015	< 1 year		> 1 year		Total	
	Fixed-rate	Variable-rate	Fixed-rate	Variable-rate	Fixed-rate	Variable-rate
Gross debt[(a)]	(612.1)	(77.5)	(792.2)	(18.3)	(1,404.3)	(95.8)
Financial assets, cash and cash equivalents	–	3,477.7	–	–	–	3,477.7
NET EXPOSURE BEFORE IMPACT OF DERIVATIVE INSTRUMENTS	**(612.1)**	**3,400.2**	**(792.2)**	**(18.3)**	**(1,404.3)**	**3,381.9**
Hedging derivatives	395.5	(395.5)	585.3	(585.3)	980.8	(980.8)
NET EXPOSURE AFTER IMPACT OF DERIVATIVE INSTRUMENTS	**(216.6)**	**3,004.7**	**(206.9)**	**(603.6)**	**(423.5)**	**2,401.1**

(a) After deduction of the fair value of interest-rate derivatives.

Based on the Group's average net cash (taking into account hedging instruments), a 1% rise in interest rates would increase net interest income by €21.6 million in 2016 (€11.4 million in 2015).

b) Customer credit risk

Credit risk relates to the risk that a party to a contract will default on its commitments or fail to pay what it owes.

Risk of default by private sector customers

Non-governmental customers (aircraft manufacturers, airlines, private infrastructure operators and industry) account for approximately 25% of Thales' sales. These customers may encounter major and/or prolonged financial difficulties that could lead to payment defaults or order cancellations. Such occurrences could have a negative impact on Thales' sales, profitability and financial position.

To mitigate these risks, Thales conducts regular analyses of the ability of customers to meet their obligations. When necessary, Thales may request bank guarantees or corporate guarantees, or may use credit insurers.

Credit risk relating to public sector customers

Public, government and institutional customers account for around 75% of Thales' sales. Thales works with a large number of countries. Some of them could present a significant credit risk which could, for example, lead them to suspend an order in production, or render them unable to pay on delivery, as agreed under the terms of the contract. To limit its exposure to these risks, Thales takes out insurance with export credit agencies (such as BPIFrance) or private insurers.

At 31 December 2016, only three customers accounted for annual sales in excess of €500 million: the French State (around €2.5 billion), the UK government (around €1 billion) and the Australian government (around €0.6 billion). At 31 December 2016, these three countries had first-class or high-quality ratings (France was rated AA by S&P and Aa2 by Moody's, the United Kingdom was rated AA by S&P and Aa1 by Moody's, and Australia was rated AAA by S&P and Aaa by Moody's).

The Group's Finance department consolidates all the information relating to the Group's exposure to credit risk, notably by identifying and analysing the ageing of overdue accounts and notes receivable that have not been impaired. At 31 December 2016 and 2015, the ageing of these accounts and notes receivable is as follows:

31/12/2016	Total	Accounts and notes receivables past due		
		Less than 3 months	3 to 6 months	More than 6 months
Overdue accounts and notes receivables not impaired				
State and similar	158.0	80.1	10.3	67.6
Other	430.1	274.3	61.1	94.7

31/12/2015	Total	Accounts and notes receivables past due		
		Less than 3 months	3 to 6 months	More than 6 months
Overdue accounts and notes receivables not impaired				
State and similar	132.1	101.1	8.5	22.5
Other	377.7	246.4	51.6	79.7

Credit risk related to banking counterparties

Financial investments are diversified. They relate to first ranking debt and are negotiated with tier-one banks.

Thales Group trades over-the-counter derivatives with tier-one banks under agreements which provide for the offseting of amounts payable and receivable in the event of default by one of the contracting parties. These conditional offsetting agreements do not meet the eligibility criteria within the meaning of IAS 32 for offsetting derivative instruments recorded under assets and liabilities. However, they do fall within the scope of disclosures under IFRS 7 on offsetting.

31/12/2016	Gross value (before offset)	Offset amounts on balance sheet	Net presented in balance sheet	Impact of other offsetting agreements		Net
				Offsetting agreements	Financial collaterals	
Derivatives – Assets	189.6	–	189.6	(185.0)	–	4.6
Derivatives – Liabilities	478.3	–	478.3	(185.0)	–	293.3

31/12/2015	Gross value (before offset)	Offset amounts on balance sheet	Net presented in balance sheet	Impact of other offsetting agreements		Net
				Offsetting agreements	Financial collaterals	
Derivatives – Assets	190.4	–	190.4	(172.0)	–	18.3
Derivatives – Liabilities	405.3	–	405.3	(172.0)	–	233.3

c) Liquidity risk

The Group's liquidity risk is the risk of it being unable to meet its cash needs out of its financial resources. In particular, it relates to Thales' level of exposure to changes in the main market indicators that could lead to an increase in the cost of credit or even to a temporary limitation of access to external sources of financing.

The Group manages this risk by trying to anticipate its cash needs and ensures that these are covered by the Group's short-term and long-term financial resources, as follows:

- shareholders' equity (Note 8.1);
- gross debt (listed by date of maturity in Note 6.2);
- committed, undrawn credit facilities granted by banks (€1,500 million maturing in 2021) as backup to the commercial paper programme and acting as a financing reserve.

The parent company's financing programmes are rated by Standard & Poor's and Moody's. At the date of publication, Thales' credit risk ratings were as follows:

	Moody's	Standard & Poor's
Medium & long-term loans	A2	A-
Outlook	Stable	Stable
Commercial paper & short-term loans	Prime-1	A-2

The decrease of Thales' credit risk rating would not trigger the financial covenants included in its financing contracts. The single accelerated repayment clause would apply only in the event that the French State ceased to hold its golden share and, simultaneously, the ratio of consolidated net debt to EBITDA[1] were to exceed 3x.

A lower rating would result in an increase (capped) in the margins applicable to the €1.5 billion committed credit facility. A higher rating would lead to a decrease in the applicable margin (with a minimum threshold). No other financing arrangements are subject to covenants based on financial ratios.

NOTE 7. INCOME TAX

The income tax charge takes into account specific local tax rules, including the tax consolidation systems in France and the United States, group relief in the United Kingdom and *Organschaft* rules in Germany.

7.1 Income tax expense

	2016	2015
Current tax[a]	(262.4)	(197.9)
Deferred tax	6.8	(22.0)
TOTAL	**(255.6)**	**(219.9)**

(a) This amount excludes levies recorded under operating items, mainly comprising property taxes, social solidarity contributions and the company value-added contribution (*cotisation sur la valeur ajoutée des entreprises* – CVAE) in France (€76.0 million in 2016 and €69.0 million in 2015).

Tax proof

	2016	2015
Net income	1,014.6	812.7
Less: income tax	255.6	219.9
Less: share in net income of equity affiliates	(119.6)	(112.8)
Net income before tax and share in net income of equity affiliates	**1,150.6**	**919.8**
Average tax rate	29.6%	31.0%
Theoretical tax benefit (expense)	**(340.9)**	**(284.9)**
Reconciliation items:		
• Tax credits	76.9	69.6
• Change in provision for deferred tax assets	38.7	30.1
• Taxes not taken into account in the theoretical rate	(29.2)	(15.9)
• Ajustments in respect of prior periods	(18.8)	(13.8)
• Impact of dividends paid	5.2	(9.4)
• Impact of change in deferred tax rates	(7.7)	(1.4)
• Impact of partial or total exemption of disposals	22.3	14.8
• Other	(2.1)	(9.0)
Income tax benefit (expense) recognised in profit and loss	**(255.6)**	**(219.9)**
Effective tax rate	**22.2%**	**23.9%**

(1) EBITDA, as defined in the financing agreements, is the sum of operating income, depreciation of non-current assets and impairment of intangible assets, net of goodwill amortisation. This indicator is calculated in accordance with French GAAP.

The weighted average rate corresponds to the sum of theoretical taxes of consolidated companies, divided by the consolidated net income before tax and the share in net income of equity affiliates. The theoretical tax of each consolidated company corresponds to net income before tax at the local tax rate.

Accordingly, the average tax rate reflects the relative contribution of the different countries to consolidated net income. France, which has a tax rate of 34.43% before additional contributions, represented almost 70% of income before tax in both 2016 and 2015.

The impact of tax credits includes:

- the impact of tax exemption of research tax credits (€176.2 million in 2016, €153.5 million in 2015) and tax credits for competitiveness and jobs (*crédit d'impôt pour la compétitivité et l'emploi* – CICE) recognised in operating income;
- the tax advantages related to research, which are recognised in income tax (notably in Australia and the Netherlands).

Taxes excluded from the average tax rate mainly include state taxes in the United States, taxes on foreign establishments, and the additional contribution in France in 2015.

The impact of changes in deferred tax rates in 2016 mainly includes the impact of the tax cut enacted in France with effect from 2020 (to 28.9% from 34.43%).

7.2 Deferred tax recognised in equity

		2016		2015
Fully consolidated entities	**Base**	**Tax**	**Base**	**Tax**
Translation of the financial statements of foreign subsidiaries	35.8	–	7.0	–
Net foreign investment hedges	(3.9)	1.3	3.9	(1.3)
Cash flow hedges	52.5	(18.9)	(191.0)	45.7
Available for sale financial assets	3.5	–	0.6	–
Items reclassified to income	**87.9**	**(17.6)**	**(179.5)**	**44.4**
Actuarial gains and losses/pensions – United Kingdom	(553.0)	11.5 [a]	140.6	43.5 [a]
Actuarial gains and losses/pensions – Other countries	(108.0)	10.8 [b]	130.9	(38.4)
Items not reclassified to income	**(661.0)**	**22.3**	**271.5**	**5.1**
Treasury shares and share-based payment		7.1		0.5
TOTAL DEFERRED TAX RECOGNISED IN EQUITY		**11.8**		**50.0**

(a) Release of a portion of the provision for deferred taxes linked to pensions in the United Kingdom.
(b) Including a negative amount of €16.5 million due to the tax cut in France with effect from 2020.

7.3 Tax assets and liabilities presented in the balance sheet

	01/01/2016	**Income (expense)**	**Equity**	**Cash flow**	**Changes in exch. rates, scope**	**Other**	**31/12/2016**
Current income tax assets	70.8	–	–	(11.0)	–	–	59.8
Current income tax liabilities	(63.7)	(262.4)	–	110.4	–	156.7	(59.0)
Current income tax, net	**7.1**	**(262.4)**	**–**	**99.4**	**–**	**156.7**	**0.8**
Deferred tax assets	967.0	(37.6)	11.8	–	28.0	6.6	975.8
Deferred tax liabilities	(257.9)	44.4	–	–	(81.1)	–	(294.6)
Deferred tax, net	**709.1**	**6.8**	**11.8**	**–**	**(53.1)**	**6.6**	**681.2**
TOTAL		**(255.6)**	**11.8**	**99.4**			

	01/01/2015	**Income (expense)**	**Equity**	**Cash flow**	**Changes in exch. rates, scope**	**Other**	**31/12/2015**
Current income tax assets	60.3	–	–	10.5	–	–	70.8
Current income tax liabilities	(54.0)	(197.9)	–	91.8	(2.7)	99.1	(63.7)
Current income tax, net	**6.3**	**(197.9)**	**–**	**102.3**	**(2.7)**	**99.1**	**7.1**
Deferred tax assets	942.4	(41.3)	50.0	–	13.7	2.2	967.0
Deferred tax liabilities	(265.3)	19.3	–	–	(11.9)	–	(257.9)
Deferred tax, net	**677.1**	**(22.0)**	**50.0**	**–**	**1.8**	**2.2**	**709.1**
TOTAL		**(219.9)**	**50.0**	**102.3**			

a) Current income tax

Income tax paid is reported net of tax credits utilised. The allocation of tax credits is presented under "Other".

b) Deferred tax

Changes by nature

	01/01/2016	(Expense)/ Income for the period	Equity	Changes in exch. rates, scope and other	31/12/2016
Temporary differences:	**846.7**	**35.8**	**80.5**	**(78.8)**	**884.2**
• Pensions and other employee benefits	531.1	(21.3)	104.3	(20.7)	593.3
• Intangible assets	(262.5)	32.8	–	(80.4)	(310.1)
• Reserve for losses at completion	118.6	24.1	–	(1.2)	141.5
• Other	459.5	0.2	(23.8)	23.6	459.5
Tax loss carry-forwards	**248.0**	**(67.7)**	**–**	**12.1**	**192.4**
Total	**1,094.7**	**(31.9)**	**80.5**	**(66.7)**	**1,076.6**
O/w not recognised in the balance sheet	**(385.6)**	**38.7**	**(68.7)**	**20.2**	**(395.4)**
Total net deferred tax assets	**709.1**	**6.8**	**11.8**	**(46.5)**	**681.2**

	01/01/2015	(Expense)/ Income for the period	Equity	Changes in exch. rates, scope and other	31/12/2015
Temporary differences:	**838.3**	**21.7**	**(33.6)**	**20.3**	**846.7**
• Pensions and other employee benefits	608.4	(20.5)	(81.9)	25.1	531.1
• Intangible assets	(288.6)	41.8	–	(15.7)	(262.5)
• Reserve for losses at completion	131.3	(12.8)	–	0.1	118.6
• Other	387.2	13.2	48.3	10.8	459.5
Tax loss carry-forwards	**316.1**	**(73.8)**	**–**	**5.7**	**248.0**
Total	**1,154.4**	**(52.1)**	**(33.6)**	**26.0**	**1,094.7**
O/w not recognised in the balanche sheet	**(477.3)**	**30.1**	**83.6**	**(22.0)**	**(385.6)**
Total net deferred tax assets	**677.1**	**(22.0)**	**50.0**	**4.0**	**709.1**

Tax loss carry-forwards

Total tax loss carry-forwards represent a potential tax saving of €192.4 million at 31 December 2016 (€248.0 million at 31 December 2015). The corresponding expiry dates are as follows:

	31/12/2016
2017	1.0
2018-2021	0.8
Beyond 2021	47.5
Not time limited	143.1
Total	**192.4**
O/w not recognised in the balance sheet	(112.5)
Net deferred tax asset	**79.9**

	31/12/2015
2016	0.4
2017-2020	1.0
Beyond 2020	29.7
Not time limited	216.9
Total	**248.0**
O/w not recognised in the balance sheet	(165.4)
Net deferred tax asset	**82.6**

As described in Note 14-i, only deferred tax assets related to tax losses which the Group expects to recover are recognised in the balance sheet. In particular, the Group takes into account any loss carry-forward limitations.

NOTE 8. EQUITY AND EARNINGS PER SHARE

8.1 Equity

a) Share capital

The share capital of Thales (parent company) amounts to €636,584,298 and comprises 212,194,766 shares with a par value of €3, compared with 210,961,404 shares at 31 December 2015. This represents an increase of 1,233,362 shares resulting from the exercise of share subscription options.

b) Outstanding securities giving access to the share capital

At 31 December 2016, there are no securities that give access to the share capital of the Company, with the exception of the share subscription options described in Note 9.4.

c) Treasury shares

Thales (parent company) held 749,559 of its own shares at 31 December 2016. They are accounted for as a deduction from equity in the amount of €61.6 million.

In accordance with the authorisations given to the Board of Directors at the Annual General Meeting, the Company carried out the following transactions in 2015 and 2016:

	2016	2015
Treasury shares at 1 January	839,254	1,876,732
Purchases as part of a liquidity agreement	513,001	807,144
Sales as part of a liquidity agreement	(472,001)	(822,144)
Transfer to employees as part of the employee share purchase offering	(41,714)	(457,596)
Delivery of free shares	(607,381)	(535,532)
Market purchases	575,000	–
Exercise of share purchase options	(56,600)	(29,350)
Treasury shares at 31 December	**749,559**	**839,524**

At 31 December 2016 and 2015, the following numbers of shares where held in the liquidity account managed by Kepler Cheuvreux:

	2016	2015
Number of shares at 31 December	50,000	9,000
Value (€ million)	29.5	31.9

d) Translation adjustments

Translation adjustments result from the translation of financial statements of companies whose functional currency is not the euro, offset as applicable by the impact of derivative instruments denominated in foreign currencies to hedge net investments in foreign operations.

Translation adjustments are recorded in equity as other comprehensive income, and are subsequently reclassified to income on disposal. They break down as follows:

	2016	2015
Translation adjustment at 1 January	**(87.2)**	**(134.7)**
Changes in value	21.4	48.8
Reclassified to profit and loss	(46.8)	–
Gross change	(25.4)	48.8
Deferred tax	1.3	(1.3)
Scope	1.3	–
Translation adjustment at 31 December	**(110.0)**	**(87.2)**
Of which:		
• Hedge of net investments in foreign operations	–	3.9

e) Reserves for cash flow hedge

The Group uses foreign exchange derivatives to hedge against changes in the value of future cash flows related to commercial cash flows in foreign currencies. In the consolidated financial statements, the effective portion of changes in fair value of these derivatives is recognised directly in equity, until such time as the hedged flows affect profit and loss.

	2016	2015
Cash flow hedge at 1 January	**(276.8)**	**(118.5)**
Changes in value of derivatives	17.6	(238.9)
Reclassified to operating (income)/expense	27.4	116.9
Reclassified to income tax (benefit)/expense	(9.9)	(40.3)
Changes in scope and exchange rates	(9.0)	4.0
Cash flow hedge at 31 December [(a)]	**(250.7)**	**(276.8)**

(a) A negative balance at closing means that the exchange rates of the derivative instruments documented as hedges are generally less favorable than the exchange rates prevailing at the closing date.

f) Parent company dividend distribution

The per share dividend amounted to €1.60 in 2016 and €1.36 in 2015.

On 27 February 2017, the Board of Directors decided to propose to shareholders, who will be convened to a General Meeting on 17 May 2017, the payment of a total amount of €1.60 per share. In view of the interim dividend of €0.40 per share, if approved, the ex-dividend date will be 31 May 2017, with a payment date of the balance of €1.20 per share, on 2 June 2017.

Dividends paid in 2015 and 2016 are described below:

Year	Approved by	Description	Dividend per share	Payment date	Payment method	Total
2016	Board of Directors meeting on 22 September 2016	2016 interim dividend	€0.40	12/2016	Cash	€84.6 million
	General Meeting on 18 may 2016	Balance for 2015	€1.01	05/2016	Cash	€212.2 million
	Total dividends paid in 2016					**€296.8 million**
2015	Board of Directors meeting on 17 September 2015	2015 interim dividend	€0.35	12/2015	Cash	€73.4 million
	General Meeting on 13 May 2015	Balance for 2014	€0.78	05/2015	Cash	€160.6 million
	Total dividends paid in 2015					**€234.0 million**
2014	Board of Directors meeting on 16 September 2014	2014 interim dividend	€0.34	12/2014	Cash	€70.0 million

g) Non-controlling interests

This item principally includes Leonardo's interest in sub-group Thales Alenia Space (33%), Siemens' and Philips Medical Systems International's interest in Trixell SAS (49%) and, up until 29 June 2016, Raytheon's interest in Thales-Raytheon Systems Company SAS (50%).

The individual contributions of these minority shareholders to the Group's key financial indicators are not material.

The cash of these three companies is unrestricted and is exclusively pooled with Thales' Corporate Treasury department.

8.2 Earnings per share

Basic earnings per share are calculated by dividing the attributable net income by the weighted average number of shares outstanding during the period, excluding treasury shares.

Diluted earnings per share take into account instruments with a dilutive effect on earnings per share and exclude non-dilutive instruments. The dilutive effect of share subscription and share purchase options, free share and unit allotments, is calculated using the treasury stock method, taking into account the average share price over the relevant period.

		2016	2015
Numerator (in € millions)			
Net income attributable to shareholders of the parent company	(A)	946.4	765.1
Denominator (in thousands)			
Average number of shares outstanding	(B)	210,872	208,112
Share subscription and share purchase options [(a)]		1,004	1,403
Free share and units plans [(b)]		1,432	1,421
Diluted average number of shares outstanding	(C)	213,308	210,936
Basic earnings per share (in euros)	**(A) / (B)**	**4.49**	**3.68**
Diluted earnings per share (in euros)	**(A) / (C)**	**4.44**	**3.63**
Average share price		€77.59	€57.86

(a) Only options plans with an exercise price that is lower than the average share price are taken into account in the calculation of diluted earnings per share.
(b) Performance shares/units are only taken into account when performance targets are achieved (for the portion deliverable in shares).

NOTE 9. EMPLOYEE BENEFITS

9.1 Consolidated headcount

Consolidated headcount includes all employees of fully consolidated companies. It does not include employees of equity affiliates. At end-2016, Thales' headcount stood at 63,783 versus 61,848 at end-2015.

Headcount includes three-fourths of employees with an employment grade of engineer, specialist, manager or equivalent.

9.2 Personnel expenses

	2016	2015
Wages and salaries and payroll taxes [(a)]	(5,875.8)	(5,635.2)
Defined benefit pension expense: current service cost (Note 9.3)	(92.9)	(115.9)
Compensation subject to presence conditions related to business combinations	(19.0)	–
Share-based payment (Note 9.4)	(36.9)	(32.9)
TOTAL	**(6,024.6)**	**(5,784.0)**

(a) Including profit-sharing, incentive plans and defined contribution pension expenses.

9.3 Provisions for pensions and other employee benefits

The Group grants its employees post-employment benefits (pensions, end-of-career indemnities, medical care, etc.) and other long-term benefits (long-service and jubilee awards, etc.).

a) Description of the plans

The Group's existing plans are either defined contribution plans or defined benefit plans.

Defined contribution plans

In certain countries, the Group pays contributions based on salaries to state organisations in charge of basic pension schemes (e.g., *Sécurité sociale* or compulsory supplementary schemes ARRCO and AGIRC in France). Beyond these basic pension schemes, Thales also contributes to other defined contribution plans (e.g., Netherlands and United Kingdom since 2002). These plans do not impose any other obligations on the Group except for the payment of contributions: there is no related benefit obligation and contributions are expensed in the period they are incurred.

Defined benefit plans

Defined benefit plans relate to different types of advantages:

- pensions and end-of-career indemnities (legal or contractual), and other long-term benefits (jubiliee awards, etc.), notably in France. In general, these commitments are not covered by any assets;
- supplementary pension schemes, mainly in the United Kingdom where the main scheme, "Thales UK Pension Scheme provides a pension based on the beneficiary's average salary, indexed to inflation. This plan has been closed to new entrants since 2002, and is managed by a trust according to minimum local funding regulations.

The present value of the Group's obligations and the value of plan assets are measured independantly. A provision is recognised if the value of the assets is insufficient to cover the obligations.

b) Provisions recognised in the balance sheet

	2016	2015
Provision at 1 January	**(2,318.9)**	**(2,556.8)**
Current service cost (income from operations)	**(92.9)**	**(115.9)**
Amendments and settlements (non-recurring operating income)	**–**	**10.1**
Interest expense	(182.6)	(213.5)
Expected return on plan assets	122.0	146.8
Net interest cost	(60.6)	(66.7)
Pension fund management cost	(5.2)	(5.8)
Actuarial gains and losses on other long-term benefits	(11.8)	12.4
Finance costs on pensions and other long-term employee benefits	**(77.6)**	**(60.1)**
Total expense for the period	**(170.5)**	**(165.9)**
Actuarial gains and losses (other comprehensive income)	**(661.0)**	**271.5**
Benefits and contributions	**190.1**	**225.1**
• of which, deficit payment in the United Kingdom	88.3	101.0
• of which, other benefits and contributions	101.8	124.1
Translation adjustment	163.2	(77.6)
Changes in scope of consolidation and other	11.3	(15.2)
Provision at 31 December	**(2,785.8)**	**(2,318.9)**
Of which:		
• Post-employment benefits	(2,586.9)	(2,138.2)
• Other long-term benefits	(198.9)	(180.7)

c) Changes in defined benefit obligations and plans assets

31/12/2016	UK	France	Netherlands	Other	Total
Obligation at 1 January	**(4,294.5)**	**(1,042.2)**	**(27.0)**	**(528.0)**	**(5,891.7)**
Current service cost	(19.9)	(51.4)	(0.9)	(20.7)	(92.9)
Interest cost	(148.7)	(21.4)	(0.3)	(12.2)	(182.6)
Plan participant contributions	(11.4)	–	–	(1.8)	(13.2)
Amendments/settlements	–	–	–	–	–
Experience gains (losses)	8.1	(11.5)	–	2.9	(0.5)
Actuarial gains (losses)/financial assumptions	(1,011.8)	(17.3)	0.4	(28.7)	(1,057.4)
Actuarial gains (losses)/demographic assumptions	79.7	(56.8)	–	2.3	25.2
Actuarial gains (losses) on long-term benefits	–	(10.1)	(0.1)	(1.6)	(11.8)
Benefits paid by plan assets	141.7	2.4	–	5.1	149.2
Benefits paid by employer	0.5	58.5	4.5	14.2	77.7
Changes in scope, exchange rates and other	650.6	11.7	(0.1)	(5.3)	656.9
Obligation at 31 December	**(4,605.7)**	**(1,138.1)**	**(23.5)**	**(573.8)**	**(6,341.1)**
Plan assets at 1 January	**3,274.6**	**139.2**	**–**	**159.0**	**3,572.8**
Expected return on plan assets	115.0	2.9	–	4.1	122.0
Employer's contribution	106.1	2.0	–	4.3	112.4
Plan participant contributions	11.4	–	–	1.8	13.2
Amendments/settlements	–	–	–	–	–
Benefits paid by plans assets	(141.7)	(2.4)	–	(5.1)	(149.2)
Experience gains (losses)	371.0	0.0	–	0.7	371.7
Changes in scope, exchange rates and other	(490.2)	(0.2)	–	2.8	(487.6)
Plan assets at 31 December	**3,246.2**	**141.5**	**–**	**167.6**	**3,555.3**
PROVISIONS AT 31 DECEMBER	**(1,359.5)**	**(996.6)**	**(23.5)**	**(406.2)**	**(2,785.8)**

31/12/2015	UK	France	Netherlands	Other	Total
Obligations at 1 January	**(4,135.4)**	**(1,072.0)**	**(1,293.9)**	**(494.4)**	**(6,995.7)**
Current service cost	(25.7)	(48.8)	(18.0)	(23.4)	(115.9)
Interest cost	(160.7)	(15.8)	(24.3)	(12.7)	(213.5)
Plan participant contribution	(12.7)	–	(9.8)	(1.7)	(24.2)
Amendments/settlements [(a)]	7.7	–	1,238.0	–	1,245.7
Experience gains (losses)	(21.5)	(32.5)	5.0	3.2	(45.8)
Actuarial gains (losses)/financial assumptions	154.1	66.2	45.8	20.5	286.6
Actuarial gains (losses)/demographic assumptions	–	–	–	2.5	2.5
Actuarial gains (losses) on long-term benefits	–	7.9	0.3	4.2	12.4
Benefits paid by plan assets	151.6	2.4	29.4	8.1	191.5
Benefits paid by employer	0.6	52.0	0.3	18.3	71.2
Changes in scope, exchange rates and other	(252.5)	(1.6)	0.2	(52.6)	(306.5)
Obligations at 31 December	**(4,294.5)**	**(1,042.2)**	**(27.0)**	**(528.0)**	**(5,891.7)**
Plan assets at 1 January	**2,989.2**	**128.4**	**1,200.6**	**120.7**	**4,438.9**
Expected return on plans assets	118.0	2.0	22.8	4.0	146.8
Employer's contribution	124.5	3.2	19.5	6.9	154.1
Plan participant contribution	12.7	–	9.8	1.7	24.2
Amendments/settlements [(a)]	–	–	(1,235.6)	–	(1,235.6)
Benefits paid by plan assets	(151.6)	(2.4)	(29.4)	(8.1)	(191.5)
Experience gains (losses)	8.1	7.8	13.6	(1.3)	28.2
Changes in scope, exchange rates and other	173.7	0.2	(1.3)	35.1	207.7
Plan assets at 31 December	**3,274.6**	**139.2**	**(0.0)**	**159.0**	**3,572.8**
PROVISIONS AT 31 DECEMBER	**(1,019.9)**	**(903.0)**	**(27.0)**	**(369.0)**	**(2,318.9)**

(a) Employees in the Netherlands had a defined benefit plan, indexed to the level of financing achieved, as assessed by the local prudential rules. In late 2015, the rules of this plan were amended in agreement with employee representative bodies, and the plan was turned into a collective defined contribution plan. Future employer contributions no longer depend on the pension fund's financial performance. At 31 December 2015, the outstanding provision mainly relates to an early-retirement plan.

d) Actuarial assumptions used

The actuarial assumptions used are determined according to the economic environment and specific criteria of each country and each system. The most sensitive assumptions are as follows:

2016	UK	France
Inflation rate	3.22%	1.40%
Discount rate	2.79%	1.50%
Average duration of the plans	17 years	10 years

2015	UK	France
Inflation rate	3.02%	1.60%
Discount rate	3.96%	2.03%
Average duration of the plans	17 years	11 years

For each country, the discount rates are obtained by reference to the Iboxx Corporate AA index which reflects the rate of return of very high-quality corporate bonds, with maturity dates equivalent to the duration of the plans being measured, and in the same currency.

The difference in assumptions between 2015 and 2016 (decrease in the discount rate and increase in inflation), is due to the climate of uncertainty generated by the Brexit vote in the United Kingdom.

At 31 December 2016, the sensitivity of the net obligation to a change in the discount rate is as follows:

Sensitivity in basis points	+0.25%	–0.25%	+0.50%	–0.50%	+1%	–1%
Decrease (increase) in provision (in € millions)	256.9	(273.0)	498.5	(564.6)	939.0	(1,205.0)

In the United Kingdom, a 25-basis-point increase in the inflation rate would lead to a €129.8 million increase in the obligation. Conversely, a 25-basis-point decrease in the inflation rate would give rise to a €112.6 million decrease in the obligation.

e) Allocation and return on plan assets

Plan assets generated an actual average return of 14% in 2016, compared with 4% in 2015. At 31 December 2016, the allocation of assets, mainly invested in the United Kingdom, breaks down as follows:

	2016	2015
Fixed-rate bonds	32%	36%
Index-linked investments	13%	11%
Equities	33%	31%
Alternative liquid investments	8%	9%
Alternative non-liquid investments (property, etc.)	14%	12%
Cash	–	1%
TOTAL	**100%**	**100%**

f) Funding

Thales is subject to funding obligations in respect of its defined benefit pension commitments in the United Kingdom.

In accordance with the regulations in force, the level of funding for its pension obligation is remeasured every three years, further to which the suitability of a new funding plan and/or the implementation of guarantees for the plan is decided in consultation with the trustees. The latest measurement, based on the situation at end-2014, was finalised in September 2016 and led to an annual contribution of £60 million to the main Thales UK Pension Scheme (£6 million for other schemes).

Depending on changes in the degree of deficit (increase or decrease), future contributions to the main scheme could range between £45 million and £75 million.

Thales UK Holding has also guaranteed the future liabilities linked to the funding plan for the subsidiaries concerned in the United Kingdom. At 31 December 2016, the balance of the guarantee of £858.9 million will be reduced by any sums paid. This guarantee is underwritten by Thales for €974 million.

9.4 Share-based payment

At 31 December 2016, the following options, shares and units were outstanding:

- 40,850 share purchase options with a weighted average exercise price of €44.64;
- 1,320,693 share subscription options with a weighted average exercise price of €36.01, including 236,472 performance shares;
- 859,445 free shares, including 374,405 performance shares;
- 1,270,140 share units, including 497,200 performance units;
- 77,340 phantom shares, payable in cash at the end of a four-year vesting period, including 37,910 performance shares.

The terms of these plans are described in the Section 3.5.3 and Sections 4.3.3.4.3 to 4.3.3.4.6.

The Group also implemented an employee share purchase plan, the terms of which are described in the 2015 Registration Document (Note 9.4.f. to the consolidated financial statements).

a) Outstanding share purchase option plans

Date of Board decision	Exercise period	Exercise price	Number of options outstanding at 31/12/2015	Options exercised in 2016	Options cancelled in 2016	Number of options outstanding at 31/12/2016
25/11/2008	from 25/11/2012 to 24/11/2018	€38.50	8,450	(7,600)	–	850
04/07/2007	from 04/07/2011 to 03/07/2017	€44.77	80,000	(40,000)	–	40,000

b) Outstanding share subscription option plans

Date of Board decision	Exercise period	Exercise price	Number of options outstanding at 31/12/2015	Options exercised in 2016	Options cancelled in 2016	Number of options outstanding at 31/12/2016
15/09/2011 (a)	from 15/09/2015 to 14/09/2021	€26.34	224,833	(98,511)	–	126,322
23/09/2010 (a)	from 23/09/2014 to 22/09/2020	€26.34	175,115	(63,765)	(1,200)	110,150
25/06/2009	from 25/06/2013 to 24/06/2019	€32.88	514,699	(150,895)	(1,220)	362,584
01/07/2008	from 01/07/2012 to 30/06/2018	€38.50	659,215	(193,168)	(2,810)	463,237
04/07/2007	from 04/07/2011 to 03/07/2017	€44.77	501,615	(240,635)	(2,580)	258,400
09/11/2006	from 09/11/2010 to 08/11/2016	€36.47	540,388	(486,388)	(54,000)	–

(a) Plans contingent upon the achievement of internal performance targets over the three financial years following the grant date.

c) Allotment of free shares

Date of Board decision	Vesting period	Share price at grant date	Number of free shares at 31/12/2015	Shares allotted in 2016	Shares cancelled in 2016	Shares delivered in 2016	Number of free shares at 31/12/2016
27/10/2016	from 27/10/2016 to 27/10/2020	€83.10	– –	88,020 148,070 (a)	(160) –	– –	87,860 148,070
17/09/2013	from 17/09/2013 to 17/09/2017	€39.16	406,010 235,043 (b)	– –	(8,830) (8,708)	– –	397,180 226,335
20/12/2012	from 20/12/2012 to 20/12/2016	€27.47	449,620 173,804 (a)	– –	(10,900) (5,143)	(438,720) (168,661)	– –

(a) Plans contingent upon the achievement of internal performance targets over the three financial years following the grant date.
(b) 2013 Plan: the number of shares at 31/12/2015 has been adjusted for 1,340 shares erroneously canceled in 2015.

d) Allotment of share units indexed to the value of Thales shares

Date of the allocation decision	Vesting period	Share price at grant date	Number of units at 31/12/15	Units cancelled in 2016	Units delivered in 2016	Number of units at 31/12/2016
17/09/2015	from 17/09/2015 to 17/09/2019	€61.75	375,870 232,000 (a)	(8,070) (2,800)	(70) –	367,730 229,200
16/09/2014	from 16/09/2014 to 16/09/2018	€42.42	417,040 275,600 (a)	(11,590) (7,600)	(240) –	405,210 268,000

(a) Plans contingent upon the achievement of internal performance targets over the three financial years following the grant date.

e) Allotment of phantom shares indexed to the value of Thales shares

Date of the allocation decision	Vesting period	Number of phantom shares at 31/12/15	Phantom shares deliverred in 2016	Phantom shares cancelled in 2016	Number of phantom shares at 31/12/16
27/10/2016	from 27/10/2016 to 27/10/2020	–	40,620 38,900 (a)	(1,190) (990)	39,430 37,910

(a) Plans contingent upon the achievement of internal performance targets over the three financial years following the grant date.

f) Expenses related to share-based payment

In the consolidated financial statements, the benefit granted to beneficiaries of the above-mentioned plans is recognised as an operating expense. These amounts break down as follows:

Plans	Residual fair value at the end of 2016	2016 expense	2015 expense
Free shares [a]	19.2	(9.9)	(11.1)
Units [b]	45.5	(19.0)	(10.5)
Phantom shares	5.8	(0.3)	–
Employee share scheme	–	–	(6.5)
Social contributions related to the plans	21.5	(7.7)	(4.8)
TOTAL	**92.0**	**(36.9)**	**(32.9)**
Of which, offsetting entries:			
• Shareholders equity		16.7	22.2
• Debt		20.2	10.7

(a) The fair value of free share plans takes into account a 2.5% dividend payout rate for the 2012 and 2013 plans, and a 2% dividend payout rate for the 2016 plan.
(b) The fair value of the plan, measured in accordance with the Monte Carlo model, takes into account the following assumptions respectively in 2014 and 2015: volatility rates of 22% and 23%, dividend payout rates of 2.7% and 2%, and free risk rates of 0.14% and 0.10%.

9.5 Compensation of directors and senior corporate officers

Expenses recognised in respect of compensation, benefits and social security contributions attributed to Directors and members of the Executive Committee are as follows:

	2016	2015
Short-term benefits:		
• Fixed compensation	4.8	4.4
• Variable compensation	3.9	3.0
• Employer social security contributions	2.9	2.6
• Contract termination benefits resulting from contractual commitments	–	2.1
• Employer social security contribution on termination benefits	–	0.7
• Attendance fees	0.5	0.6
Other benefits:		
• Post-employment benefits	1.7	1.3
• Share-based payments	2.5	1.8

NOTE 10. CURRENT OPERATING ASSETS AND LIABILITIES

Current operating assets and liabilities include working capital components and reserves for contingencies. The changes in these items are presented below.

Contracts falling within the scope of IAS 11 are subject to specific classification in the consolidated balance sheet: for each contract, the balance of unbilled receivables, work in progress and reserves for contingencies are presented in assets or liabilities under "Construction contracts" (Note 14-c).

The Group is authorised to assign trade receivables, mainly from the French State, and commercial paper. At 31 December 2016, derecognised receivables amounted to €130.3 million (€103.7 million at 31 December 2015). The organic change in derecognised receivables represents an increase of €21.1 million for 2016 (a decrease of €126.3 million in 2015).

As these assignements without recourse in case of default by the debtor involve the transfer of substantially all corresponding risks and rewards, they are derecognised. Thales' continued involvement (within the meaning of IFRS 7) in the related risks and rewards corresponds to the share of dilution risk not transferred to the bank and the remuneration received under the recovery mandate.

10.1 Change in current operating assets and liabilities

	01/01/2015	Change in WCR and reserves	Change in scope, exchange rates and reclassifications	31/12/2015	Change in WCR and reserves	Change in scope, exchange rates and reclassifications	31/12/2016
Inventories and work in progress	2,437.6	98.3	24.9	2,560.8	117.4	(3.6)	2,734.6
Construction contracts – Assets	1,996.4	25.1	21.1	2,042.6	285.2	3.7	2,331.5
Advances to suppliers	326.0	52.0	5.0	383.0	(32.4)	(2.3)	348.3
Accounts, notes and other receivables	4,129.1	330.2	(55.1)	4,404.2	223.3	(80.0)	4,547.5
Current derivatives – Assets	108.2	46.3	(0.3)	154.2	18.0	(10.5)	161.7
Current operating assets	**8,997.3**	**551.9**	**(4.4)**	**9,544.8**	**671.5**	**(92.7)**	**10,123.6**
Advances received from customers on contracts [a]	(3,676.4)	(599.6)	(41.2)	(4,317.2)	(193.0)	31.8	(4,478.4)
Refundable grants	(130.4)	2.2	0.6	(127.6)	(6.6)	0.8	(133.4)
Construction contracts – Liabilities	(1,072.3)	57.6	(6.3)	(1,021.0)	(116.8)	(1.6)	(1,139.4)
Reserve for contingencies	(1,038.0)	50.8	(35.7)	(1,022.9)	5.6	(19.7)	(1,037.0)
Accounts, notes and other payables	(5,254.4)	(189.1)	(104.1)	(5,547.6)	(310.7)	(14.3)	(5,872.6)
Current derivatives – Liabilities	(282.2)	–	(123.1)	(405.3)	21.0	(94.0)	(478.3)
Current operating liabilities	**(11,453.7)**	**(678.1)**	**(309.8)**	**(12,441.6)**	**(600.5)**	**(97.0)**	**(13,139.1)**
Restructuring provision [b]	**134.2**	**(16.8)**	**(1.1)**	**116.3**	**(7.4)**	**5.4**	**114.3**
INCREASE (DECREASE) IN WCR AND RESERVES FOR CONTINGENCIES		**(143.0)**			**63.4**		

(a) Advances received on construction contracts respectively amount to €2,679.2 million, €3,262.8 million and €3,302.7 million at 1 January 2015, 31 December 2015 and 2016.
(b) Included in reserves for contingencies.

10.2 Reserves for contingencies (excluding construction contracts)

	31/12/2015	Additions	Utilisation	Reversal (surplus)	Exchange rates and other	31/12/2016
Restructuring [a]	116.3	72.4	(68.1)	(8.1)	5.4	114.3
Litigation	127.7	33.4	(18.9)	(24.4)	7.7	125.5
Guarantees	239.7	82.2	(51.8)	(10.4)	(3.9)	255.8
Losses at completion	76.1	52.9	(27.9)	(4.8)	–	96.3
Provisions on contracts	147.4	44.9	(12.7)	(4.8)	(1.3)	173.5
Other [b]	315.7	71.1	(58.4)	(26.6)	(33.8)	271.6
TOTAL	**1,022.9**	**356.9**	**(237.8)**	**(79.1)**	**(25.9)**	**1,037.0**

	01/01/2015	Additions	Utilisation	Reversal (surplus)	Exchange rates and other	31/12/2015
Restructuring [(a)]	134.2	81.2	(91.1)	(6.9)	(1.1)	116.3
Litigation	142.5	32.9	(27.3)	(20.4)	–	127.7
Guarantees	230.9	63.3	(50.1)	(13.0)	8.6	239.7
Losses at completion	69.1	40.9	(24.2)	(9.5)	(0.2)	76.1
Provisions on contracts	171.6	32.9	(37.6)	(10.6)	(8.9)	147.4
Other [(b)]	289.7	74.3	(38.3)	(22.2)	12.2	315.7
TOTAL	**1,038.0**	**325.5**	**(268.6)**	**(82.6)**	**10.6**	**1,022.9**

(a) Net restructuring costs break down as follows:

	2016	2015
Additions for the period	(72.4)	(81.2)
Reversals for the period	79.8	98.0
Expenses for the period	(107.9)	(111.1)
Restructuring costs, net	**(100.5)**	**(94.3)**

(b) Includes technical provisions of insurance companies, provisions for tax and labour-related risks, vendor warranties, environmental guarantees and other.

10.3 Maturity of current receivables and payable

The amounts presented in the balance sheet for this item break down as follows:

	31/12/2016			31/12/2015
	Total	< 1 year	> 1 year	Total
Accounts and accrued receivables, gross	3,357.0	3,172.6	184.4	3,189.2
Provisions on accounts and notes receivable [(a)]	(94.8)	(53.7)	(41.1)	(102.2)
Accounts and accrued receivables, net	**3,262.2**	**3,118.9**	**143.3**	**3,087.0**
Tax receivables (excluding income tax)	966.0	715.8	250.2	966.6
Other receivables, gross	319.3	299.7	19.6	351.7
Provisions on other receivables	–	–	–	(1.1)
Net	**1,285.3**	**1,015.5**	**269.8**	**1,317.2**
Accounts, notes and other receivables	**4,547.5**	**4,134.4**	**413.1**	**4,404.2**
Accounts and notes payable	2,467.0	2,459.9	7.1	2,297.5
Accrued holiday pay and payroll taxes	1,455.6	1,421.8	33.8	1,406.5
Tax payables (excluding income tax)	679.0	678.6	0.4	697.5
Other creditors and accrued liabilities	1,271.0	1,161.2	109.8	1,146.1
Accounts, notes and other payables	**5,872.6**	**5,721.5**	**151.1**	**5,547.6**

(a) In 2016, additions to provisions for bad debts, net of reversals of surplus provision, amounted to €2.1 million (€10.3 million in 2015).

10.4 Bonds and warranties linked to commercial contracts

In the ordinary course of its activities, the Group regularly responds to invitations to tender. When requested by the customer, bid bonds are delivered in order to demonstrate the definitive nature of the bid and to indemnify the customer if the Group fails to meet its commitments. At 31 December 2016, bid bonds issued amounted to €26.2 million (€66.2 million at 31 December 2015).

From the signature of a contract up until its completion, the Group may also issue performance bonds for its customers, with a bank acting as an intermediary, in order to cover the payment of damages to the customer in the event that the Group does not meet its contractual commitments. At 31 December 2016, performance bonds amounted to €2,288.6 million (€2,038.6 million at 31 December 2015).

Technical, operational and financial costs incurred by the Group in order to meet its obligations are valued, on a contract-by-contract basis, and are included in the cost to completion of the contract. Where this is not the case, a provision is set aside in the consolidated financial statements for any potential risk, estimated on a contract-by-contract basis.

In order to finance contract execution, the Group may receive advance payments from its customers, in accordance with contractual terms, which are recognised in liabilities in the balance sheet. In order to guarantee reimbursement of these advance payments if the contractual obligations are not met, the Group may deliver, at the customer's request, an advance payment bond. At 31 December 2016, advance payment bonds amounted to €2,336.7 million (€2,183.4 million at 31 December 2015).

The Group evaluates and sets aside provisions for warranty costs in order to guarantee the conformity of goods sold to the customer during the contractual warranty period. In most cases, the provisional withholding of payment contractually applying during this period can be replaced by a warranty retention bond using a bank as intermediary. At 31 December 2016, warranty retention bonds amount to €114.9 million (€115.2 million at 31 December 2015).

The maturity dates of these commitments are:

	< 1 year	1 to 5 years	> 5 years	31/12/2016	31/12/2015
Bid bonds	25.0	1.2	–	26.2	66.2
Performance bonds	804.3	1,157.9	326.4	2,288.6	2,038.6
Advance payment bonds	852.2	1,244.4	240.1	2,336.7	2,183.4
Warranty retention bonds	79.9	18.8	16.2	114.9	115.2
Other bank bonds	55.1	32.6	75.5	163.2	175.0
TOTAL	**1,816.5**	**2,454.9**	**658.2**	**4,929.6**	**4,578.4**

The awarding of major contracts, particularly within the defence sector, may be subject to local or regulatory offsetting obligations, which can take the form of direct offsetting, semi-direct offsetting or indirect offsetting. The associated risks are described under "risk factors" in the management report.

Parent company guarantees

In addition, Thales may grant parent company guarantees to third parties in support of its subsidiaries' obligations without using a bank as an intermediary. At 31 December 2016, these guarantees amounted to €13,697.1 million (€14,688.3 million at 31 December 2015).

These guarantees include all commitments given on behalf of Thales Alenia Space, which are backed by a counterguarantee from Leonardo in proportion to its interest in the capital of Thales Alenia Space (33%).

NOTE 11. CASH FLOWS

11.1 Changes in net cash (net debt)

	2016	2015
Net cash (debt) at 1 January	**1,977.6**	**1,006.3**
Net cash flow from operating activities	1,337.9	1,467.7
Less, reduction in pension deficits	88.3	101.0
Net operating investments	(472.0)	(458.3)
Free Operating cash flow	**954.2**	**1,110.4**
Acquisitions of subsidiaries and affiliates	(391.2)	(51.2)
Disposals of subsidiaries and affiliates	296.9	87.8
Reduction of UK pension deficits	(88.3)	(101.0)
Change in loans	(26.5)	23.3
Dividends paid by the parent company	(296.8)	(234.0)
Third party share in dividend distributions of subsidiaries	(48.3)	(51.3)
Treasury shares and subscription options exercised	4.9	125.4
Changes in exchange rates: translation and financing operations	(19.8)	26.6
Changes in borrowings and debt/investments and other	2.9	35.3
Total change	**388.0**	**971.3**
Net cash (debt) at 31 December (Note 6.2)	**2,365.6**	**1,977.6**

11.2 Operating investments

Only acquisitions and disposals of property, plant and equipment and intangible assets that resulted in a cash inflow or outflow are presented in the cash flow statement. This notably includes the capitalisation of development costs (Note 4.2).

11.3 Financial investments, net

Acquisitions of subsidiaries and affiliates	2016	2015
Acquisition of Vormetric	(372.4)	–
Acquisition of Ruag's optoelectronics business	(12.7)	–
Visionix contingent consideration	–	(12.9)
Tronics Stake (19.7%)	–	(10.3)
Other	(13.1)	(28.0)
Total	**(398.2)**	**(51.2)**
Less cash and cash equivalents acquired	7.0	–
Net investment in subsidiaries and affiliates	**(391.2)**	**(51.2)**

Disposals of subsidiaries and affiliates	2016	2015
Hanwha Thales Co. Ltd (50%)	204.4	–
Equalisation payment/Thales – Raytheon Systems	81.0	–
ESG Elecktroniksystem- und Logistik GmbH (30%)	–	75.2
Other	11.5	12.6
Net disposal of subsidiaries and affiliates	**296.9**	**87.8**

NOTE 12. LITIGATION

Due to the nature of its business activities, Thales is exposed to the risk of technical and commercial litigation.

To prevent disputes or limit their impact, Thales' policy is to systematically seek alternative dispute resolution mechanisms. This policy is reviewed on a regular basis to take into account changes in the Group's core areas of business and is backed by employee training programmes.

In addition, Thales implemented a procedure several years ago to centralise all civil commercial and criminal litigation and claims. These are handled by the Corporate Legal Affairs department, with the support of the Group companies involved.

At the end of 2002, a group of French manufacturers, including Thales and one of its subsidiaries, collectively received a request for arbitration from a shared customer claiming an amount which allegedly should be no less than $260 million and for which the group of French manufacturers might be jointly liable towards the claimant. This request for arbitration is related to the execution of old contracts by the group of French manufacturers. Pursuant to an agreement signed by all of the parties in June 2003, the claimant withdrew its request for arbitration.

In November 2012, the claimant filed a new request for arbitration for a revised amount of €226 million of which Thales' share would be around 28% of the amount claimed. The manufacturers are strongly disputing this demand and at this date it is not possible to evaluate any potential financial risk. Accordingly, Thales has not set aside a provision in respect of this dispute. Proceedings are ongoing.

There are no other government, judicial or arbitration claims of which the Group is aware, which are pending or threatened and which could have or have had, any significant effect on the financial position or profitability of the Company and/or the Group in the last 12 months.

NOTE 13. SUBSEQUENT EVENTS

To the best of the Group's knowledge, no significant events occurred after the end of the reporting period.

NOTE 14. ACCOUNTING POLICIES

a) Presentation of the financial statements

Consolidated profit and loss account

Expenses in the income statement are presented analytically by destination.

Income from operations is equal to income of operating activities before taking into account:

- gains and losses on disposal of disposals of property, plant and equipment and intangible assets, businesses or investments;
- the impact of changes in scope on consolidated net income (Note 14-b);
- the impact of the amendment, curtailment or liquidation of pension plans and other long-term benefits;
- the impairment of non-current operating assets;
- other operating income (expense) resulting from events that are unusual by their frequency, nature and amount.

Consolidated balance sheet

A significant portion of the Group's activities in its different business segments have long-term operating cycles. Accordingly, assets (liabilities) that are usually realised (settled) within the entities' operating cycles (inventory, accounts receivable and payable, advances, reserves, etc.) are classified in the consolidated balance sheet as current assets and liabilities, with no distinction between the amounts due within one year and those due after one year.

Consolidated statement of cash flows

The statement of cash flows provides an analysis of the change in cash and cash equivalents, as presented in the balance sheet and defined in Note 14-h. The statement of cash flows is prepared using the indirect method based on consolidated net income and is broken down into three categories:

- net cash flow from operating activities (including interest and taxes);
- net cash flow used in investing activities, including net operating investments (acquisition and disposal of property, plant and equipment and intangible assets, capitalisation of development costs) and net financial investments;
- net cash flow used in financing activities including dividends paid, from capital subscriptions (exercise of options by employees), the purchase/sale of treasury shares, the issuance and repayment of debt, and changes in bank overdrafts, etc.

The Group also presents the changes in its **net cash**, which is a non-GAAP measure and includes gross debt, net of cash and cash equivalents and liquid investments. Changes in net cash, presented in Note 11.1, notably reflect **Free operating cash flow**, defined as net cash flow from operating activites less net operating investments, plus the payment of the UK pension deficits.

Adjusted net income

In order to monitor and compare its operating and financial performances, the Group presents the following key indicators:

EBIT, corresponding to income from operations plus the share in net income of equity affiliates minus the amortisation of acquired intangible assets (purchase price allocation – PPA) recorded when significant businesses are combined. From 1 January 2016, it also excludes the other expenses recognised in current operationnal result that are directly related to business combinations, and which are unusual by nature.

Adjusted net income is regarded as pertinent by the Group as it excludes non-recurring items. It corresponds to consolidated net income attributable to shareholders of the parent company, less the following items, net of the corresponding tax impacts:

- amortisation of acquired intangible assets (PPA);
- other expenses recognised in current operationnal result that are directly related to business combinations, and which are unusual by nature;
- disposal of assets, changes in scope of consolidation and other;
- changes in the fair value of derivative foreign exchange instruments, recognised in "Other financial income";
- actuarial gains and losses on long-term employee benefits, included in "financial income on pensions and other employee benefits".

Adjusted net income per share corresponds to the adjusted net income attributable to shareholders of the parent company, divided by the average number of shares outstanding during the period concerned.

Off-balance sheet commitments

Disclosures regarding off-balance sheet commitments are presented in the following notes:

- Note 4.3: lease commitments;
- Note 9.3-f: pension commitments;
- Note 10.4: commercial contract commitments.

Related parties

The Group has identified the following related parties: shareholders of Thales (parent company), notably the French State and Dassault Aviation, companies controlled by these shareholders, companies under joint control or significant influence, Directors and Senior Corporate Officers.

Section 4.3.3.3 of the 2015 Registration Document describes the main provisions concerning the shareholders' agreement governing relations between the French State ("public sector") and Dassault Aviation ("Industrial Partner") within Thales, the convention on the protection of national strategic interests and the specific convention binding the State and Thales.

Information related to transactions with related parties is presented in the following notes:

- sales with the French State (mainly with DGA: French defence procurement agency) in Note 6.5-b;
- transactions with companies under joint control and their joint shareholders in Note 5.1-e.

Transactions with other related parties are not material.

Expenses recognised in respect of compensation, benefits and social security contributions attributable to Directors and members of the Executive Committee are presented in Note 9.5.

b) Scope of consolidation and changes in scope

Scope of consolidation

The financial statements of material subsidiaries directly or indirectly controlled by Thales are fully consolidated. The financial statements of material subsidiariesjointly controlled by Thales(joint ventures) or in which the Group has significant influence (associates) are accounted for under the equity method.

Business combinations

Business combinations are accounted for under the acquisition method as described in IFRS 3. Under this method, the Group recognises identifiable assets acquired and liabilities assumed at fair value on their acquisition date. It also recognises non-controlling interests in an acquiree on their acquisition date.

Non-controlling interests are measured either at fair value or proportionate to the share of the identifiable net assets. This is determined on a case-by-case by the Group depending on the option it wishes to apply.

Acquisition-related costs (valuation fees, consulting fees, etc.) are recognised under "other operating expenses" as incurred.

Negative goodwill is immediately recognised in "other operating income (expenses)". Positive goodwill related to controlled companies is recognised in balance sheet assets under intangible assets. Positive goodwill related to equity affiliates is recognised under "share in net assets of equityaffiliates".

Goodwill is not amortised but is subject to impairment tests each year. Goodwill impairment is booked as an expense under "impairment of non-current operating assets" and may not be reversed. Goodwill impairment related to equity affiliates is recognised in "share in net income of equity affiliates" and may be reversed.

c) Revenue recognition

The Group's sales can be divided into two main accounting categories: sales of goods and services, and construction contracts.

Sales are measured at the fair value of the consideration received or receivable. When the deferral of payment has a material effect on the determination of fair value, the amount at which sales are recognised is adjusted to take the financial impact of the deferral of payment into account.

Sales of goods and services

Income from the sales of goods and services together with royalty and licence income are recognised when future economic benefits are likely to flow to the Group and when the amount of sales can be measured reliably. The following specific criteria must also be satisfied in order for sales to be recognised:

- income from the sale of goods is recognised when the Company has transferred the principal risks and rewards inherent to ownership of the goods to the purchaser;
- income from services rendered is recognised according to the percentage-of-completion method.

The costs related to the service provided (sale of goods or services rendered) are recognised in the statement of income at the same time as the corresponding sales.

Construction contracts

A construction contract is a contract specifically negotiated for the construction of an asset or group of assets that are closely linked or interrelated in terms of their design, technology, function, purpose or use.

According to its characteristics, a notified construction contract can either be accounted for separately, be segmented into several components which are each accounted for separately, or be combined with another construction contract in progress in order to form the scope of the contract for accounting purposes in respect of which sales and expenses will be recognised.

Sales and expenses on construction contracts are recognised in accordance with the technical percentage-of-completion method. However, when there is no significant time difference between technical percentage of completion and contractual dates of transfer of ownership, the percentage of completion is determined according to the contractual transfer of ownership.

Penalties for late payment or the improper execution of a contract are recognised as a deduction from sales. In the balance sheet, provisions for penalties are deducted from assets related to the contract.

Expected losses on contracts are fully recognised as soon as they are identified.

Selling, administrative and interest expenses are directly charged to the profit and loss account in the period in which they are incurred.

Estimates of work remaining on loss-making contracts do not include sales from claims made by the Group, except when it is highly probable that such claims will be accepted by the customer.

Progress payments received on construction contracts are deducted from contract assets as the contract is completed. Progress payments received before the corresponding work has been performed are classified in "advances received from customers on contracts" in balance sheet liabilities.

The cumulative amount of costs incurred and profit recognised, less any recognised losses and progress billings, is determined on a contract-by-contract basis. If this amount is positive, it is recognised under "Construction contracts: assets" in the balance sheet. If it is negative, it is recognised under "Construction contracts: liabilities".

d) Inventories and work in progress

In the consolidated balance sheet, work in progress related to construction contracts is included under "Construction contracts: assets" or "Construction contracts: liabilities".

Inventories and work in progress are carried at their production cost (determined using the FIFO or weighted-average cost method) and written down when production cost exceeds their net realisable value. Work in progress, semi-finished and finished goods are stated at direct cost of raw materials, production labour and subcontractor costs incurred during production, plus an appropriate portion of production overheads and any other costs that can be directly allocated to contracts.

When material, the cost of debt incurred during the construction of a qualifying asset is incorporated in the value of the asset. When the funding is specific, the loan interest rate is used, otherwise the Group's financing rate is used.

e) Research and development expenses

A significant share of research and development expenses is funded by customers and government agencies. Internally funded research and development expenses are charged to the profit and loss account as incurred, except for project development costs which meet the criteria below. In this case, the development costs are capitalised in balance sheet assets:

- the product or process is clearly defined, and costs are separately identified and reliably measured;
- the technical feasibility of the product or project is clearly demonstrated, and the Group's experience in this area is established;
- adequate resources are available to complete the project successfully;
- a potential market for the products exists or their usefulness, in case of internal use, is demonstrated;
- the Company intends to produce and market, or use the new product or process, and can demonstrate its profitability. Profitability is assessed on the basis of prudent commercial assumptions in order to reflect contingencies inherent to the long cycles of the Group's activities, in particular Aerospace. Minimum internal rates of return are required in the case of projects deemed risky.

Capitalised development costs mainly relate to the Group's Aerospace and Security activities, for which the products developed are relatively generic and can be sold to a larger number of potential customers. By contrast, development costs linked to Defence activities are for more specific and restricted markets with a more limited number of players: the specific features of the products developed make it harder to share development work and therefore harder to capitalise the associated costs.

Development costs are then amortised over the useful life of the product. The method of amortisation is generally determined by reference to expected future quantities over the period in which future economic benefits will be earned. If the method cannot be determined reliably, linear amortisation is adopted. The period of amortisation depends on the type of activity.

Assets are also subjected to impairment loss tests. The terms and assumptions taken into account to conduct these tests are described in Note 4. These impairment losses can be reversed. Impairment loss reversal criteria are identical to those retained when first capitalising development costs on a new project.

The Group receives tax credits related to research carried out by its subsidiaries. These tax credits are considered as operating grants and are therefore included in income from operations, when their award is not dependent on the generation of taxable income. Otherwise, they are recognised as a deduction from income tax expense.

f) Restructuring costs

Provisions for restructuring costs are set aside when restructuring programs have been agreed and approved by Group management and have been announced before the balance sheet date, resulting in an obligating event of the Group to the third parties in question, as long as the Group does not expect consideration for these costs.

Such costs primarily relate to severance payments, costs for notice periods not worked and other costs linked to the closure of facilities such as write-offs of fixed assets. These costs and the costs directly linked to restructuring measures (removal costs, training costs of transferred employees, etc.) are recognised under "restructuring costs" in the profit and loss account.

g) Property, plant and equipment and intangible assets

Intangible assets

The Group's intangible assets mainly include:

- goodwill (Note 14-b);
- assets acquired in business combinations, primarily acquired technologies, customer relationships and the order backlog. These assets are recognised at fair value and amortised over their useful lives. The fair value of the assets is based on the market value. If no active market exists, the Group uses methods based on forecasts of the present value of the expected future operating cash flows (excess earnings method, royalty method, etc.);
- capitalised development costs (Note 14-e).

Intangible assets are submitted to impairment tests.

Property, plant and equipment

Property, plant and equipment is stated at cost, net of any accumulated depreciation and accumulated impairment losses. Depreciation of property, plant and equipment is generally calculated on the basis of the following typical useful lives:

- 20 years for buildings;
- 1 to 10 years for technical facilities and industrial equipment and tooling;
- 5 to 10 years for other property, plant and equipment (vehicles, fixtures, etc.).

The depreciable amount takes into account the residual value of the asset. The different components of property, plant and equipment are recognised separately when their estimated useful lives or patterns of use, and thus the period over which they are depreciated or the depreciation methods applicable to them, are materially different.

Borrowing costs that are directly attributable to the acquisition or construction of an asset are capitalised as part of the cost of that asset.

h) Financial assets, financial liabilities and derivatives

Financial assets

Financial assets are initially recorded at fair value. They are subsequently measured at either fair value or amortised cost, depending on the category they fall into, as defined by IAS 39.

- Investments are designated as "available for sale" assets and measured at fair value. The fair value corresponds to the market price for shares quoted on a regulated market. For other shares, the fair value is usually determined using valuation models provided by independent third parties, or by reference to the share in net equity held by the Group. Changes in fair value are recognised directly in equity. If an impairment indicator is identified, impairment is recognised in "other financial income (expense)". Such impairments are only written back to profit and loss at the date of disposal of the security in question.
- Receivables and financial loans are recognised at amortised cost. They are subject to impairment if an impairment indicator is identified. Such impairment, recognised in "other financial income (expense)", may subsequently be reversed through profit and loss if the conditions which led to the impairment loss being recognised cease to exist.
- Deposits that Thales intends to hold until maturity are recognised at amortised cost.
- Other financial assets are estimated at fair value, with changes in fair value recognised in profit and loss. They include money market funds and other mutual funds, and interest rate products (certificates of deposit, term deposits, medium-term negotiable notes, etc.).
- "Cash and cash equivalents" includes cash at bank and in hand as well as cash equivalents (short-term and liquid investments that are easily converted into a known amount of cash and exposed to negligible risk of a change in value).

Financial liabilities

Borrowings and other financial liabilities are measured at amortised cost using the effective interest rate. Upon initial recognition, premiums, redemption and issuance costs are included in the calculation of the effective interest rate and are recognised in the profit and loss account on an actuarial basis over the life of the loan.

Derivatives

The Group uses financial instruments to manage and reduce its exposure to risks of changes in interest rates and foreign exchange rates.

Foreign exchange derivatives eligible for hedge accounting are accounted for as follows:

- the effective portion of the change in fair value of the hedging instrument is recognised directly in equity until such time as the hedged flows affect profit and loss. The ineffective portion is recognised in profit and loss;
- the amount of the foreign currency denominated transaction is subsequently translated at the exchange rate prevailing at the date of inception of the hedge.

Changes in the fair value of premiums or discounts related to forward foreign currency contracts, as well as the time value of foreign currency options, are recognised in "other financial income (expense)" as they are excluded from the hedging relationship.

Interest-rate derivatives are used either as fair value hedges or cash flow hedges:

- a fair value hedge is a hedge of the exposure to changes in the value of assets and liabilities,
- a cash flow hedge is a hedge of the exposure to changes in the value of future cash flows (unknown future interest flows payable on existing variable-rate borrowings or on highly probable future borrowing issues, for example).

In the case of fair value hedge relationships, particularly for the portion of fixed-rate bond debt swapped for a variable rate, the financial liabilities hedged by the interest-rate derivatives are remeasured to the extent of risk hedged. Changes in the value of hedged items are recognised in profit and loss for the period and are offset by symmetrical adjustments in interest-rate derivatives.

In the case of cash flow hedging relationships, the effective portion of changes in fair value of interest-rate derivatives shown in the balance sheet is recognised directly in equity until such time as the hedged flows affect profit and loss.

i) Deferred taxation

Thales recognises deferred taxes when the tax value of an asset or liability differs from its book value.

Deferred tax assets are not recognised in the balance sheet if the company concerned does not reasonably expect to recover the tax asset. To assess its ability to recover deferred tax assets, the Group takes into account forecast taxable income of the tax entities concerned, generally over a five-year time-frame, non-recurring past events and tax strategies specific to each country.

j) Pensions and other long-term employee benefits

The Group's defined benefit plan commitments are measured by independent actuaries using the projected unit credit method on the basis of estimated salaries at the date of retirement. The calculations mainly take into account assumptions concerning discounting as well as inflation, mortality and staff turnover rates, etc.

Changes in actuarial assumptions and experience adjustments – corresponding to the effects of differences between previous actuarial assumptions and what has actually occurred – give rise to actuarial gains and losses:

- actuarial gains and losses on post-employment benefits are recognised in full within other comprehensive income, and are not subsequently reclassfied to profit and loss. Where appropriate, the same treatment is applied to adjustments linked to the ceiling on net assets for plans in surplus.
- actuarial gains and losses on other long-term benefits are recognised immediately in financial income (Note 9.3).

Past service cost, measured in cases of amendments or curtailments of plans, and plan settlements are recognised in full within non-recurring operating income in the period in which it is incurred.

Net interest expense, determined based on the discount rate of obligations, is recognised in financial income.

k) Share-based payment

Free share plans

Between 2007 and 2013, and then again in 2016, Thales granted free shares and/or performance shares to its employees. These allotments give rise to an expense representing the fair value of services received at the grant date. This payroll expense is recognised against equity.

The fair value of the services received is calculated by reference to the fair value of the shares at the grant date, less the present value of dividends forfeited by employees during the vesting period, taking into account the presence conditions.

Internal performance conditions are taken into account only by means of an adjustment in the projected number of instruments acquired by employees at the end of the vesting period. Therefore, they are not taken into account in the fair value estimate of the instruments granted, which is determined at the grant date.

The expense related to these plans is included in the current operating income with the consolidated reserves account as counterpart without impact on total equity. As the payment of compensation is subject to presence conditions, the corresponding expense is recorded over the vesting period on a straight-line basis. When appropriate, the expense is adjusted over the vesting period to reflect any losses of rights.

Share unit plans indexed to the value of the Thales share

A share unit plan indexed to the value of Thales shares, some of which are performance shares, was implemented in 2014 and in 2015. At the maturity date, the beneficiaries will receive the value, about half of which is in the form of shares and half in the form of cash-settled share-based payment.

The proportion delivered in shares follows the same accounting policies as those applied to free share plans. The accounting treatment applicable to cash-settled share-based payments is governed by IFRS 2. Under this policy, the services acquired and the liability incurred are measured at fair value. Until the liability is settled, debt is remeasured at each reporting date, with any changes in fair value recognised in income for the period. The remeasurement of the liability at the reporting date takes into account any changes in the value of the underlying shares, as well as whether or not the presence conditions and performance criteria have been met.

Phantom shares

Since this is a cash-settled plan, IFRS 2 requires an evaluation of vested services and the liability assumed at fair value. Until the payment of the liability, the debt is remeasured at the closing date and taken to profit and loss. The remeasurement of the debt takes into account the achievement of performance and/or presence conditions, as well as the change in value of the underlying shares.

Company savings plans

Employee share offerings with a discount to the market price proposed within Company savings plans do not include any vesting period for rights but are subject to a legal five-year lock-up period. The measurement of the advantages granted to employees takes into account the cost of the five-year lock-up period.

NOTE 15. FEES PAID TO STATUTORY AUDITORS

The amounts of fees paid to the statutory auditors of Thales (parent company) and their networks recognised in profit and loss for 2015 and 2016 are presented below:

(in € thousands)	Mazars		Ernst & Young Audit		Total	
	2016	2015	2016	2015	2016	2015
Certification of accounts	**5,427**	**5,022**	**4,627**	**4,561**	**10,054**	**9,583**
• Issuer	779	730	856	807	1,635	1,537
• Subsidiaries	4,648	4,292	3,771	3,754	8,419	8,046
Other services	**526**	**420**	**791**	**633**	**1,317**	**1,053**
• Issuer	190	279	31	48	221	327
• Subsidiaries	336	141	760	585	1,096	726
TOTAL	**5,953**	**5,442**	**5,418**	**5,194**	**11,371**	**10,636**

NOTE 16. OTHER DISCLOSURES

The German group companies Thales Transportation Systems GmbH and Electronic Signalling Services (ESS) GmbH, located at 1 Thalesplatz, 71254 Ditzingen have claimed an exemption from their obligation to publish their respective German financial statements for the fiscal year 2016 by reference to section 264 paragraph 3 of the German Commercial code.

NOTE 17. LIST OF MAIN CONSOLIDATED COMPANIES

(excluding Thales, the parent company)

Company name	Country	% interest 31/12/2016	% interest 31/12/2015
1. Consolidated subsidiaries [(a)]			
TDA Armements SAS	France	100%	100%
Thales Alenia Space SAS	France	67%	67%
Thales Alenia Space Italia SpA	Italy	67%	67%
Thales Air Operations SAS	France	100%	50%
Thales Air Systems SAS	France	100%	100%
Thales Australia Ltd	Australia	100%	100%
Thales Avionics SAS	France	100%	100%
Thales Avionics, Inc.	United States	100%	100%
Thales Avionics Electrical Systems SAS	France	100%	100%
Thales Canada Inc.	Canada	100%	100%
Thales Communications & Security SAS	France	100%	100%
Thales Defense & Security, Inc.	United States	100%	100%
Thales Electronic Systems GmbH	Germany	100%	100%
Thales e-Security, Inc [(b)]	United States	100%	100%
Thales Espana Grp, S.A.U.	Spain	100%	100%
Thales Electron Devices SAS	France	100%	100%
Thales Italia SpA	Italy	100%	100%
Thales Nederland B.V.	Netherlands	99%	99%
Thales Optronique SAS	France	100%	100%
Thales Transportation Systems GmbH	Germany	100%	100%
Thales Ground Transportation Systems UK Ltd	United Kingdom	100%	100%

Company name	Country	% interest 31/12/2016	% interest 31/12/2015
Thales Rail Signalling Solutions AG	Switzerland	100%	100%
Thales Services SAS	France	100%	100%
Thales Solutions Asia Pte Ltd	Singapore	100%	100%
Thales Systèmes Aéroportés SAS	France	100%	100%
Thales Transport & Security (Hong Kong) Ltd	Hong Kong	100%	100%
Thales Transport & Security Ltd	United Kingdom	100%	100%
Thales Training & Simulation SAS	France	100%	100%
Trixell SAS	France	51%	51%
Thales Underwater Systems SAS	France	100%	100%
Thales UK Ltd	United Kingdom	100%	100%
2. Joint ventures (equity method)			
Thales-Raytheon Systems Air and Missile Defense Command and Control SAS (TRS AMDC2)	France	50%	50%
Citylink Telecommunications Holdings Ltd	United Kingdom	33%	33%
DCNS	France	35%	35%
Diehl Aerospace GmbH	Germany	49%	49%
Hanwha Thales Co., Ltd	South Korea	–	50%
Sofradir SAS	France	50%	50%
3. Associates (equity method)			
Aviation Communications & Surveillance Systems	United States	30%	30%
Airtanker Holdings Ltd	United Kingdom	13%	13%
Elettronica SpA	Italy	33%	33%
Thales-Raytheon Systems Company LLC	United States	–	50%
Telespazio SpA	Italy	33%	33%

(a) Companies with sales representing more than 0.5% of consolidated sales.
(b) In 2016, this company includes the activities of recently-acquired Vormetric.

The full list of affiliates outside of France is available on Group website: https://www.thalesgroup.com/fr/responsabilité

1.2.7 Statutory auditors' report on the consolidated financial statements

To the Shareholders,

In compliance with the assignment entrusted to us by your Annual General Meetings, we hereby report to you, for the year ended December 31, 2016 on:

- the audit of the accompanying consolidated financial statements of Thales;
- the justification of our assessments;
- the specific verification required by law.

These consolidated financial statements have been approved by the Board of Directors. Our role is to express an opinion on these consolidated financial statements based on our audit.

I. Opinion on the consolidated financial statements

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2016 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

II. Justification of our assessments

In accordance with the requirements of Article L. 823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

As stated in Note 1.4 "Main sources of estimates" to the consolidated financial statements, your Company's general management is required to make estimates and assumptions that affect certain amounts included in the consolidated financial statements and the accompanying notes to these consolidated financial statements. These assumptions are by nature uncertain, and the actual figures may vary from these estimates under the circumstances anticipated in Note 1.4 "Main sources of estimates" to the consolidated financial statements.

We considered that the items that have been subject to significant accounting estimates, and which are likely to require justification of our assessments, include construction contracts, impairment tests relating to acquisition goodwill, deferred tax asset valuation, provisions for pension plans and related contingency, and litigation and contingency provisions.

- **Customers contracts**

Your Company recognizes income on its contracts, and in particular on its construction contracts, in accordance with the methods set out in Note 14-c "Sales" to the consolidated financial statements. Such income is based on estimates of income on completion made by the project managers, according to the Group's procedures and under the control of Group's management.

Based on the information provided to us at the time of our audit, our work consisted in assessing the data and assumptions used to estimate the income on completion for these contracts, comparing the amounts of income on completion from previous financial periods with the corresponding actual figures, and checking that the notes to the financial statements provide appropriate information.

- **Acquisition goodwill**

Acquisition goodwill, which appears in the balance sheet as at December 31, 2016 for a net amount of €3,424.4 million, was subject to impairment tests in accordance with the methods set out in Note 4.1-b "Accounting policies – Impairment of non-current assets" to the consolidated financial statements. We reviewed the methods for carrying out these tests, based on discounted cash-flows of the business activities, verified the consistency of the assumptions used with the forecast data taken from the strategic plans drawn up for each business activity under the Group's control and checked that Note 4.1 "Goodwill" provides appropriate information.

- **Deferred tax assets**

As stated in Notes 14-i "Deferred taxation" and 1.4 "Main sources of estimates" to the consolidated financial statements, the recoverability of net deferred tax assets amounting in the balance sheet as at December 31, 2016 to €681.2 million was assessed on the basis of forecast data taken from the strategic plans drawn up for each consolidated tax group concerned, under the Group's control. We reviewed the recoverability tests performed by your Company on these deferred tax assets and checked that Notes 14-i and 1.4 to the financial statements provide appropriate information.

- **Provisions for pension plans and related commitments**

Certain headings in both the assets and liabilities sides of the balance sheet drawn up for the consolidated financial statements, as well as off-balance sheet commitments, are estimated on a statistical and actuarial basis, in particular, the provisions for pension plans and related commitments. The methods for calculating these headings are set out in Notes 14-j "Accounting policies- Pensions and other employee benefits" and 9.3 "Provisions for pensions and other employee benefits" to the consolidated financial statements. Our work consisted in assessing the data and assumptions used in the models for valuing these headings, with due regard, in particular, to your Company's experience, its regulatory and economic environment; as well as the overall consistency of the assumptions and the appropriateness of the information given in Notes 14-j and 9.3 to the financial statements.

- **Litigation and contingency provisions**

As regards litigation and contingency provisions, we ensured that the procedures in force in your Group allow their identification, evaluation and recognition from an accounting standpoint in satisfactory conditions. We checked that the significant litigation and contingency provisions identified during the implementation of these procedures were described in appropriate terms in the notes to the consolidated financial statements, and, in particular, in Notes 12 "Litigation" and 6.5 "Financial Risk Management".

These assessments were made as part of our audit of the consolidated financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

III. Specific verification

As required by law we have also verified in accordance with professional standards applicable in France the information presented in the Group's management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

Courbevoie and Paris-La Défense, February 27, 2017

The statutory auditors
French original signed by

Mazars		**Ernst & Young Audit**	
Anne-Laure Rousselou	Jean-Marc Deslandes	Philippe Diu	Serge Pottiez

1.3 PARENT COMPANY MANAGEMENT REPORT AND FINANCIAL STATEMENTS

1.3.1 2016 parent company management report

1.3.1.1 Activity and results

Operating income amounted to €636 million, compared with €627 million in 2015. Sales came to €233 million, compared with €209 million in 2015.

Operations are described by sector in the Notes.

Sales mainly consist of rents re-billed to operating subsidiaries and sales of research, chiefly conducted by the Central Research and Technology department of Thales Group. The increase in sales is mainly due to the centralisation of specific facility management and Thales (the parent company) taking direct responsibility for the Massy site lease.

Other operating income amounted to €379 million, compared with €393 million in 2015. It is made up of royalties paid by operating subsidiaries and re-billed expenses, including for general and specific centralised services provided by the parent company and capitalised production. In 2015, it included re-billed costs of €15 million in relation to the employee share purchase plan.

Net loss from operations amounted to €93 million, compared with a loss of €70 million in 2015.

Net financial income came to €464 million, compared with €849 million in 2015.

Increases in provisions for equity investments and subsidiary risks totalled €58 million in 2016 compared with €36 million in 2015. Reversals of provisions for equity investments and subsidiary risks represented €53 million in 2016 compared with €193 million in 2015.

Income from investments amounted to €496 million in 2016, versus €701 million in 2015.

Non-recurring expense amounted to €17 million, compared with €1 million in 2015, mainly due to the recognition of a partial reimbursement of Thales Suisse capital for €14 million in 2016.

The Company recorded an income tax benefit of €78 million compared with €94 million in 2015, due largely to Group relief from the tax consolidation applied by Thales and its subsidiaries.

In 2016, non-deductible expenses pursuant to Articles 223 *quater* and 39.4 of the French Tax Code (*Code Général des Impôts*) amounted to €0.2 million.

Profit for the year came to €431 million in 2016, compared with €872 million in 2015.

1.3.1.2 Balance sheet at 31 December 2016

The total balance sheet at 31 December 2016 represented €14,302 million, up €493 million from €13,809 million at year-end 2015.

The total non-current assets of €9,002 million (€8,882 million in 2015) are mainly composed of financial investments. The €114 million increase in equity investments is mainly due to the Thales Avionics Electrical Systems SAS capital increase for €76 million, and the acquisition of shares in Thales Canada Inc and Forges de Zeebrugge for €32 million and €26 million, respectively.

Other financial investments rose by €14 million, largely as a result of loans granted to Group subsidiaries in an amount of €26 million, of which €10 million was allocated to Thales South Africa Systems, partially offset by the full repayment in 2016 of the €10 million loan in relation to the employee share purchase plan that was granted in 2015.

Current assets rose €373 million to €5,300 million at 31 December 2016. Cash and cash equivalents increased by €233 million reflecting the improved operating cash flow of subsidiaries. The €71 million decrease in other receivables is mainly due to foreign exchange revaluations and a decrease in tax receivables from the French State, with negative impacts of €43 million and €37 million, respectively.

The €33 million increase in treasury shares assigned to plans results from the market purchase of shares for €46 million in 2016 for allocation to the 2013 plan, offset by the delivery of shares worth €17 million under the 2012 free share plan.

Other investments of €250 million corresponded to deposits with first-tier banks with maturities of 3 to 12 months.

The balance of Group company current accounts represented a net payable of €4,350 million at year end 2016, compared with €3,963 million at year-end 2015.

Borrowings amounted to €1,459 million at 31 December 2016, versus €1,460 million at 31 December 2015. They mainly include bond issues for €1,400 million, as well as foreign-currency and euro denominated borrowings from Group subsidiaries and associates.

At 31 December 2016, share capital stood at €636.6 million and total equity came to €6,829 million, compared with €6,650 million at year-end 2015.

Supplier payment schedules

Thales pays its suppliers 60 days after the invoice date, in line with the maximum period allowed under the French law on the modernisation of the economy (*Loi de modernisation de l'économie* – LME).

The table below presents the ageing of trade payables by invoice date, in accordance with Article L. 441-6-1 of the French Commercial Code.

	Trade payables at 31/12/2016			Trade payables at 31/12/2015		
(in € millions)	Group	Non-Group	Total	Group	Non-Group	Total
France						
Less than two months (not past due)	47.0	11.2	58.2	15.5	10.9	25.4
Between two and four months	0.1	0.8	0.9	0.3	2.1	2.4
More than four months	0.1	0.5	0.6	0.3	0.3	0.6
	47.2	12.5	59.7	16.1	13.3	29.4
International						
Less than two months (not past due)	1.0	1.2	2.2	2.0	0.8	2.8
Between two and four months	0.6	0.0	0.6	1.1	0.2	1.3
More than four months	0.7	0.0	0.7	1.0	0.3	1.3
	2.3	1.2	3.5	4.1	1.3	5.4
Sub-total	**49.5**	**13.7**	**63.2**	**20.2**	**14.6**	**34.8**
Charges payable not due			36.3			25.5
TOTAL TRADE PAYABLES			**99.5**			**60.3**

1.3.1.3 Events after the reporting period

Thales (the parent company) has been notified that a tax audit will be carried out on its accounting records for the 2011 to 2015 reporting periods.

1.3.1.4 Outlook for 2017

The results for 2017 are expected to reflect the dividends paid by certain subsidiaries in respect of the 2016 financial year and changes in provisions for impairment of equity investments and subsidiary risks as a consequence of trends in their business and performance in 2017.

1.3.1.5 Proposed allocations of earnings and dividend policy

The Annual General Meeting notes distributable earnings, made up of net profit for the year ended 31 December 2016, of	€431,143,252.66
Less allocations to the legal reserve	(€370,008.60)
Plus the total interim dividend of €0.40 per share paid on 9 December 2016	€84,560,890.80
Plus retained earnings	€1,523,814,297.85
Amounts to a total of	**€2,039,148,432.71**

The Annual General Meeting decides to allocate this amount as follows:

Distribution of a dividend of €1.60 per share on 212,194,766 shares bearing rights as from 1 January 2016[a]	€339,511,625.60
Retained earnings after dividend	€1,699,636,807.11
Total equivalent to distributable earnings	**€2,039,148,432.71**

Subject to approval by the Annual General Meeting of 17 May 2017, the 2016 dividend will have an ex dividend date of 31 May 2017 and will be paid on 2 June 2017. Taking into account the interim dividend of €0.40 per share, the balance of the dividend that remains to be paid amounts to €1.20 per share.

The shareholders are paid dividends in accordance with the law. The Company uses the Euroclear direct payment procedure. Any unclaimed dividends after a five-year period will be forfeited by law and paid to the French Treasury (*Trésor public*).

The following per-share dividends were paid during the past three financial years and are disclosed below pursuant to the applicable legal provisions. The dividends paid in respect of 2013, 2014 and 2015 qualify for the 40% tax relief under the conditions provided for in the French Tax Code.

Year	Dividend per share
2013	€1.12
2014	€1.12
2015	€1.36
2016	**€1.60**[a]

(a) Subject to the approval of the Annual General Meeting of 17 May 2017 that will be held to approve the 2016 financial statements.

1.3.1.6 Parent company management report cross-reference table

In accordance particularly with Articles L. 225-100, L. 232-1, L. 247.1 and R. 225-102 of the French Commercial Code (*Code de commerce*), the parent company management report also includes the following information contained in the 2016 Registration Document:

Management report French Commercial Code	Sections/Notes	Pages
1. Annual financial statements of Thales the parent company at 31 December 2016	**Section 1.3.2**	
Table of subsidiaries and equity affiliates	Note 24	98
Table of investments made and thresholds crossed in French companies in 2016	Note 24	98
Table of the results of the Company for the last five years	Section 1.3.2.6	100
Table of outstanding share purchase options plans and subscription options plans at 31 December 2016	Note 15	90
Change in number and in value of the treasury shares of the Company	Note 14	89
Reversal of general expenses following tax audit	Note 6	82
Events after reporting period	Note 22	97
2. Management report and consolidated financial statements of the Group at 31 December 2016	**Chapters 1 and 2**	
Presentation of the businesses with segment reporting for subsidiaries and controlled companies	Sections 2.1 to 2.4	104 to 119
Description of the main risks and uncertainties the Group has to cope with	Section 1.1.2	14 to 25
Information on use of financial instruments (as a complement of the notes related to the financial statements)	Section 1.1.2.3	21 to 24
Information on the research and development activities	Section 2.2	112 to 114
3. Corporate Governance	**Chapter 3**	
Information on Executive Directors and corporate officers (offices, positions, compensations, commitments made by the Company, stock options granted)	Section 3.1.1 Sections 3.5.1 & 3.5.3	122 145 to 157
Chairman's report on corporate governance, internal control and risks management	Section 3.2	130 to 142
Board of Directors' report prepared in accordance with Article 225-37-2 of the French Commercial Code and related to the principles and criteria for determining, breaking down, and allocating the fixed, variable, and exceptional items that make up the total compensation and benefits in kind that may be granted to the company representatives	Section 3.5.1.2-B	150
4. Company and share capital	**Chapter 4**	
Breakdown of shareholders and changes performed during the year	Sections 4.3.1 & 4.3.3	164 to 166
Employee shareholdings	Section 4.3.3.6	172, 173
Authorisations granted at General Meetings with delegation of powers to the Board of Directors	Section 4.3.3.9	175
Description of the shares repurchase program adopted by the Annual General Meeting of 17 May 2017	Section 4.3.3.4.7	171
Transactions on treasury shares during 2016	Section 4.3.3.8	174
Summary statement of transactions indicated in Articles L. 621-18-2 of the French Monetary and Financial Code carried out in 2016	Section 4.3.3.7	173, 174
Information about the market performance of Thales shares over the past two years	Section 4.5.1.3	179, 180
Key factors likely to have an impact in the event of a public offering	Section 4.3.3.10	175
Information on operations of free shares granted during the year 2016	Section 4.3.3.4.3	169, 170
Amount of dividends paid for the past three years	Section 4.5.1.4	181
5. Corporate responsibility	**Chapter 5**	
Social information	Section 5.1	186 to 201
Environmental information	Section 5.2	201 to 212
Societal information	Section 5.3	213 to 219

1.3.2 Thales parent company financial statements for the year ended 31 December 2016

1.3.2.1 Income statement

(in € millions)	Notes	2016	2015
Re-billing of rents		220.0	194.4
Research		13.3	14.2
Sales		**233.3**	**208.6**
Royalties		215.2	201.6
Re-billing of expenses		163.4	190.9
Other operating income		**378.6**	**392.5**
Reversals of provisions		16.0	9.7
Transfer of expenses		7.8	16.4
TOTAL OPERATING INCOME		**635.7**	**627.2**
Purchases and changes in inventories and work-in-progress		(27.3)	(40.2)
Other external charges		(451.2)	(429.1)
Taxes other than on income		(11.9)	(9.5)
Personnel expenses		(191.5)	(187.1)
Depreciation and amortisation		(20.9)	(22.8)
Increase in provisions		(26.1)	(8.7)
Total operating expenses		**(728.9)**	**(697.4)**
INCOME (LOSS) FROM OPERATIONS	Note 3	**(93.2)**	**(70.2)**
Net interest and finance costs		(1.1)	(5.1)
Income from investments		496.1	700.5
Other financial income		60.6	224.5
Other financial expenses		(92.1)	(70.8)
Financial income (expense)	Note 4	463.5	849.1
PROFIT (LOSS) FROM ORDINARY ACTIVITIES BEFORE INCOME TAX		**370.3**	**778.9**
Non-recurring income (expense)	Note 5	**(17.2)**	**(0.8)**
PROFIT (LOSS) BEFORE INCOME TAX		**353.1**	**778.1**
Income tax benefit (expense)	Note 6	**78.0**	**93.8**
PROFIT FOR THE YEAR		**431.1**	**871.9**

The Notes to the financial statements are an integral part of the parent company financial statements.

1.3.2.2 Balance sheet

Assets

(in € millions)	Notes	31/12/2016	31/12/2015
Intangible assets and property, plant and equipment, net	Note 7	120.4	132.2
Equity investments	Note 8	8,787.6	8,673.3
Treasury shares not assigned to plans	Note 14	11.6	8.2
Other financial investments	Note 9	82.1	68.1
Total non-current assets		**9,001.7**	**8,881.8**
Inventories and work in progress		12.0	4.9
Advances to suppliers	Note 16	0.1	2.7
Trade receivables	Note 16	188.8	179.1
Other receivables	Note 16	733.1	804.0
Group company current-account receivables	Note 10	875.8	965.7
Treasury shares assigned to plans	Note 14	50.0	17.0
Accrued interests		7.3	3.7
Other investments	Note 11	250.0	0.0
Cash and cash equivalents	Note 11	3,183.1	2,949.8
Total current assets		**5,300.2**	**4,926.9**
TOTAL ASSETS		**14,301.9**	**13,808.7**

Shareholders' equity and liabilities

(in € millions)	Notes	31/12/2016	31/12/2015
Share capital		636.6	632.9
Additional paid-in capital		4,036.9	3,995.4
Reserves and retained earnings		1,724.6	1,149.5
Profit for the year		431.1	871.9
Total shareholders' equity	Note 13	**6,829.2**	**6,649.7**
Provisions for contingencies and losses	Note 17	**197.8**	**172.3**
Borrowings	Note 12	1,459.2	1,460.5
Group company current-account payables	Note 10	5,225.8	4,929.1
Advances received on contracts in progress	Note 16	18.8	16.3
Trade payables	Note 16	99.5	60.3
Other liabilities	Note 16	471.6	520.5
Total liabilities		**7,472.7**	**7,159.0**
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**14,301.9**	**13,808.7**

The Notes to the financial statements are an integral part of the parent company financial statements.

1.3.2.3 Statement of cash flows

(in € millions)	Notes	2016	2015
Profit for the year		**431.1**	**871.9**
Add (deduct):			
Net depreciation, amortisation and impairment charges on intangible assets and property, plant and equipment	Note 7	20.9	22.8
Provisions for post-employment and other employee benefits	Note 17	5.8	(18.9)
Net provisions for impairment of investments and subsidiary risks	Note 4	5.3	(156.7)
Loss (gain) on disposals of assets	Note 5	13.0	(17.8)
Other items		0.6	17.7
Operating cash flow		**476.7**	**719.0**
Change in working capital and provisions for operating contingencies and losses		53.5	(113.5)
CASH FLOW FROM OPERATING ACTIVITIES	**- I -**	**530.2**	**605.5**
Payments for acquisitions of intangible assets and property, plant and equipment		(10.2)	(27.6)
Proceeds from disposal of intangible assets and property, plant and equipment		0.9	0.0
Net operating investment	Note 7	**(9.3)**	**(27.6)**
Investments in subsidiaries and associates	Note 8	(147.4)	(96.8)
Disposals of subsidiaries and associates	Note 8	21.7	13.3
Decrease (increase) in other investments	Note 11	(250.0)	–
Decrease (increase) in other financial investments and treasury shares		(60.3)	10.9
Decrease (increase) in current-account receivables		95.6	(91.7)
Net financial investment		**(340.4)**	**(164.3)**
CASH FLOW USED IN INVESTING ACTIVITIES	**- II -**	**(349.7)**	**(191.9)**
Dividend distributions	Note 13	(296.8)	(234.0)
Increase in share capital (exercise of subscription options)		45.7	116.1
Increase in borrowings		600.0	27.1
Decrease in borrowings		(641.8)	(5.0)
Increase (decrease) in current-account payables		345.7	580.6
CASH FLOW FROM FINANCING ACTIVITIES	**- III -**	**52.8**	**484.8**
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**I + II + III**	**233.3**	**898.4**
Cash and cash equivalents at the beginning of the period		2,949.8	2,051.4
Cash and cash equivalents at the end of the period		**3,183.1**	**2,949.8**

The Notes to the financial statements are an integral part of the parent company financial statements.

1.3.2.4 Statement of changes in equity

(in € millions)	Number of shares outstanding (in thousands)	Share capital	Issue premiums	Retained earnings	Profit for the year	Total shareholders' equity
At 1 January 2015	**207,841**	**623.5**	**3,889.9**	**720.6**	**662.9**	**5,896.9**
Allocation of 2014 profit	–	–	–	662.9	(662.9)	0.0
Dividend distribution (see Note 13.2)	–	–	–	(234.0)	–	(234.0)
Capital increase	3,120	9.4	105.5	–	–	114.9
2015 profit	–	–	–	–	871.9	871.9
At 31 December 2015	**210,961**	**632.9**	**3,995.4**	**1,149.5**	**871.9**	**6,649.7**
Allocation of 2015 profit	–	–	–	871.9	(871.9)	0.0
Dividend distribution (see Note 13.2)	–	–	–	(296.8)	–	(296.8)
Capital increase	1,234	3.7	41.5	–	–	45.2
2016 profit	–	–	–	–	431.1	431.1
At 31 December 2016	**212,195**	**636.6**	**4,036.9**	**1,724.6**	**431.1**	**6,829.2**

The Notes to the financial statements are an integral part of the parent company financial statements.

1.3.2.5 Notes to the parent company financial statements

All the amounts in these notes are expressed in millions of euros (€m), with the exception of information related to numbers of employees and shares. The parent company financial statements for the year ended 31 December 2016 have been prepared in accordance with the same accounting principles applied in 2015.

NOTE 1. ACCOUNTING PRINCIPLES

Thales is a French public limited company (*société anonyme*) and the parent company of Thales Group.

The parent company financial statements are prepared in accordance with the accounting principles applicable in France pursuant to the provisions of the French General Chart of Accounts (*Plan Comptable Général*) as defined in ANC Regulation 2014-03.

These principles are detailed in each note hereafter.

NOTE 2. CHANGE IN THALES' DIRECTLY OWNED INVESTMENTS

In 2016, Thales purchased the shares in Thales Canada Inc held by Thales Avionics SAS, Thales Overseas Ltd and Thales Nederland BV for €22.1 million, €8.6 million and €1.6 million, respectively. Thales Canada Inc is now wholly-owned by Thales.

Thales purchased Forges de Zeebrugge from Thales Defense Armements SAS for €26.2 million then increased the share capital by €8 million with the intention of acquiring the business of Thales Belgium SA.

In 2015, Thales sold its 22% stake in Cloudwatt to Orange for €8.9 million.

NOTE 3. INCOME (LOSS) FROM OPERATIONS

In addition to its functions as a holding company (holding equity investments, managing central support functions and cash pooling), the parent company manages the real estate of its French operating subsidiaries and carries out its own research activity in France.

3.1 Operating income

Consequently, operating income includes:

- rents re-billed to operating subsidiaries and sales of research, which represent the sales of the parent company (€233.3 million in 2016 and €208.6 million in 2015), mainly realised in France;
- royalties paid by subsidiaries for shared services, and re-billed expenses for general and specific services provided to the subsidiaries by the parent company.

3.2 Operating expenses

Operating expenses mainly include personnel expenses (employees of Thales parent company and directors), real estate rents and related services, and other external services (notably provided by Thales Global Services, which incorporates the Group's shared services).

NOTE 4. FINANCIAL INCOME (EXPENSE)

4.1 Accounting policies

Financial income (expense) mainly includes:

- interest expenses and finance costs on net debt;
- income and expenses related to Thales' directly owned investments (dividends and depreciation, see Note 8);
- the financial component of the increase in provisions for post-employment and other employee benefits (see Note 17);
- foreign exchange gains and losses (see Note 20).

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4.2 Analysis of financial income (expense)

	Notes	2016	2015
NET INTEREST AND FINANCE COSTS		**(1.1)**	**(5.1)**
Interest and financial income:		**32.8**	**28.1**
Interest on Group company current-account receivables and loans to subsidiaries and associates		4.5	4.5
Interest on cash and cash equivalents		28.3	23.6
Interest and financial expenses:		**(48.4)**	**(46.9)**
Interest on Group company current-account payables and borrowings from subsidiaries and associates		(10.2)	(11.9)
Interest on bonds and other borrowings		(38.2)	(35.0)
Interest on interest rate swaps hedging borrowings		**14.5**	**13.7**
INCOME FROM INVESTMENTS	Note 24	**496.1**	**700.5**
OTHER FINANCIAL INCOME		**60.6**	**224.5**
Reversal of provisions related to associates [a]		53.1	192.9
Reversal of provisions for termination payments and other benefits	Note 17	1.2	16.4
Foreign exchange gains		0.3	12.1
Reversal of provisions for currency risks		1.7	–
Amounts recovered on clawback provisions		0.7	0.9
Other		3.6	2.2
OTHER FINANCIAL EXPENSES		**(92.1)**	**(70.8)**
Increase in provisions related to associates [a]		(58.4)	(36.2)
Increase in Thales Security Solutions & Services Company financial receivables [b]		–	(25.5)
Increase in provisions for termination payments and other benefits	Note 17	(10.6)	(1.5)
Foreign exchange losses		(18.3)	(2.6)
Increase in provisions for currency risks		–	(1.7)
Other		(4.8)	(3.3)
FINANCIAL INCOME (EXPENSE)		**463.5**	**849.1**

(a) Provisions related to subsidiaries and associates.
(b) Following the reversal of the provision for subsidiary risk for €23.9 million (see breakdown below).

	2016		2015	
	Reversal	Increase	Reversal	Increase
Provisions for impairment of equity investments:	**52.3**	**(48.5)**	**164.0**	**(34.6)**
Thales Holdings UK Plc	35.1	–	135.0	–
Thales Belgium SA	9.6	–	17.0	–
Thales Microelectronics SAS	1.2	–	–	(18.1)
Thales Avionics Electrical Systems SAS	–	(33.0)	–	–
Thales SESO SAS	–	(11.2)	–	(3.4)
Société de Marchands de Biens pour l'Electronique SAS	–	–	–	(7.3)
Avimo Group Ltd	4.3	–	10.5	–
CMT Medical Technologies Ltd	–	–	–	(3.4)
Other	2.1	(4.3)	1.5	(5.8)
Provisions for subsidiary risks (see Note 17.2)	**0.8**	**(9.9)**	**28.9**	**(1.6)**
Thales SESO SAS	–	(9.9)	–	–
Thales Security Solutions & Services Company	–	–	23.9	–
Société de Marchands de Biens pour l'Electronique SAS	–	–	4.5	–
Other	0.8	–	0.5	(1.6)
TOTAL	**53.1**	**(58.4)**	**192.9**	**(36.2)**

NOTE 5. NON-RECURRING INCOME (EXPENSE)

5.1 Accounting policies

Non-recurring income (expense) includes:

- restructuring costs, which primarily relate to severance payments, redundancy payments, costs for notice periods not worked and other costs linked to the closure of facilities such as site rehabilitation or asset write-offs. These costs and the costs directly linked to restructuring measures (removal costs, training costs for transferred employees, etc.) are recognised as restructuring costs in the income statement;
- capital gains or losses on disposals, particularly of businesses or equity investments. As an exception to the guidelines of the French General Chart of Accounts and in order to give a more accurate presentation of these transactions, reversals of provisions for impairment of equity investments and reversals of provisions for subsidiary risks are included in income from disposals;
- other income and expenses arising on events that are unusual as regards their frequency, nature or amount.

5.2 Analysis of non-recurring income (expense)

	2016	2015
Restructuring costs	**(7.7)**	**(8.5)**
Capital gains or losses on disposals:	**(13.0)**	**17.8**
Reimbursement of Thales Suisse capital	(13.7)	–
Disposal of Thales Université SAS	(3.4)	–
Disposal of Thales Geodis Freight & Logistics SA	3.6	–
Disposal of treasury shares as part of the liquidity contract	1.6	1.6
Transfer of treasury shares as part of the employee share purchase plan	0.8	12.9
Disposal of Thales Programas, Electronica y Comunicaciones SA	–	3.9
Disposal of Cloudwatt	–	1.1
Other	(1.9)	(1.7)
Reversal (increase) in provisions for non-recurring risks	**3.5**	**(10.1)**
NON-RECURRING INCOME (EXPENSE)	**(17.2)**	**(0.8)**

NOTE 6. INCOME TAX

6.1 General framework and accounting principles

Since 1 January 1992, Thales has opted for the Group tax consolidation regime. Thales is the head of a tax consolidation group that includes the majority of its French subsidiaries pursuant to the tax regime provided by Article 223A of the French Tax Code.

In accordance with the tax consolidation agreement entered into between Thales and its subsidiaries, each subsidiary in the tax group records the amount of tax it would have paid had they been taxed separately. Any tax savings arising on the use of tax losses of subsidiaries are recorded by the parent company and recognised in the income statement. However, the parent company may have to record a corresponding tax expense, if and when these subsidiaries return to profit and are able to deduct the losses as they would have done had they been taxed separately.

The income tax rate for 2016 decreased to 34.43% from 38% in 2015, following the decision not to renew the 10.7% surtax in 2016. Tax loss carryforwards are attributable up to the limit of 50% of taxable profit in excess of €1 million. In addition, since 17 August 2012, French companies have been subject to a 3% tax on dividend distributions.

Thales also benefits from tax credits related to its research and development activities at the Palaiseau site, which are recorded against income tax expense.

6.2 Current tax

The income tax benefit breaks down as follows:

	2016	2015
Income tax benefit received from tax-group subsidiaries	173.4	127.7
Income tax due to the French State	(109.8)	(54.7)
Income tax benefit resulting from tax consolidation	**63.6**	**73.0**
3% tax on dividends from tax-group subsidiaries	12.3	18.1
3% tax on dividends due to the French State	(8.9)	(7.0)
Benefit on tax on dividends resulting from tax consolidation	**3.4**	**11.1**
Research tax credit (CIR)	7.7	7.6
Prior period adjustments and other taxes	3.3	2.1
INCOME TAX BENEFIT	**78.0**	**93.8**

In 2016 as in 2015, no non-deductible general expenses were reintegrated as a result of a tax audit. Expenditure excluded from deductible expenses in accordance with Articles 223 *quater* and 39.4 of the French Tax Code amounted to €0.2 million in both 2016 and 2015, reflecting excess amortisation of vehicles.

6.3 Deferred tax

The Company has available future tax savings due to:

- temporary differences arising on the different tax and accounting treatments of income and expenses (€128.0 million at 31 December 2016 compared with €127.6 million at 31 December 2015). They mainly reflect provisions for contingencies and losses, in particular provisions for post-employment benefits, which are not deductible for tax purposes; and
- tax loss carryforwards, which amounted to €86.4 million for the tax consolidation group at 31 December 2015. There were no remaining tax loss carryforwards at 31 December 2016.

The corresponding deferred tax is not recognised.

NOTE 7. INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

7.1 Accounting policies

Intangible assets (mainly software) and property, plant and equipment are recognised at their acquisition cost in the balance sheet. They are amortised or depreciated on a straight-line or declining-balance basis, over the period of their estimated useful lives (20 years for buildings and 3 to 10 years for other assets).

Any non-current assets held under finance leases or hire purchase agreements are not recognised and are reported in off-balance sheet commitments.

7.2 Breakdown

	31/12/2016			31/12/2015		
	Gross	Cumulated amort. and depr.	Net	Gross	Cumulated amort. and depr.	Net
Intangible assets	**18.8**	**(18.7)**	**0.1**	**18.7**	**(18.7)**	**–**
Buildings	201.5	(109.5)	92.0	209.3	(102.5)	106.8
Industrial plant, equipment and machinery	44.0	(41.0)	3.0	44.6	(41.8)	2.7
Other property, plant and equipment	36.0	(10.7)	25.3	31.2	(8.6)	22.6
Property, plant and equipment	**281.5**	**(161.2)**	**120.3**	**285.1**	**(152.9)**	**132.2**
TOTAL	**300.3**	**(179.9)**	**120.4**	**303.8**	**(171.6)**	**132.2**

7.3 Change in net intangible assets and property, plant and equipment

	Intangible assets	Property, plant and equipment	Total
Net value at 1 January 2015	**0.1**	**134.3**	**134.4**
Acquisitions	0.1	27.5	27.8
Depreciation and amortisation	(0.2)	(22.6)	(22.8)
Other	–	(7.0)	(7.0)
Net value at 31 December 2015	**–**	**132.2**	**132.2**
Acquisitions	0.2	10.0	10.2
Disposals	–	(0.9)	(0.9)
Depreciation and amortisation	(0.2)	(20.7)	(20.9)
Other	0.1	(0.3)	(0.2)
NET VALUE AT 31 DECEMBER 2016	**0.1**	**120.3**	**120.4**

NOTE 8. EQUITY INVESTMENTS

8.1 Accounting policies

Equity investments are recorded at cost price and related acquisition costs are recognised in the income statement. In the event that the carrying value exceeds value in use, a provision for impairment is recorded for the difference.

Value in use is determined based on profitability forecasts, the underlying assets, recent transactions or the market price of any listed securities.

The profitability forecasts are determined on the basis of expected future cash flows set out in the three-year strategic plans and a terminal value.

The assumptions used are prudent with forecast growth in sales and terminal values limited to 2%.

The discount rate used is calculated on the basis of the Group's weighted average cost of capital (8.5% in 2016 as in 2015), adjusted if necessary for the specific risks attributable to each equity investment. This rate is mainly based on the market risk-free rate, risk factors inherent in the Group's businesses, the Group's marginal borrowing rate and specific risks for which cash flows have not been adjusted.

Impairment tests are carried out annually at year-end in line with the Group's internal schedule for the preparation of Group entity strategic plans.

8.2 Change in equity investments

A breakdown of equity investments is presented in Note 24. Changes are presented below:

	Notes	Gross	Impairment	Net
VALUE AT 1 JANUARY 2015		**9,980.1**	**(1,493.0)**	**8,487.1**
Acquisitions/capital subscriptions and transactions		**96.3**		**96.3**
Increase in capital of Thales USA Inc		84.8	–	84.8
Increase in capital of SMBPE SAS		7.4	–	7.4
Release of capital of Cloudwatt		1.3	–	1.3
Other		2.8	–	2.8
Disposals		**(12.8)**	**–**	**(12.8)**
Disposal of Cloudwatt		(8.9)	–	(8.9)
Disposal of Thales Programas, Eletronica y Comunicaciones SA		(3.9)	–	(3.9)
Increase in provisions for impairment	Note 4	**–**	**(34.6)**	**(34.6)**
Reversal of provisions for impairment	Note 4	**–**	**164.0**	**164.0**
Other		**(58.1)**	**31.4**	**(26.7)**
VALUE AT 31 DECEMBER 2015		**10,005.5**	**(1,332.2)**	**8,673.3**

	Notes	Gross	Impairment	Net
Acquisitions/capital subscriptions and transactions		**147.4**	**–**	**147.4**
Increase in capital of Thales Avionics Electrical Systems SAS		76.0	–	76.0
Purchase and increase in capital of Forges de Zeebrugge		34.2	–	34.2
Increase in capital of Thales Université SAS		5.0	–	5.0
Acquisition of shares in Thales Canada Inc		32.2	–	32.2
Disposals		**(21.7)**	**–**	**(21.7)**
Sale of Thales Geodis Freight & Logistics SA		(5.7)	–	(5.7)
Reimbursement of capital of Thales Suisse		(16.0)	–	(16.0)
Increase in provisions for impairment	Note 4	**–**	**(48.5)**	**(48.5)**
Reversal of provisions for impairment	Note 4	**–**	**52.3**	**52.3**
Other		**(41.1)**	**25.9**	**(15.2)**
VALUE AT 31 DECEMBER 2016		**10,090.1**	**(1,302.5)**	**8,787.6**

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NOTE 9. OTHER FINANCIAL INVESTMENTS

9.1 Accounting policies

Other financial investments mainly include loan agreements signed by Thales with its direct or indirect subsidiaries and associates. These loans are presented separately from the current-account agreements, which are used in the daily management of cash requirements or surpluses (see Note 10).

Other financial investments also include deposits paid as part of real estate commitments and other financial receivables. An impairment loss is recognised depending on the risk of non recovery.

9.2 Breakdown

	31/12/2016			31/12/2015		
	Gross value	Impair-ment	Net value	Gross value	Impair-ment	Net value
Loans to direct subsidiaries and associates (see Note 24)	27.1	(25.5)	1.6	29.0	(26.4)	2.6
Loans to other Group subsidiaries	64.8	–	64.8	39.0	–	39.0
Loans to other Group associates	6.3	–	6.3	8.8	–	8.8
Other financial investments	11.0	(1.6)	9.4	21.9	(4.2)	17.7
TOTAL	**109.2**	**(27.1)**	**82.1**	**98.7**	**(30.6)**	**68.1**

9.3 Breakdown by maturity and by currency

Breakdown by maturity	31/12/2016	31/12/2015
Less than 1 year	60.9	46.9
From 1 to 5 years	12.7	14.3
More than 5 years	8.5	6.9
TOTAL	**82.1**	**68.1**

Breakdown by currency	31/12/2016	31/12/2015
Euro	48.8	47.7
South African rand	22.3	12.5
Chinese yuan	8.3	6.4
Other currencies	2.7	1.5
TOTAL	**82.1**	**68.1**

NOTE 10. GROUP COMPANY CURRENT ACCOUNTS

10.1 General framework and accounting principles

The Group company current-account amounts presented in the parent company balance sheet represent the receivables and payables between the parent company and its subsidiaries as part of the Group's cash pooling organisation.

Under this centralised system, the cash surpluses of subsidiaries are generally transferred to the parent company. In return, the parent company ensures that the cash requirements of its subsidiaries are met. Except in special cases, this system is applied to all subsidiaries in which Thales exercises majority control.

Group company current-account receivables and payables are always recognised as due within one year.

10.2 Current-account receivables

	31/12/2016	31/12/2015
Amounts due from direct subsidiaries and associates (see Note 24)	758.0	826.4
Amounts due from other subsidiaries	117.8	139.3
TOTAL	**875.8**	**965.7**

10.3 Current-account payables

	31/12/2016	31/12/2015
Amounts deposited by direct subsidiaries and associates (see Note 24)	4,097.5	3,867.4
Amounts deposited by Thales Alenia Space (France and Italy)	185.7	284.3
Amounts deposited by Thales Australia Ltd	319.1	285.7
Amounts deposited by other Group subsidiaries	623.5	491.7
TOTAL	**5,225.8**	**4,929.1**

NOTE 11. CASH AND OTHER INVESTMENTS

11.1 Accounting policies

Cash and cash equivalents include cash at bank and in hand as well as short-term, liquid investments that are easily converted into a known amount of cash and exposed to negligible risk of a change in value.

11.2 Cash and cash equivalents

Cash and cash equivalents amounted to €3,183.1 million at 31 December 2016 compared with €2,949.8 million at 31 December 2015. This amount includes €2,886.2 million (€2,585.2 million at year end 2015) of term deposits, euro-denominated money-market funds ("SICAV"), negotiable debt securities, and other investments with maturities of less than three months.

11.3 Other investments

Other investments correspond to term deposits with first-tier banks with maturities of 3 to 12 months.

NOTE 12. BORROWINGS

12.1 Accounting policies

Bonds are recognised at their redemption value. Any issue or redemption premiums are recognised under the corresponding balance sheet line item and taken to financial income (expense) on a straight-line basis. Bond issue expenses are recognised on a straight-line basis over the term of the bond.

12.2 Breakdown of borrowings

	Nominal rate	Variable rate swaps	31/12/2016	31/12/2015
Bonds maturing in June 2023	Fixed 0.75%	€400 million	600.0	–
Bonds maturing in March 2021	Fixed 2.25%	€300 million	300.0	300.0
Bonds maturing in March 2018	Fixed 1.63%	€300 million	500.0	500.0
Bonds maturing in October 2016	Fixed 2.75%	€400 million	–	600.0
Other borrowings			45.0	45.5
Accrued interest			14.2	15.0
GROSS BORROWINGS			**1,459.2**	**1,460.5**

At 31 December 2016, no material Group financing was subject to covenants requiring accelerated or early repayment based on the Group's credit rating or financial ratios.

At 31 December 2016, confirmed and undrawn credit facilities agreed with a pool of banks amounted to €1,500 million, expiring in 2021. These credit facilities are used as a backup to the commercial paper programme and as a financial reserve. The related agreement states that in the event that the French State no longer holds its golden share and the consolidated net debt/EBITDA ratio[1] also exceeds 3, early repayment clauses will apply.

12.3 Breakdown of borrowings by maturity and by currency

Breakdown by maturity	31/12/2016	31/12/2015
Less than 1 year	59.2	660.5
From 1 to 5 years	800.0	500.0
More than 5 years	600.0	300.0
TOTAL	**1,459.2**	**1,460.5**

Breakdown by currency	31/12/2016	31/12/2015
Euro	1,425.3	1,426.0
Singapore dollar	33.9	34.5
TOTAL	**1,459.2**	**1,460.5**

(1) EBITDA represents operating income before depreciation, amortisation and impairment of current, non-current and intangible assets, less impairment of goodwill, in accordance with accepted French accounting principles.

NOTE 13. SHAREHOLDERS' EQUITY

13.1 Share capital

Thales' share capital of €636,584,298 at 31 December 2016, is composed of 212,194,766 shares with a par value of €3 each, compared with 210,961,404 shares at 31 December 2015. This represents an increase of 1,233,362 shares resulting from the exercise of share subscription options. The breakdown of share capital is presented below:

	31/12/2016			31/12/2015		
	Number of shares	% of share capital	% of voting rights	Number of shares	% of share capital	% of voting rights
TSA	54,786,654	25.82%	35.86%	54,786,654	25.97%	36.04%
French State (including 1 golden share)	2,060	–	–	2,060	–	–
Public sector [a]	54,788,714	25.82%	35.86%	54,788,714	25.97%	36.04%
Dassault Aviation [b]	52,531,431	24.76%	28.53%	52,531,431	24.90%	28.67%
Thales [c]	749,559	0.35%	–	839,254	0.40%	–
Employees	5,743,081	2.71%	3.31%	5,684,120	2.69%	3.24%
Other shareholders	98,381,981	46.36%	32.30%	97,117,855	46.04%	32.05%
TOTAL [d]	**212,194,766**	**100.00%**	**100.00%**	**210,961,404**	**100.00%**	**100.00%**

(a) Under the terms of the shareholders' agreement with Dassault Aviation (the "Industrial Partner"), the "public sector" (the French State) is represented by the company TSA, excluding the State directly. All Thales shares held directly and indirectly by the French State have been directly registered for more than two years and thus have a double voting right as at 31 December 2016.

(b) As at 31 December 2016, Dassault Aviation has held 34,654,349 shares in directly registered form for more than two years, thus granting it double voting rights, and holds 17,877,082 shares in bearer form.

(c) Treasury shares represented 50,000 bearer shares held under a liquidity contract and 699,559 directly registered shares.

(d) During 2016, 1,233,362 new shares bearing rights from 1 January 2016 were created as a result of the exercise of share subscription options.

At 31 December 2016, there are no securities giving access to the Company's capital, with the exception of the share subscription options described in the Note below.

13.2 Reserves and retained earnings

	31/12/2015	Allocation of 2015 profit	Balance of 2015 dividend	2016 interim dividend	31/12/2016
Legal reserve	62.4	0.9	–	–	63.3
Blocked reserve	8.3	–	–	–	8.3
Ordinary reserve	128.9	–	–	–	128.9
Other reserves	0.3	–	–	–	0.3
Retained earnings	949.6	871.0	(212.2)	(84.6)	1,523.8
TOTAL	**1,149.5**	**871.9**	**(212.2)**	**(84.6)**	**1,724.6**

Thales allocated €285.6 million of the profit for the 2015 financial year to dividends (€1.36 per share), paying a €73.4 million interim dividend in December 2015, and the balance of €212.2 million in June 2016. Thales paid a €84.6 million interim dividend in December 2016 in respect of the 2016 financial year.

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NOTE 14. TREASURY SHARES

14.1 Accounting policies

Thales carries out transactions in its own shares in accordance with the authorisations granted to the Board of Directors by the Annual General Meeting.

At year-end, treasury shares are recognised and measured on the basis of their assigned function:

- treasury shares that have not been assigned are recorded under other financial investments at their acquisition cost. At the reporting date, an impairment loss is recognised if their carrying value exceeds the average stock market price for December;
- treasury shares assigned to a free share plan are recorded under marketable securities, either at their acquisition cost if the shares were assigned from the beginning of the plan, or at their net carrying value at the reclassification date if they were assigned after their acquisition.

These treasury shares are not measured at market value because they are set aside to be granted to employees. Consequently:

- shares allocated to parent company (Thales) employees are amortised on a straight-line basis over the term of the plan (48 months) through an increase in provisions for contingencies and losses recorded in liabilities,
- shares allocated to other Group employees are maintained at historical cost, as they will be re billed to the relevant subsidiaries for the same amount.

14.2 Change in treasury shares

Change in the number of treasury shares

At 31 December 2016, Thales held 749,559 treasury shares, including 126,044 shares (0.10% of share capital) that were freely transferable, and 623,515 shares (0.30% of share capital) assigned to the 17 September 2013 free share plan.

			2016			2015
	Freely transferable treasury shares	Treasury shares assigned to plans	Total treasury shares	Freely transferable treasury shares	Treasury shares assigned to plans	Total treasury shares
At 1 January	**215,830**	**623,424**	**839,254**	**700,294**	**1,176,438**	**1,876,732**
Purchases under the liquidity contract	513,001	–	513,001	807,144	–	807,144
Disposals under the liquidity contract	(472,001)	–	(472,001)	(822,144)	–	(822,144)
Transfer to employees under the employee share purchase plan	(41,714)	–	(41,714)	(457,596)	–	(457,596)
Stock market purchases	76,044	498,956	575,000	–	–	–
Delivery of free shares	–	(607,381)	(607,381)	–	(535,532)	(535,532)
Exercise of stock options	(56,600)	–	(56,600)	(29,350)	–	(29,350)
Reclassified shares	(108,516)	108,516	–	17,482	(17,482)	–
Net change	**(89,786)**	**91**	**(89,695)**	**(484,464)**	**(553,014)**	**(1,037,478)**
At 31 December	**126,044**	**623,515**	**749,559**	**215,830**	**623,424**	**839,254**

Change in the value of treasury shares

Freely transferable treasury shares	2016	2015
At 1 January	**8.2**	**24.9**
Purchases under the liquidity contract	39.4	43.7
Disposals under the liquidity contract	(35.4)	(44.2)
Transfer to employees under the employee share purchase plan	(1.6)	(15.6)
Exercise of stock options	5.1	(1.0)
Reclassified shares	(4.1)	0.4
At 31 December	**11.6**	**8.2**
Of which, acquisition cost	11.6	8.2
Of which, impairment	–	–
Average share price for December	€91.16	€69.44

Treasury shares assigned to plans	2016	2015
At 1 January	**17.0**	**34.0**
Delivery of free shares	(16.6)	(16.6)
Stock market purchases	45.5	–
Reclassified free shares	4.1	(0.4)
At 31 December	**50.0**	**17.0**
Provisions for contingencies and losses	(18.1)	(6.3)

NOTE 15. FREE SHARE PLANS AND STOCK OPTIONS GRANTED TO EMPLOYEES

At 31 December 2016, the following options, shares and units were outstanding:

- 40,850 stock options at a weighted average exercise price of €44.64;
- 1,320,693 share subscription options at a weighted average exercise price of €36.01, of which 236,472 are subject to performance conditions;
- 859,445 free shares, of which 374,405 are subject to performance conditions;
- 1,270,140 units, of which 497,200 are subject to performance conditions;
- 77,340 phantom shares, granting the right to a cash payment after a four-year vesting period, of which 37,910 are subject to performance conditions.

15.1 Outstanding stock option plans

Date of Board decision	Exercise period	Exercise price at the grant date	Number of options outstanding at 31/12/2015	Options exercised in 2016	Number of options outstanding at 31/12/2016
25/11/2008	from 25/11/2012 to 24/11/2018	€38.50	8,450	(7,600)	850
04/07/2007	from 04/07/2011 to 03/07/2017	€44.77	80,000	(40,000)	40,000

15.2 Outstanding share subscription options

Date of Board decision	Exercise period	Exercise price at grant date	Number of options outstanding at 31/12/2015	Options exercised in 2016	Options cancelled in 2016	Number of options outstanding at 31/12/2016
15/09/2011 [(a)]	from 15/09/2015 to 14/09/2021	€26.34	224,833	(98,511)	–	126,322
23/09/2010 [(a)]	from 23/09/2014 to 22/09/2020	€26.34	175,115	(63,765)	(1,200)	110,150
25/06/2009	from 25/06/2013 to 24/06/2019	€32.88	514,699	(150,895)	(1,220)	362,584
01/07/2008	from 01/07/2012 to 30/06/2018	€38.50	659,215	(193,168)	(2,810)	463,237
04/07/2007	from 04/07/2011 to 03/07/2017	€44.77	501,615	(240,635)	(2,580)	258,400
09/11/2006	from 09/11/2010 to 08/11/2016	€36.47	540,388	(486,388)	(54,000)	–

(a) Subject to the achievement of internal performance targets over the three financial years following the grant date.

Options granted and exercised in 2016

	Number of options granted/ shares subscribed or purchased	Exercise price	Date of plan
1. Directors			
Options granted in 2016	None		
2. The 10 largest grants of options to employees			
Options granted in 2016	None		
3. The 10 largest exercises of options by employees [(a)]			
Options exercised in 2016	13,000	€38.50	01/07/2008
	12,000	€32.88	25/06/2009
	11,000	€38.50	01/07/2008
	10,000	€26.34	23/09/2010
	8,091	€26.34	15/09/2011
	8,000	€38.50	01/07/2008
	7,200	€36.47	09/11/2006
	6,473	€26.34	15/09/2011
	6,473	€26.34	15/09/2011
	6,000	€36.47	09/11/2006

(a) For all Group companies combined.

15.3 Free share plans

Date of Board decision	Vesting period	Share price at grant date	Number of free shares at 31/12/2015	Shares granted in 2016	Shares cancelled in 2016	Shares delivered in 2016	Number of free shares at 31/12/2016
06/09/2016	from 27/10/2016 to 27/10/2020	€83.10	– –	88,020 148,070 [a]	(160) –	– –	87,860 148,070
17/09/2013	from 17/09/2013 to 17/09/2017	€39.16	406,010 235,043 [a] [b]	– –	(8,830) (8,708) [b]	– –	397,180 226,335
20/12/2012	from 20/12/2012 to 20/12/2016	€27.47	449,620 173,804 [a]	– –	(10,900) (5,143)	(438,720) (168,661)	– –

(a) Subject to the achievement of internal performance targets over the three financial years following the grant date.
(b) Number of free shares outstanding at 31 December 2015 under the 2013 free share plan corrected to include 1,340 shares cancelled in error.

15.4 Plans in units indexed to the value of the Thales share

Date of the allocation decision	Vesting period	Unit price at grant date	Number of units at 31/12/15	Units cancelled in 2016	Units delivered in 2016	Number of units at 31/12/2016
17/09/2015	from 17/09/2015 to 17/09/2019	€61.75	375,870 232,000 [a]	(8,070) (2,800)	(70) –	367,730 229,200
16/09/2014	from 16/09/2014 to 16/09/2018	€42.42	417,040 275,600 [a]	(11,590) (7,600)	(240) –	405,210 268,000

(a) Subject to the achievement of internal performance targets over the three financial years following the grant date.

15.5 Phantom shares indexed to the value of the Thales share

Date of the allocation decision	Vesting period	Number of phantom shares at 31/12/15	Phantom shares granted in 2016	Phantom shares cancelled in 2016	Number of phantom shares at 31/12/16
27/10/2016	from 27/10/2016 to 27/10/2020	–	40,620 38,900 [a]	(1,190) (990)	39,430 37,910

(a) Subject to the achievement of internal performance targets over the three financial years following the grant date.

NOTE 16. RECEIVABLES AND PAYABLES

16.1 Accounting policies

Receivables and payables denominated in foreign currencies are generally hedged and are consequently translated at the hedged foreign exchange rate.

The Thales parent company hedges currency risks related to contracts or normal commercial transactions on behalf of its subsidiaries. At each reporting date:

- derivative instruments subscribed by Thales (parent company) with bank counterparties are measured at market value and presented as an asset or a liability in the balance sheet under "Translation difference and exchange rate adjustments";
- exchange guarantees granted to subsidiaries are measured at market value and presented as an asset or a liability in the balance sheet under "Translation difference and exchange rate adjustments".

The balance of these accounts corresponds mainly to cash management timing differences between amounts received from and paid to subsidiaries and cash in-flows and out-flows between Thales and the bank in the context of foreign exchange derivatives management.

16.2 Breakdown of receivables and payables

			31/12/2016	31/12/2015
	Gross	Provisions	Net	Net
Advances to suppliers	**0.1**	**–**	**0.1**	**2.7**
Trade receivables	**190.5**	**(1.7)**	**188.8**	**179.1**
Other receivables	**733.1**	**–**	**733.1**	**804.0**
Income tax receivables from the French State (mainly research tax credits)	320.7	–	320.7	357.5
Translation difference and exchange rate adjustments	356.5	–	356.5	399.6
Tax and social security receivables	27.2	–	27.2	24.1
Other	28.7	–	28.7	22.8
TOTAL	**923.7**	**(1.7)**	**922.0**	**985.8**
Advances received on contracts in progress	**18.8**	**–**	**18.8**	**16.3**
Trade payables	**99.5**	**–**	**99.5**	**60.3**
Other liabilities	**471.6**	**–**	**471.6**	**520.5**
Tax liabilities towards consolidated subsidiaries	152.1	–	152.1	161.4
Translation difference and exchange rate adjustments	187.5	–	187.5	237.0
Tax payables, excluding income tax and social security	82.0	–	82.0	85.4
Other	50.0	–	50.0	36.7
TOTAL	**589.9**	**–**	**589.9**	**597.1**

16.3 Breakdown of receivables and payables by maturity at 31 December 2016

	Net	Maturity		
		Less than 1 year	From 1 to 5 years	More than 5 years
Advances to suppliers	0.1	0.1	–	–
Trade receivables	188.8	188.8	–	–
Other receivables	733.1	505.5	227.6	–
TOTAL RECEIVABLES	**922.0**	**694.4**	**227.6**	**–**
Advances received on contracts in progress	18.8	18.8	–	–
Trade payables	99.5	99.5	–	–
Other liabilities	471.6	357.4	99.6	14.6
TOTAL PAYABLES	**589.9**	**475.7**	**99.6**	**14.6**

NOTE 17. PROVISIONS FOR CONTINGENCIES AND LOSSES

17.1 Accounting policies

The Group records a provision when it recognises a legal or constructive obligation resulting from a past event for which an outflow of resources will be required and a reliable estimate can be made of the amount. Provisions are generally recorded for the following:

Provisions for post-employment and other employee benefits

The financing of post-employment obligations mainly involves contributions to State plans (social security, compulsory additional plans such as ARRCO and AGIRC, etc.) for which the recognised expense for the financial year is equal to the amounts paid.

The Company grants its employees termination payments and other long-term benefits (long-service awards and an additional week of paid holidays during the employee's 35th year of service within the Group). Some senior executives also benefit from a supplementary pension plan.

In accordance with ANC Regulation 2013-02, a provision is recognised for obligations that qualify as defined benefit plans. It is calculated on the basis of an actuarial valuation, determined using the projected unit credit method and taking into account future salary levels.

This method consists in assessing for each employee, the present value of the benefits that he or she can expect at the due date, by applying assumptions concerning discount rates, inflation, mortality and staff turnover.

These plans are recognised in the Company's financial statements as follows:

- the service cost, which corresponds to the increase in the obligation during the reporting period, is recognised in income (loss) from operations;
- the costs of unwinding the net obligation as well as actuarial gains and losses due to changes in assumptions and experience adjustments are recognised in financial income (expense);
- the impact of plan amendments following renegotiations of employee benefits is recognised in non recurring income (expense).

Provisions for subsidiary risks

Equity investments held by Thales are measured at the end of each reporting period and an impairment loss is recorded if necessary. In the event that the investment is fully written down and Thales' share in the equity of the subsidiary or associate becomes negative, a provision for subsidiary risks may be recognised when considered necessary.

Provisions for restructuring

Provisions for restructuring costs are recorded when a restructuring programme has been agreed with a third party, approved by Group management and announced before the reporting date, resulting in an obligation to the third parties in question, and for which the Group does not expect any consideration for the costs.

17.2 Breakdown of provisions

	31/12/2015	Increase	Reversal	Reclassification	31/12/2016
Post-employment and other employee benefits (see Note 17.3)	99.3	16.2	(10.4)	–	105.1
Subsidiary risks	3.3	9.9	(0.8)	(1.6)	10.8
Restructuring	4.8	10.0	(6.5)	–	8.3
Free shares	6.3	18.1	(6.3)	–	18.1
Other	58.6	2.3	(5.4)	–	55.5
TOTAL	**172.3**	**56.5**	**(29.4)**	**(1.6)**	**197.8**

17.3 Post-employment and other employee benefits

The provisions in the balance sheet can be analysed as follows:

			2016
	Post-employment benefits	Other employee benefits	Total
Provisions at 31 December 2015	**(96.0)**	**(3.3)**	**(99.3)**
Net increase in provisions of which:	**(5.6)**	**(0.2)**	**(5.8)**
Current service cost	(4.4)	(0.2)	(4.6)
Financial expense:	(9.1)	(0.3)	(9.4)
• Net interest	(1.9)	(0.1)	(2.0)
• Actuarial gains (losses)	(7.2)	(0.2)	(7.4)
Benefits and contributions paid	5.6	0.3	5.9
Other	2.3	–	2.3
Provisions at 31 December 2016	**(101.6)**	**(3.5)**	**(105.1)**
Of which:			
• Obligations	(148.7)	(3.5)	(152.2)
• Plan assets	47.1	–	47.1

The actuarial assumptions used to estimate the obligation are the following:

	31/12/2016	31/12/2015
Discount rate	1.50%	2.03%
Inflation rate	1.40%	1.60%
Average salary increase rate	2.38%	2.20%
Expected average remaining working life	7 years	7 years

NOTE 18. LEGAL AND ENVIRONMENTAL RISKS

18.1 Legal risks

Due to the nature of its business, Thales is exposed to the risk of technical and commercial disputes.

To prevent disputes or limit their impact, Thales' policy is to systematically seek alternative dispute resolution mechanisms. This policy is reviewed on a regular basis to take into account changes in the Group's core areas of business and is backed by employee training programmes.

In addition, Thales implemented a procedure several years ago to centralise all civil, commercial and criminal litigation and claims. These are handled by the Corporate Legal Affairs department, with the support of the Group companies concerned.

At the end of 2002, a group of French manufacturers, including Thales and one of its subsidiaries, collectively received a request for arbitration from a shared customer claiming an amount which allegedly should be no less than $260 million and for which the group of French manufacturers might be jointly liable towards the claimant. This request for arbitration is related to the execution of old contracts by the group of French manufacturers. Pursuant to an agreement signed by all of the parties in June 2003, the claimant withdrew its request for arbitration. In November 2012, the claimant filed a new request for arbitration for a revised amount of €226 million of which Thales' share would be around 28% of the amount claimed. The manufacturers are strongly disputing this demand and at this date it is not possible to evaluate any potential financial risk. Accordingly, Thales has not set aside a provision in respect of this dispute. Proceedings are ongoing.

There are no other government, judicial or arbitration claims, of which the Group is aware, which are pending or threatened, which could have, or which had, in the course of the last 12 months, any significant effect on the financial position or the profitability of the Company and/or the Group.

18.2 Environmental risks

Due to the nature of its business, Thales is exposed to environmental risks related to potential adverse environmental and health effects resulting from its activities, the impact of the environment on its operations and non-compliance with new regulations applicable to its activities and products.

For many years, Thales has regularly analysed and updated its environmental risks on the basis of its business activities, scientific and technical developments and emerging environmental challenges.

This analysis, represented by risk mapping, is intended to:

- ensure that employees and local residents are not exposed to health and environmental risks;
- ensure the compliance of its activities and products;
- analyse the impact of new regulations, including on product design;
- identify an appropriate organisational structure and associated action plans, either at Group level or locally, according to the risk mapping results.

In support of this analysis, an environmental management system has been deployed at all sites in order to ensure the control and limitation of the environmental impacts of the Group's products and activities. This management system is deployed throughout the different business lines as part of the Group's framework. Consequently, environmental skills and know-how have been rolled out to services such as engineering, research, procurement and contracts.

At 31 December 2016, provisions for environmental risks amounted to €1.0 million.

NOTE 19. OFF-BALANCE SHEET COMMITMENTS

19.1 Deposits and guarantees

Commitments given:	**31/12/2016**	**31/12/2015**
Guarantees given by Thales under commercial contracts signed by operating entities	9,828.7	10,794.9
Guarantees given to banks for facilities granted to subsidiaries	2,216.9	2,189.0
Counter-guarantee given to trustees to hedge pension obligations in the United Kingdom	974.0	1,146.8
Other guarantees given to Group subsidiaries	801.8	438.8
Other guarantees given to third parties	677.5	557.6
Total (a)	**14,498.9**	**15,127.1**
Of which, related to direct subsidiaries (see Note 24)	4,576.4	4,508.2
Of which, related to other Group subsidiaries	9,632.8	10,164.8
Of which, related to direct and indirect associates	289.8	454.1

Commitments received:	**31/12/2016**	**31/12/2015**
Debt write-offs granted to related companies with clawback provisions	120.1	120.8

(a) The decrease in guarantees given from 2015 to 2016 is explained in part by changes in exchange rates (€248 million).

19.2 Commitments to lease properties

	31/12/2016	31/12/2015
Operating leases	608.4	649.5
Less than 1 year	120.9	112.4
From 1 to 5 years	326.7	329.4
More than 5 years	160.8	207.7

NOTE 20. MARKET RISKS

20.1 Accounting policies

The Thales parent company Treasury and Financing department is active in the financial markets in order to reduce the interest rate and foreign exchange risks of the Group.

Interest rate derivatives

Thales uses interest rate derivatives to manage and reduce its exposure to interest rate fluctuations. When the derivatives are designated as hedging instruments, the gains and losses on the hedge are recognised in the same period as the hedged item.

Currency derivatives

Thales hedges currency risks arising on commercial offers entered into by its subsidiaries, which are denominated in currencies other than the main operating currency. The gains and losses on currency derivatives subscribed by Thales with bank counterparties are recognised in the income statement. A provision is recorded in the event that the valuation of Thales' commitment to hedge the offers of its operating subsidiaries is negative.

Thales hedges currency risks related to firm contracts and normal commercial transactions on behalf of its subsidiaries. As such, it guarantees its operating subsidiaries a specific exchange rate for each transaction and backs up its position by arranging currency derivatives with banking counterparts. Both the unrealised and realised gains and losses, on the bank derivatives and the subsidiaries' guarantees, are recognised symmetrically in the income statement.

Thales hedges the currency risks related to its cash pooling system. The gains and losses on currency derivatives are offset by the gains and losses resulting from the revaluation of the hedged Group company current accounts and loans. However, gains or losses related to the derivatives' swap points are spread over the term of the hedge.

In some cases, Thales hedges the property liability risks on its net foreign assets. The gains and losses on currency derivatives are recognised in the balance sheet under "Translation difference and exchange rate adjustments" (see Note 16), with the exception of the gains or losses related to the derivatives' swap points, which are spread over the term of the hedge.

20.2 Interest rate risk management

At 31 December 2016 and 2015, Thales held the following derivative instruments, which all qualify as hedges.

	31/12/2016		31/12/2015	
	Nominal	Market value	Nominal	Market value
Fixed-for-floating interest rate swaps:				
• swaps backing bonds maturing in 2023	400.0	0.1	–	–
• swaps backing bonds maturing in 2021	300.0	21.6	300.0	19.9
• swaps backing bonds maturing in 2018	300.0	6.2	300.0	8.1
• swaps backing bonds maturing in 2016	–	–	400.0	8.2
TOTAL	**1,000.0**	**27.9**	**1,000.0**	**36.2**
Floating-for-fixed interest rate swaps:				
• swap backing a loan maturing in 2019	6.3	(0.2)	8.7	(0.4)
• cross currency swap backing a loan	15.2	1.3	16.0	(0.5)
TOTAL	**21.5**	**1.1**	**24.7**	**(0.9)**

20.3 Currency risk management

At 31 December 2016 and 2015, the derivative instruments subscribed by Thales with bank counterparties were as follows:

				31/12/2016		31/12/2015	
	USD	GBP	Other	Total	Market value	Total	Market value
Hedges of commercial offers and transactions:							
Forward currency sales	4,817.7	738.3	2,146.3	7,702.3	(179.3)	7,936.3	(242.3)
Forward currency purchases	1,519.2	821.6	1,822.4	4,163.2		4,111.6	
Currency sales (call and put options)	92.0	–	2.1	94.1	0.6	217.7	1.6
Currency purchases (call and put options)	10.4	–	15.6	26.0		98.1	
Hedges related to cash pooling:							
Currency sales: foreign exchange swaps	782.4	–	247.8	1,030.2	(136.1)	583.8	(11.1)
Currency purchases: foreign exchange swaps	270.0	742.6	461.7	1,474.3		1,537.5	

In addition, Thales has granted its operating subsidiaries "mirror" foreign exchange guarantees in relation to firm contracts or normal commercial operations.

Thales has also granted its operating subsidiaries foreign exchange guarantees on commercial offers, subject to the subsidiary winning the contract.

NOTE 21. RELATED PARTIES

21.1 Definition

The Group has identified the following related parties: shareholders of Thales (the parent company), especially the French State and Dassault Aviation, companies controlled by these same shareholders, companies under joint control, companies under significant influence, directors and senior executives.

21.2 Agreements with Thales' shareholders

Section 4.3.3.3 describes the main provisions of the shareholders' agreement governing relations between the French State (the "Public Sector") and Dassault Aviation (the "Industrial Partner") within Thales, in relation to the convention on the protection of strategic national interests as well as the specific convention binding the French State and Thales.

21.3 Agreements with DCNS

As of December 2011, Thales holds 35% of the share capital of DCNS, a subsidiary jointly controlled with the French State.

Thales and DCNS also signed an industrial and trade cooperation agreement, with the objective of optimising the organisation of the naval business activities of both groups (market access, research and development and purchasing).

21.4 Compensation of directors and senior executives[(a)]

The compensation, benefits and social security contributions awarded to members of the Board of Directors and the Executive Committee break down as follows:

	2016	2015
Short-term benefits:		
• Fixed compensation	4.3	4.1
• Variable compensation	3.7	2.8
• Social security contributions	2.7	2.4
• Contract termination benefits resulting from contractual commitments	–	2.1
• Social society contributions/contract termination benefits	–	0.7
• Attendance fees	0.5	0.6
Other benefits:		
• Post-employment benefits	1.7	1.3
• Share-based payments (see Note 15)[(b)]	2.5	1.8

(a) The components of compensation presented correspond to costs recognised in the Thales parent company financial statements.
(b) Measured in accordance with IFRS 2 – Share-based Payment.

NOTE 22. EVENTS AFTER THE REPORTING PERIOD

At the publication date of this document, no event liable to have an impact on Thales' financial position has occurred since year-end.

NOTE 23. INFORMATION ON EXISTING BRANCHES (ARTICLE L. 232-1, II OF THE FRENCH COMMERCIAL CODE)

At 31 December 2016, Thales had a secondary facility registered in France with the commercial registrary and indicated on its *K bis* (company registration certificate).

NOTE 24. SUBSIDIARIES AND ASSOCIATES

(in millions)			Information related to the entity (local currency)			
			Prior year sales excluding VAT	Profit (loss) for last year ended	Share capital	Shareholders' equity other than share capital
A. Detailed information on subsidiaries and associates whose gross value exceeds 1% of the Company's share capital						
1. Subsidiaries	THALES HOLDINGS UK PLC	GBP	0.0	6.7	726.8	408.6
	THALES AVIONICS SAS	EUR	1,285.1	105.3	175.0	48.3
	THALES ALENIA SPACE SAS	EUR	0.0	198.9	918.0	271.2
	THALES SYSTEMES AEROPORTES SAS	EUR	1,133.6	96.0	93.2	32.4
	THALES COMMUNICATIONS & SECURITY SAS	EUR	1,913.8	103.1	164.0	33.5
	THALES DEUTSCHLAND GMBH	EUR	0.0	(3.6)	27.1	281.8
	THALES USA INC	USD	0.0	(12.3)	118.1	357.6
	THALES INTERNATIONAL SAS	EUR	0.0	136.8	313.0	15.3
	THALES AIR SYSTEMS SAS	EUR	730.6	32.3	126.3	231.0
	AVIMO GROUP LTD	SGD	0.0	0.5	22.1	34.6
	THALES NEDERLAND BV	EUR	379.7	21.2	29.5	143.8
	THALES UNDERWATER SYSTEMS NV PAYS BAS	EUR	0.0	(0.0)	4.5	4.1
	THALES SERVICES SAS	EUR	431.1	8.1	1.5	7.8
	SIFELEC SAS	EUR	0.0	(0.0)	38.3	(6.2)
	THALES OPTRONIQUE SAS	EUR	491.9	42.3	56.2	107.5
	THALES UNDERWATER SYSTEMS SAS	EUR	399.7	26.7	15.3	9.9
	THALES MICROELECTRONICS SAS	EUR	77.7	(0.6)	0.5	25.7
	THALES AVIONICS ELECTRICAL SYSTEMS SAS	EUR	130.4	(17.4)	6.9	54.2
	THALES HOLDING NORWAY AS	NOK	0.0	(0.0)	419.8	(186.8)
	THALES CORPORATE VENTURES SAS	EUR	0.0	1.5	15.0	13.1
	THALES CANADA INC	CAD	551.4	(35.6)	6.8	(44.3)
	TDA ARMEMENTS SAS	EUR	97.1	29.5	0.3	20.6
	THALES EUROPE SAS	EUR	0.0	16.7	43.2	(62.2)
	THALES BELGIUM SA	EUR	30.9	24.0	3.4	2.8
	THALES ELECTRON DEVICES SAS	EUR	295.2	(21.1)	31.0	40.0
	TH. BELGIUM SA (FORMERLY FZ)	EUR	26.4	0.3	14.2	(21.7)
	THALES SUISSE SA	CHF	45.6	10.6	40.0	(9.6)
	CMT MEDICAL TECHNOLOGIES LTD	USD	16.7	(1.9)	1.0	28.9
	SNC THALES MERIGNAC	EUR	0.2	(0.1)	20.0	(0.3)
	THALES SESO SAS	EUR	15.1	(13.0)	0.4	2.6
	THALES GLOBAL SERVICES SAS	EUR	486.0	(3.4)	0.5	1.8
	THALES COMMUNICATIONS LTDA	BRL	0.0	(1.8)	19.8	(19.8)
	SAS CHATELLERAULT BRELANDIERE	EUR	2.4	(0.3)	2.0	1.9
	THALES ANGENIEUX SAS	EUR	66.5	2.3	2.7	14.4
Total subsidiaries						
2. Associates	UNITED MONOLITHIC SEMICONDUCTORS HOLDING	EUR	0.0	2.4	33.9	13.9
	ELETTRONICA SpA	EUR	0.0	25.2	0.0	66.7
	SOFRADIR SAS	EUR	150.7	22.1	6.0	70.9
	TELESPAZIO SpA	EUR	577.3	29.4	50.0	183.7
	DCNS	EUR	3,191.2	96.5	563.0	(291.6)
	TH. SYSTEMS IRELAND LTD	EUR	0.0	212.4	7.7	168.6
Total associates						
TOTAL (A)						
B. Detailed information concerning other subsidiaries and associates						
1. Subsidiaries not listed in section A						
French subsidiaries						
Foreign subsidiaries						
Total						
2. Associates not listed in section A						
French companies						
Foreign companies						
Total						
TOTAL (B)						
TOTAL (A + B)						
Information concerning related companies						
Thales' direct subsidiaries (A)						
Thales' direct subsidiaries (B)						
Other Group subsidiaries						

							Contribution of subsidiaries and associates to Thales' financial statements (EUR)
Carrying amount of investments (gross)	**Carrying amount (net)**	**% share capital held**	**Loans and advances made by Thales not yet paid**	**Receivables**	**Liabilities**	**Deposits and guarantees given by Thales**	**Dividends received by Thales during the year**
2,571.7	1,870.1	100%	–	3.0	174.7	0.0	0.0
936.8	936.8	100%	–	0.0	294.8	0.0	132.8
683.1	683.1	67%	–	0.0	0.0	459.9	71.4
706.1	706.1	100%	–	0.0	1,498.2	616.1	101.8
590.8	590.8	100%	–	0.0	401.7	954.9	75.6
545.0	545.0	100%	–	23.8	0.0	220.0	0.0
476.6	476.6	100%	–	0.0	152.3	830.2	0.0
398.5	398.5	100%	–	0.0	44.4	6.0	19.2
314.1	314.1	89%	–	3.6	667.0	19.0	10.2
250.7	76.8	100%	–	0.0	0.0	0.0	1.3
235.2	235.2	99%	–	0.0	163.1	333.8	0.0
129.2	8.5	100%	–	0.0	0.0	0.0	0.0
126.4	126.4	100%	–	38.7	0.0	0.8	0.0
111.8	38.7	100%	–	0.0	30.0	0.0	0.0
106.3	106.3	77%	–	0.0	240.1	190.3	20.9
96.5	96.5	100%	–	0.0	295.3	38.0	18.5
88.0	9.9	100%	–	0.0	9.6	0.0	0.0
94.6	61.6	100%	–	19.5	0.0	0.0	0.0
77.2	77.2	100%	–	0.0	0.0	0.0	0.0
73.3	18.7	100%	–	0.0	14.1	0.0	0.0
51.9	51.9	100%	–	36.3	12.0	826.3	0.0
51.7	51.7	100%	–	0.0	47.8	7.3	11.8
43.2	43.2	100%	–	187.5	0.0	0.0	0.0
41.4	31.2	100%	–	0.0	31.3	38.6	0.0
39.2	39.2	100%	–	83.5	1.7	21.5	0.0
34.2	34.2	100%	–	23.3	0.1	0.0	0.0
26.4	26.4	100%	–	0.4	0.4	0.0	7.8
21.8	21.8	100%	–	1.4	1.6	0.0	0.0
20.0	19.7	100%	–	133.8	0.0	0.0	0.0
14.6	0.0	100%	–	11.7	0.2	0.0	0.0
12.4	6.2	100%	–	68.8	0.0	0.7	0.0
11.0	0.0	100%	–	0.0	0.0	0.0	0.0
10.0	2.5	100%	–	0.0	0.3	0.0	0.4
8.1	8.1	100%	–	0.0	1.4	12.1	1.7
8,997.6	**7,712.7**		**0.0**	**635.4**	**4,082.0**	**4,575.6**	**473.5**
24.3	22.8	50%	0.0	0.0	0.0	0.0	0.0
26.7	26.7	33%	0.0	0.0	0.0	0.0	5.8
26.4	26.4	50%	0.0	0.0	0.0	0.0	11.0
81.6	81.6	33%	1.6	0.0	0.0	0.0	1.7
833.7	833.7	35%	0.0	0.0	0.0	0.6	0.0
56.3	56.3	23%	0.0	0.0	0.0	0.0	0.0
1,049.1	**1,047.6**		**1.6**	**0.0**	**0.0**	**0.6**	**18.5**
10,046.7	**8,760.3**		**1.6**	**635.4**	**4,082.0**	**4,576.1**	**492.0**
25.6	17.7		–	25.7	15.5	0.8	3.2
0.7	0.1		–	0.0	0.0	0.0	0.0
26.4	**17.8**		**–**	**25.7**	**15.5**	**0.8**	**3.2**
9.7	9.5		–	0.0	0.0	0.0	0.1
7.4	0.1		25.5	96.9	0.0	308.4	0.8
17.0	**9.6**		**25.5**	**96.9**	**0.0**	**308.4**	**0.9**
43.4	**27.4**		**25.5**	**122.6**	**15.5**	**309.2**	**4.1**
10,090.1	**8,786**		**27.1**	**758.0**	**4,097.5**	**4,885.3**	**496.1**
			1.6	635.4	4,082.0	4,575.6	
			25.5	122.6	15.5	0.8	
				0.0		309.0	

Investments made and thresholds crossed in French companies in 2016

	31/12/2015					31/12/2016				
Percentage owned	**> 5%**	**> 20%**	**> 33%**	**> 50%**	**> 66%**	**> 5%**	**> 20%**	**> 33%**	**> 50%**	**> 66%**
1. Increases										
189Centelec SAS	–	–	–	–	–	–	–	–	–	100%
190Centelec SAS	–	–	–	–	–	–	–	–	–	100%
191Centelec SAS	–	–	–	–	–	–	–	–	–	100%
2. Decreases										
Thales Université SAS	–	–	–	–	100%	–	–	–	–	–
SMBPE SAS	–	–	–	–	100%	–	–	–	–	–
Syracuse Services SAS	–	–	–	–	100%	–	–	–	–	–
188Centelec SAS	–	–	–	–	100%	–	–	–	–	–
Thales Geodis Freight & Logistics SA	–	–	50%	–	–	–	–	–	–	–

1.3.2.6 Five-year financial summary of the Company

	2012	2013	2014	2015	2016
1. Share capital at year-end					
Share capital	607.0	617.2	623.5	632.9	636.6
Number of ordinary shares outstanding	202,339,674	205,744,500	207,841,111	210,961,404	212,194,766
Maximum number of shares to be created in future by exercise of share subscription options	12,294,262	8,186,261	5,841,789	2,615,865	1,320,693
2. Operations and results for the year					
Sales excluding tax	174.9	205.9	224.4	208.6	233.3
Earnings before tax, employee profit-sharing, depreciation, amortisation and provisions	222.0	379.7	609.3	625.7	367.9
Income tax benefit	48.1	85.8	77.4	93.8	78.0
Earnings after tax, employee profit-sharing, depreciation, amortisation and provisions	306.8	400.6	662.9	871.9	431.1
Distributed net profit	175.7	227.6	230.7	285.6	84.6 [a]
3. Earnings per share					
Earnings after tax and employee profit-sharing but before amortisation, depreciation and provisions	1.34	2.26	3.30	3.41	2.10
Earnings after tax, employee profit-sharing, depreciation, amortisation and provisions	1.52	1.95	3.19	4.13	2.03
Net dividend per share	0.88	1.12	1.12	1.36	1.60 [b]
4. Employees					
Average headcount during the year, of which:	824	833	852	831	852
• Engineers and managers	711	726	749	735	749
• Technicians and supervisors	113	107	103	96	103
Personnel expenses, of which:	161.6	177.1	183.2	187.1	191.5
• Total salary costs for the year	113.7	123.9	130.2	131.5	137.8
• Social security and other social welfare benefits paid during the year	47.9	53.2	53.0	55.6	53.7

2012: Share capital up from €606,985,371.0 to €607,019,022.0 following a capital increase.
2013: Share capital up from €607,019,022.0 to €617,233,500.0 following a capital increase.
2014: Share capital up from €617,233,500.0 to €632,523,333.0 following a capital increase.
2015: Share capital up from €632,523,333.0 to €632,884,212.0 following a capital increase.
2016: Share capital up from €632,884,212.0 to €636,584,298.0 following a capital increase.

(a) Interim dividend.
(b) Subject to the approval of the Annual General Meeting of 17 May 2017 that will be held to approve the 2016 financial statements.

1.3.3 Statutory auditors' report on the financial statements

To the Shareholders,

In compliance with the assignment entrusted to us by your Annual General Meetings, we hereby report to you, for the year ended December 31, 2016, on:

- the audit of the accompanying financial statements of Thales;
- the justification of our assessments;
- the specific verifications and information required by law.

These financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements based on our audit.

I. Opinion on the financial statements

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at December 31, 2016 and of the results of its operations for the year then ended in accordance with French accounting principles.

II. Justification of our assessments

In accordance with the requirements of Article L. 823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

- **Investments**

Investments which appear in the balance sheet as at December 31, 2016 for a net amount of €8,787.6 million are assessed at their cost price and subject to impairment tests in accordance with the methods set out in Note 8 to the financial statements.

Our work consisted in assessing the data used to estimate the net realizable value, in particular, we reviewed the update of forecast profitability of the subsidiaries and investments, and verified the consistency of the assumptions used with the forecast data taken from the strategic plans drawn up for each of these subsidiaries or investments under management's control and checked that the notes to the financial statements provide appropriate information.

- **Litigation and contingency provisions**

As regards litigation and contingency provisions, we ensured that the procedures in force in your Company made it possible to identify, evaluate and recognize such provisions from an accounting standpoint in satisfactory conditions. We also ensured that the disputes identified during the implementation of these procedures were described in appropriate terms in the notes to the financial statements, and, in particular, in Note 18.

These assessments were made as part of our audit of the financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

III. Specific verifications and information

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors and in the documents addressed to the shareholders with respect to the financial position and the financial statements.

Concerning the information given in accordance with the requirements of Article L. 225-102-1 of the French Commercial Code (*Code de commerce*) relating to remunerations and benefits received by the directors and any other commitments made in their favor, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from companies controlling your Company or controlled by it. Based on this work, we attest the accuracy and fair presentation of this information.

In accordance with French law, we have verified that the required information concerning the purchase of investments and controlling interests and the identity of the shareholders or holders of the voting rights has been properly disclosed in the management report.

Courbevoie and Paris-La Défense, February 27, 2017

The statutory auditors
French original signed by

Mazars		**Ernst & Young Audit**	
Anne-Laure Rousselou	Jean-Marc Deslandes	Philippe Diu	Serge Pottiez

BUSINESS REVIEW

>2

2.1 OPERATING SEGMENTS

The Group has a matrix organisation based on:

- six Global Business Units, grouped into three operating segments: Aerospace (Avionics, Space), Transport (Ground Transportation Systems) and Defence & Security (Secure Communications and Information Systems, Land and Air Systems, and Defence Mission Systems);
- an international organisation split into the major industrial countries in which the Group is present (Germany, France, the Netherlands, the United Kingdom, Canada, the United States and Australia), other European countries and emerging markets.

2.1.1 Aerospace segment

The Aerospace segment includes the Avionics and Space Global Business Units.

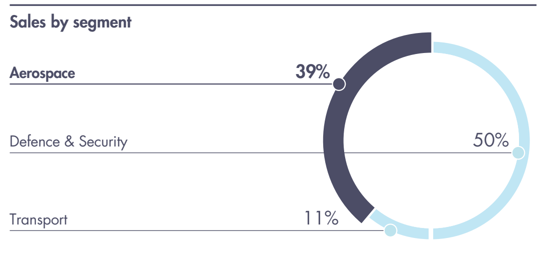
The **Avionics** Global Business Unit offers a large array of equipment and functions for piloting, navigation and aircraft control systems, electrical generation and conversion, and in-flight entertainment and connectivity systems. This activity also includes simulation and training solutions for military aircraft and civil and military helicopters as well as microwave and imaging subsystems. As a partner of the major aircraft manufacturers and airlines, Thales is a player across the entire value chain for the aviation sector, in addition to its air traffic management business.

The **Space** Global Business Unit offers space systems and solutions, particularly in the fields of telecommunications, radar and optical observation of the Earth, satellite navigation and exploration of the Universe. The strategic partnership in the space sector between Thales and Leonardo – the Space Alliance – responds to the significant environmental, scientific and security challenges faced by the sector as well as the changes brought about by the expansion of the information society. It is based on the solutions offered by both Thales Alenia Space (67% owned by Thales, 33% owned by Leonardo) in satellite manufacturing and by Telespazio (33% owned by Thales, 67% owned by Leonardo) in related services.

2.1.1.1 Key data

(in € millions)	2016	2015
Order book at 31 December	9,914	9,779
Order intake	5,872	6,281
Sales	5,812	5,387
EBIT [(a)]	571	518
Employees under Group management	18,741	17,960

(a) Non-GAAP indicator. See definition in the section entitled "Presentation of Financial Information" on page 8.



2.1.1.2 Avionics

2.1.1.2.1 General overview

From the cockpits of the future through to cyber-secured connections between aircraft and ground systems, Thales designs and manufactures on-board electronics systems that increase flight efficiency and safety, enhance the passenger experience and generate additional revenue for airlines.

Thales' offer addresses all of the different players in the avionics sector – both civil and military – from aircraft manufacturers through to passengers and including airlines, operators, pilots and crew.

The range of equipment, systems and applications covers four main areas:

On-board electronic systems and navigation aids: cockpit display systems are fitted with simplified human-system interfaces for optimised flight management and piloting. Through applications inspired by mass-market electronics and transposed to the aviation sector, pilots can stay permanently connected to their environment.

Maintenance: the maintenance solutions Thales offers enable fleets to be tracked in real time in order to optimise operating costs and increase aircraft availability.

Passenger experience: the in-flight entertainment systems and broadband connectivity offering give passengers a level of technological comfort that is increasingly comparable to their own homes. Thales also offers applications that airlines can propose to their passengers in order to generate extra revenue. In addition, the Group offers cabin lighting and aircraft interior systems, provided through Diehl Aerospace.

Simulation and training: simulator training for pilots of military aircraft and civilian and military helicopters prepare them more effectively for their missions while reducing training costs. Thales supplies flight simulators for several European defence programmes and provides training for helicopter pilots, notably via the Helisim joint venture.

The Thales offering also includes microwave subsystems (tubes and power amplifiers) which are aimed at the space and defence markets and some telecommunications and civil industrial applications, as well as imaging subsystems which are aimed at the medical radiology market.

2.1.1.2.2 Competitive position

As one of the leading players in the avionics market alongside Honeywell and Rockwell Collins, Thales supplies the civilian and military aircraft manufacturers Airbus, ATR, Bell, Boeing, Bombardier, Dassault Aviation, Embraer, Gulfstream, Leonardo, NHIndustries, Sikorsky and Sukhoi.

In the in-flight entertainment segment, Thales is one of the top two players, with Panasonic Avionics.

The Group has numerous competitors in the simulation solutions market, particularly American defence companies such as Lockheed Martin, Raytheon and L3Com.

Thales continues to be a global market leader in microwave and imaging subsystems, and its main competitors in these markets are Varian Medical Systems, CPI and L3.

2.1.1.2.3 Significant events in 2016

In civil avionics, Thales partnered with Airbus as it increased its production levels during the year, particularly for the A350. 2016 also saw the successful first flight of the Cessna Citation Longitude business jet, which is equipped with Thales flight controls. In parallel, there were very positive results from the flight tests carried out for TopMax head-worn display systems. More than 20 airlines chose to use the flight management systems (FMS) and terrain collision avoidance systems (T3CAS) in over 400 Airbus planes. The teams of Thales and Brussels Airlines (BEL) made a technical breakthrough by successfully testing a new live weather service that sends weather updates to the pilot's Electronic Flight Bag system throughout the flight. The flight tests were carried out on A330 aircraft with BEL pilots. Thales also confirmed its positioning in airline support, as it was named best avionics support supplier for the year by Airbus and came in number two worldwide for airlines.

In military avionics, a new export contract was won for the Rafale, in India. In addition, the Scorpion helmet-mounted sight and display system was selected for 80 EF-18 fighter planes of the Spanish air force and 200 light-armed helicopters in South Korea. The South Korean armed forces also chose Thales' military avionics system to equip their MRTT refuelling planes.

In terms of in-flight entertainment business, several airlines – including Gulf Air, Japan Airlines, Singapore Airlines and Emirates – opted for the AVANT solution, and in the connectivity market a major agreement was signed with SES to offer airlines and their passengers in-flight broadband connectivity over the whole of the Americas, with optimal speeds thanks to Ka-band high-throughput satellite (HTS) services.

In training and simulation, Thales and AMST were selected by the United Kingdom Ministry of Defence to supply a new mission simulation training centre for fighter jet pilots. Airbus Helicopters chose Thales and their joint venture Helisim to design and build the full flight simulator (FFS) for the new H160. Two helicopter training centres were opened during the year, in Norway (Stavanger) and Australia (Brisbane).

In electrical systems, Thales reached another milestone at the beginning of the year, by successfully completing a round of flight trials using a prototype ATR 72 turboprop equipped with a new energy management system that optimizes power demand.

In microwave and imaging subsystems, a number of new orders were taken in 2016, including a contract signed with SES for the supply of high-power Ka-band tubes for the new SES 17 satellite ordered from Thales, which will increase SES's in-flight connectivity capabilities.

Lastly, Thales opened a new 60,000 sq.m. campus in Bordeaux, marking its anchorage in the south-western region of France. Some 2,600 employees – including 1,500 fully dedicated to innovation – work there on cockpit visualisation systems, avionics suites, airborne radars, defence mission systems and military support.

2.1.1.3 Space

2.1.1.3.1 General overview

Thales Alenia Space is a joint venture between Thales (67%) and Leonardo (33%) and partners in the Space Alliance along with Telespazio, which is also owned by Thales (33%) and Leonardo (67%).

Thales Alenia Space has more than 40 years of experience in the design, integration, testing, operation and commissioning of innovative space systems, leading the way not only in space enterprise but also in a human enterprise that is undergoing constant change. The state-of-the-art satellites, payloads and vehicles produced by Thales Alenia Space are not only put to the service of its customers – operating in the areas of business, science, defence and security across the globe – but also, and above all, meet the needs of society in general. They provide communications and navigation services, monitor the environment and the oceans, help better understand climate change and drive scientific progress. Going beyond planet Earth, they also respond to the challenges of exploring the Universe, and thanks to the partnership with the International Space Station they create tangible links between humans and outer space.

At the forefront of a digital and connected world

Thales Alenia Space has drawn on its long-standing expertise in satellite telecommunications to launch cutting-edge offerings that meet today's fast-changing needs: Spacebus NEO, a modular geostationary platform (including a version with an all-electric propulsion); EliteBus for low and medium Earth orbit missions; and flexible, digital and very high-speed payloads. Thales Alenia Space puts all of these new technologies to the service of its customers and users, who are becoming more and more connected, with increasingly high-quality data services, all thanks to these space technology projects. The O3b and Leosat constellations as well as Iridium NEXT satellites (for mobile voice and data communications) are already providing – or will soon provide – broadband connections in numerous areas of the world. The new projects that Thales Alenia Space is currently working on not only concern communications but also the protection of people and countries, using military satellites (Comsat NG in particular).

A key participant in environmental programmes

Thales Alenia Space's expertise in high-resolution (sub-metric) optical and radar payloads for military, civilian or dual missions covers a wide range of uses, including information gathering, target designation, meteorology, altimetry, oceanography, climatology, cartography and crisis management. Thales Alenia Space satellites help provide a better understanding of planet Earth and how to protect it, with prime examples being the *Sentinel* satellites for Copernicus and the different generations of *Meteosat* meteorological observation satellites.

At the forefront of exploring the origins of the Universe

Thales Alenia Space is the prime contractor for the flagship ExoMars 2020 programme dedicated to the search for life on Mars, which follows on from the ExoMars 2016 scientific mission that launched the trace gas orbiter (TGO). The company is also the prime contractor for EUCLID – the satellite used for a scientific mission launched by the European Space Agency (ESA) to explore the roles played by dark matter in the evolution of the Universe. In addition it led the successful Intermediate Experimental Vehicle (IXV) project for the ESA, which involved a mini-shuttle that validated atmospheric re-entry technologies in preparation for future manned flights as well as the Space Rider mission. On the ground, it deployed radioastronomy antennae on the Atacama Plateau in Chile as part of the ALMA programme for the European Southern Observatory (ESO).

At the forefront of geolocation and navigation systems

Thales Alenia Space is at the origin of satellite navigation in Europe. For example, as prime contractor for the Egnos programme (the precursor to Galileo), the Company is playing a major role in the programme's development by providing system support for the Galileo constellation. It also participated in the in-orbit validation phase for the first four satellites of the constellation, and is in charge of deploying the ground-based mission segment.

Services for the International Space Station

In manned flights, Thales Alenia Space is a major contributor to the International Space Station (ISS), supplying more than 50% of its pressurised volume. It also supplies all of the vehicle cargo modules whose role is to resupply the ISS: ATV (Automated Transfer Vehicle) for the ESA, Cygnus for NASA, and soon the Orion spacecraft for NASA.

At the cutting-edge of innovation

Thales Alenia Space is developing the *Stratobus*, an autonomous stratospheric airship that is complementary to satellite solutions and is designed for regional telecommunications, surveillance and environmental applications.

Services for European launchers

Thales Alenia Space contributes to the European policy on access to space by supplying the on-board electronics for the Ariane rocket, the safeguard subsystem of the Soyuz launchers in French Guiana and soon that of the Ariane 6.

2.1.1.3.2 Competitive position

The satellite market is dynamic and highly competitive. In the commercial satellite segment, Thales Alenia Space's main competitors are Space Systems/Loral, Airbus Group, Orbital ATK, Boeing and Lockheed Martin. Going forward, the main commercial challenge will be the ability to offer satellite solutions with all-electric propulsion. It is important to note the gradual arrival in the commercial market of new international players (from Russia, China, India, Israel, Japan, etc.) in the fields of telecommunications and observation. The arrival of GAFA (Google, Apple, Facebook, Amazon) has also changed the commercial landscape with the emergence of new needs in terms of mega-constellations. SpaceX in particular intends to set up its own constellation.

The leading competitors in the institutional market in Europe, which is to a large extent dependent on the budgetary situation of governments, are Airbus Group and OHB – which are also sometimes partners on some programmes – as well as Boeing and Lockheed Martin for export contracts.

2.1.1.3.3 Significant events in 2016

In telecommunications, Thales Alenia Space signed a contract with SES to supply the SES-17 satellite, which will be dedicated to the mobility market. This contract demonstrates the confidence that major satellite operators have in the Company's all-electric version of its new product line, Spacebus NEO, and it follows on from the agreement signed between SES and Thales for tailor-made connectivity services over the Americas, optimised for commercial aviation.

In constellations, Thales Alenia Space and LeoSat Enterprise signed the phase B contract for the development of a Low Earth Orbit (LEO) constellation of 80 to 120 satellites, offering very-high-speed broadband, low latency and secure global connectivity.

In the field of Earth observation, Thales Alenia Space signed a contract with the ESA and the European Union to build the C and D models of the Sentinel 3A environmental monitoring satellites as part of the Copernicus programme.

Thales Alenia Space España also signed a contract with the ESA for the preliminary technological development of a thermal infrared imaging instrument.

In the high-resolution radar market, the contract was signed for the final phase of the COSMO-SkyMed Second Generation satellite programme for the Italian space agency and the Italian Ministry of Defence.

Additionally, Thales Alenia Space was chosen by Eumetsat to provide a key subassembly in the ground segment for the Metop polar-orbit meteorological satellites.

In the field of exploration, Thales Alenia Space secured a contract with Orbital ATK to supply nine additional pressurised cargo modules for upcoming cargo resupply missions to the International Space Station (ISS).

In science, the ESA awarded Thales Alenia Space the final contract of the ExoMars programme designed to complete the 2020 mission aimed at landing a rover on the surface of Mars.

In navigation, Thales Alenia Space entered into a contract with the Korean Space Agency (KARI) to supply a satellite navigation system called KASS (Korean Augmentation Satellite System). This is the Company's first export contract in this area based on EGNOS (European Geostationary Navigation Overlay System), which was developed by Thales Alenia Space as prime contractor. The Company was also awarded a contract by the European Commission to provide system engineering and operational support services for the Galileo programme.

In 2016, Thales Alenia Space participated in the following seven launches: three satellites dedicated to the climate and the environment (Jason 3, Sentinel 3A and Sentinel 1B), two Cygnus cargo resupply craft for the International Space Station, one high-resolution observation satellite for Turkey (Gokturk), and the interplanetary probe for the ExoMars programme whose TGO module dedicated to the search for life on Mars is now operational and in orbit.

The development of Thales Alenia Space's European operations continued in 2016, with (i) the acquisition of RUAG's opto electronics division, which led to the creation of Thales Alenia Space Switzerland as well as the opening of white rooms dedicated to the Company's propulsion activities at its Belfast site, and (ii) the agreement signed with SENER to jointly develop optical payloads in Spain.

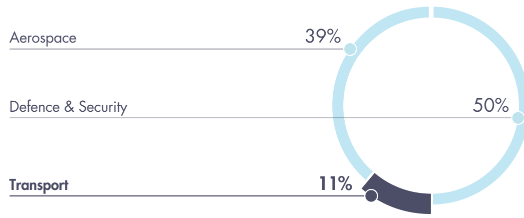
2.1.2 Transport segment

2.1.2.1 Key data

(in € millions)	2016	2015
Order book at 31 December	4,567	4,842
Order intake	1,504	2,826
Sales	1,603	1,519
EBIT [a]	11	(37)
Employees under Group management	6,812	6,289

(a) Non-GAAP indicator. See definition in the Section entitled "Presentation of Financial Information" on page 8.

Sales by segment



2.1.2.2 Ground transportation systems

2.1.2.2.1 General overview

The Group is one of the foremost global players in railway signalling and the control/monitoring of urban Transport networks and mainlines. It also offers ticketing solutions.

In rail signalling, Thales provides systems for conventional and high-speed mainline networks, freight, and urban Transport networks (metros and trams). Thales capitalises on its expertise in the field of critical information systems and cybersecurity to offer Transport network operators integrated and protected solutions to effectively supervise and control their operations. The systems provided by Thales also contribute to increasing the security of its customers' passengers, staff and infrastructure.

2.1.2.2.2 Competitive position

Specialised in intelligent critical systems and services, Thales sets itself apart from its "generalist" competitors, who offer product ranges dominated by rolling stock. The rapid digitisation of railway Transport products, solutions and operations has made Thales a recognised leading player with strong positions in these markets.

In signalling, Thales ranks among the market's leaders, and its main competitors are Siemens, Alstom, Ansaldo STS, Bombardier Transport and China Railway Signal & Communication (CRSC).

2.1.2.2.3 Significant events in 2016

Following on from 2015 – which was a record year in terms of order intake for the urban signalling activity (especially in London, Hong Kong and Doha) – in 2016, Thales signed a major contract for the extension of the Dubai metro's Red Line, in preparation for Expo 2020.

Thales continued to roll out its CBTC™ (Communications-Based Train Control) technology, extending it to more than ten new lines, primarily in Canada, the United States, Chile, Malaysia, Singapore and South Korea.

In China, which represents a significant proportion of the international market for new metro lines, the Thales SAIC Transportation System (TST) joint venture continued to develop its business in 2016. TST won several contracts for new metro lines and line extensions, notably in Nanjing, Ningbo, Jinan, Wuhan and Shanghai. In Autumn 2016, line 1 of the Hefei metro opened several months ahead of schedule, demonstrating TST's capacity to successfully complete the numerous projects it has in its portfolio.

Thales was chosen to supply the signalling system for the extension of the Light Rail Transit (LRT) network in Kaohsiung, Taiwan, having completed Taiwan's Danhai LRT project.

In Egypt, Thales won the contract for the communications, security and passenger information systems control centre for the third phase of line 3 of the Cairo metro.

In **mainline signalling**, Thales continued to roll out its ETCS (European Train Control System) technology in Europe, particularly in Spain, Denmark, Austria, Switzerland, Hungary and Poland. The mainline activity was also underpinned by framework agreements to supply signalling systems in several European countries, including Germany, Austria, Switzerland and Norway.

In Switzerland, the signalling system for the Gothard tunnel – the world's longest railway tunnel – was delivered and brought into service in 2016, one year ahead of schedule. Following this success, which came on the heels of the successful completion of the signalling project for the Lötschberg tunnel, Thales signed another contract for a railway tunnel signalling system, this time for the Ceneri tunnel. This new tunnel is the final section of the European rail corridor connecting the North Sea with the Mediterranean Sea, passing under the Alps. It will link Zurich with Milan in less than three hours compared with five with the current infrastructure.

Thales strengthened its presence in Africa during the year, marking significant milestones in its rollout of electronic interlocking systems in South Africa's Cape region.

In Saudi Arabia, Thales won the **maintenance** contract for the 2,400 km North South Rail (NSR) line linking the north of the country with the south. This contract follows on from the successful deployment of ETCS technology on this line – one of the longest to be equipped with ETCS.

In **ticketing**, Thales successfully pursued the introduction of the Transcity™ solution onto the market, thanks to new projects in India, Holland and Taiwan. In November 2016, the Group announced that it had entered into negotiations with the private equity firm Latour Capital with a view to selling its ticketing business. This project is currently in consultations with employee representative bodies and will be subject to customary closing procedures.

2.1.3 Defence & Security segment

Thales is a long-standing partner to military and security forces around the world, providing support on the ground to increase operational effectiveness as well as ensuring the highest levels of protection.

Thales designs systems for all sectors: land, air, naval, space and cyberspace (digital networks). These systems detect and assess threats, manage information, support rapid command decisions and the implementation of suitable responses (including threat neutralisation), with maximum reliability. Furthermore, by facilitating the coordination of joint or coalition forces' operations, they contribute to the decision-making superiority of these forces.

As new risks emerge, defence alone cannot protect against new threats such as trafficking, terrorism, organised crime, cyber-attacks, natural disasters, etc.

This convergence of defence and security requires new solutions and technologies to be implemented to enable the sharing of existing information and communication systems, as well as the protection of networks and infrastructure.

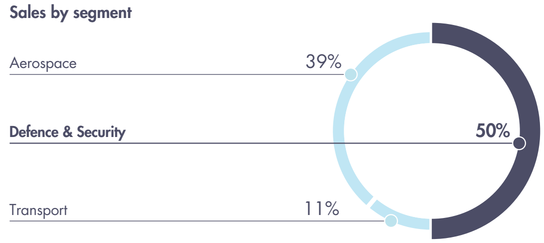
The Defence & Security segment – where the customer base is primarily made up of governments – consolidates Thales' expertise in these various fields, organised around three Global Business Units: Secure Communications and Information Systems (Section 2.1.3.2), Land and Air Systems (Section 2.1.3.3) and Defence Mission Systems (Section 2.1.3.4).

2.1.3.1 Key data

(in € millions)	2016	2015
Order book at 31 December	18,964	17,599
Order intake	9,052	9,701
Sales	7,383	7,079
EBIT [a]	788	760
Employees under Group management	33,282	32,207

(a) Non-GAAP indicator. See definition in the section entitled "Presentation of Financial Information" on page 8.

Sales by segment



2.1.3.2 Secure communications and information systems

2.1.3.2.1 General overview

At the heart of the defence-security continuum, Thales offers interoperable and secure information and telecommunications systems for military forces, security forces and essential operators. These activities, which include radiocommunications, networks, protection systems, critical information systems and cybersecurity, respond to the needs of markets in which the use of new digital technologies such as 4G mobile communications, cryptography, cloud computing and big data are of the utmost importance. Thales is present throughout the value chain, from equipment through to systems and systems of systems, as well as logistical support and related services.

These activities are developed around four segments:

- radiocommunication products: Thales designs radios and embedded and tactical communications systems for all three sectors (land, air and sea), friend or foe identification systems (IFF), radio navigation systems and solutions for electronic communications warfare. The armed forces of more than 50 countries around the world are equipped with Thales solutions. The Group is a major player in the development of interoperable, secure Software-Defined Radio (SDR) solutions and is the prime contractor for the French army's CONTACT programme.
- network and infrastructure systems: ensuring the security, integrity, service continuity and resilience of deployable or mobile infrastructure and telecommunications networks are major challenges for governments, armed forces and "essential" businesses (healthcare, water, energy, communications, etc.). For these needs, Thales designs, builds and operates secure infrastructure networks for its customers, including for theatres of operations (in Afghanistan, Mali and the Central African Republic). In France, the Group operates the information, communication and security systems at the new French Ministry of Defence site ("Balard") in Paris. Thales has also been selected to upgrade the French Ministry of Defence's resilient communications network as part of its DESCARTES programme, as well as its transmission programmes related to nuclear deterrence.
- protection systems: Thales develops information, command and intelligence systems for armed forces (military functions known as C4ISR – Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance). The Group also responds to the growing security needs of nations (identity management, border control and surveillance systems), of cities (urban security, smart cities, crisis management, security for large events) and of critical infrastructure (protection of airports, public transportation, sensitive sites and energy sites). These systems are intended to facilitate rapid decision-making for operators as well as the coordination of the various players in command and control centres or in mobile situations, by providing users with relevant, clear and immediate information about their environment.
- critical information systems and cybersecurity: Thales is one of the world leaders in business data protection and a European leader in cybersecurity. Through its network, cloud and mobile equipment protection products and data security solutions, Thales offers solutions to protect the information systems and critical data of its civilian and military customers. Thales also helps its customers to detect and prevent cyberattacks by devising secure architectures from the design stage. Thales oversees these architectures and ensures that they are kept in secure working order. Finally, the Group secures the digital transformation programmes of companies and governments alike, to ensure that they benefit from technological advances in mobility, cloud computing and collaborative models while ensuring the protection of their critical data.

2.1.3.2.2 Competitive position

Thales has a variety of competitors depending on the business and market concerned.

In defence applications – radiocommunications, networks, and command and control – the main competitors are predominantly American: Harris, General Dynamics, Raytheon and Rockwell Collins. Israel-based Elbit Systems is also a competitor in the area of integrated command and communication solutions. In Europe, the Group's main competitors are Airbus Group and – particularly in the radiocommunications sector – Rhode & Schwarz, Leonardo and Aselsan.

In security, Thales' competitors are primarily coming from aeronautic and defence sector (Boeing, Northrop Grumman, Honeywell, Airbus Group, etc.) or from the equipment sector (such as Siemens and Johnson-Tyco), services (INEO, etc.) and information systems (including IBM, Atos and Capgemini). The latter are also competitors of Thales in critical information systems.

Finally, in cybersecurity, Thales is in competition with companies such as RSA and Gemalto in the civil arena and BAE Systems, Ultra Electronics, Airbus Group and Secunet in defence, and more recently, Atos.

2.1.3.2.3 Significant events in 2016

In radiocommunications products, Thales launched SYNAPS, a new broadband tactical software-defined radio family for collaborative combat designed for all branches of the armed forces – land, air and sea. SYNAPS is based on the radio technology software developed within the framework of the CONTACT program, which will deliver from 2019, the first radio solutions software for the French armed forces.

In exports, Thales secured several major tactical radio orders in the Middle East, notably in the United Arab Emirates, Saudi Arabia, the Sultanate of Oman and Egypt.

In aeronautics, business was buoyant, driven by sales of the Rafale fighter jet. The Group received the production order for the CNI suite (Communications, Navigation, Identification) for the Rafale sold to Qatar, and a new contract for the supply of 36 Rafale was signed with India.

In the United Kingdom, Thales was awarded a contract to perform a mid-life update to the communications system for the Royal Navy Type 23 frigate fleet. Thales is the Royal Navy's main supplier of communication systems and the new solution it has offered will provide optimised support over the long term.

In France, Thales has been selected to equip the electronic warfare solution for the light aircraft equipped for surveillance and reconnaissance missions, as well as fit the Spy'Ranger mini surveillance and reconnaissance UAVs with a tactical data terminal that can transmit high-definition images via broadband.

Thales also won a contract to provide the Japan Ground Self Defence Force (JGSDF) with friend or foe identification (IFF) systems. These systems – which comply with NATO's most recent "Mode 5" standard – will be used for all of Japan's man-portable air-defence system (MANPADS) platforms.

In network and infrastructure systems, during 2016 Thales launched its new consulting offer for the infrastructure, operation and transformation of critical networks for essential operators.

In France, Thales was awarded two key contracts by the French defence procurement agency (DGA) as part of the DESCARTES programme, covering the upgrade of the SOCRATE resilient network and deployment of the POINCARÉ network to interconnect Ministry of Defence sites in mainland France and overseas.

Following the contract won by the Thales Alenia Space and Airbus Defence and Space consortium to build and deliver the military satellite communications system, Comsat NG, the Group is now the security expert for the project's space segment.

Thales also delivered the first ASTRIDE ground stations to the French army, enabling communications between command, mobile and tactical positions.

In terms of export contracts, Thales' contract with a Middle Eastern country for the operation and maintenance of a satellite communication system was renewed in 2016. In addition, NATO and the Norwegian Navy selected Thales to supply Modems 21 – a military modem system that protects satellite communications against jamming, interference and intrusion.

Also in 2016, Thales brought together nine players (including seven SMEs) to create the Fed4PMR consortium to develop a future high-data-rate 4G/LTE communication network for security agencies and emergency services.

Thales' protection systems addresses both the military and civilian markets.

In critical infrastructures, Thales and Unica signed a 15-year contract with the Dutch Ministry of Defence to install, manage and service a new security and surveillance system at 170 locations in the Netherlands.

In critical information systems and cybersecurity, Thales opened a new Cybersecurity Operations Centre (SOC) in Hong Kong to cover the Asia-Pacific market, rounding out the network of SOCs already in place in France, the United Kingdom and the Netherlands.

In the Netherlands, the Defence Cyber Command (DCC) and Thales entered into a contract to set up a virtual cybersecurity training and testing facility, known as "Cyber Range".

During the year, the Group completed its acquisition of Vormetric, a leading provider of data protection solutions in physical, virtual and cloud infrastructures. This investment reinforces the portfolio of solutions offered by Thales e-Security – a major player in hardware security modules (HSM) – and has created a global leader in corporate data security.

Thales secured several key contracts in this field during 2016, including with Salesforce for setting up a pilot programme enabling customers to keep control over the encryption keys of their sensitive data, and with Samsung for deploying data security technologies on its ARTIK™ "Internet of things" platform.

Following the trend of other large corporations in recent years, the ENGIE energy group has chosen Thales to help it reinforce the security of its IT infrastructures.

Meanwhile, in France, the Group submitted its cyberattack detection probe for certification from the French agency for information systems security (ANSSI). This digital confidence solution meets the requirements of the French military programming law which all essential operators will have to comply with by 2019.

2.1.3.3 Land and air systems

2.1.3.3.1 General overview

Thales systems and equipment help to make the airspace safer and more secure. In civil air traffic control, Thales' portfolio ranges from conventional navigational aids to radar and air traffic control centres, surveillance systems, satellite navigation and airport management solutions.

Thales plays a key role as architect and integrator for future air traffic management systems, mainly through initiatives such as ICAO's[1] Aviation System Block Upgrades in Europe and the NextGen programme in the United States. Thales remains the leading Industrial Partner of the SESAR[2] project in Europe.

Across all continents, Thales offers one of the broadest lines of civil and military ground-based and naval radars on the market, for surveillance, air traffic management and fire control. 1,300 Thales radars are in service across the world and the Group equips over 70 countries with civil radars and more than 45 countries with military radars.

In the military domain, Thales is specialized in air operations command and control systems and air defence radar systems, ensuring the protection and security of forces and resources deployed in over 45 countries. As a mission systems integrator, Thales is proud to contribute actively to major military programs in the world such as ACCS for NATO, SCCOA for France and FLORAKO for Switzerland. Thales excels in the fields of system integration, complex program management, real time and non-real time software, human-machine interfaces and service oriented architecture.

Thales owns 50% of Thales Raytheon Systems, a company that specializes in Integrated Air and Ballistic Missile Defence (IAMD) Command and Control (C2) Systems. Thales Raytheon Systems provides NATO and the NATO Nations with Integrated Air and Missile Defence capability for the NATO Air Command and Control System (ACCS) Programme.

Thales also offers a wide range of weapon systems for medium-range (SAMP/T), short-range (Crotale and RAPIDDefender) and very short-range markets (RAPIDFire cannon and RAPIDRanger missile system). The Group specialises in multirole weapon systems based on the new lightweight multirole missile (LMM) family, which includes a guided, free-fall variant.

In the field of optronics, the combination of optical and electronic systems, Thales designs and manufactures components and systems for day and night surveillance, reconnaissance, protection, threat detection and target acquisition on all types of land, sea (surface and subsurface) or air platforms for defence and security customers worldwide. Thales' expertise in optics is also applicable to the commercial fields of high end zoom lenses for cinema and for ultra-high power scientific and industrial lasers.

Thales designs, manufactures and supports armoured military vehicles including the Hawkei and the Bushmaster. Thales provides integrated capability solutions at all levels of the value chain, from subsystem supplier to system integrator; mission systems design authority and prime contractor. The open architecture systems of vehicles provides highly standardised "plug and play" capability for on-board sub-systems and products, increasing vehicle capability and performance whilst reducing size, weight and operator workload and whole life system costs.

2.1.3.3.2 Competitive position

Thales' expertise in all aspects of air traffic control (automation, navigation, surveillance and satellite communication) is widely recognised by the world's civil aviation authorities. With over 40% of the world's airspace controlled by TopSky ATC, Thales is at the forefront of air traffic control systems and civilian radars.

Other major players in the civil sector are the US companies Leidos and Raytheon, European companies Indra and Leonardo (Selex), and in some niche areas, Saab, Frequentis and Harris.

In the military segment, Thales' main competitors are the US companies Leidos, Northrop Grumman, and Raytheon, and Leonardo, Airbus Group, BAE Systems, Indra and Saab in Europe.

Thales is one of Europe's leading suppliers of medium-range, short-range and very short-range missiles and weapon systems. Other principal players in this field in Europe (MBDA) and the United States (Raytheon and Leidos) are also major customers of Thales' missile electronics and key partners in weapon systems.

Thales is Europe's leading defence optronics supplier facing competition in this segment from US suppliers (Raytheon, Leidos and Flir Systems) and from Israeli suppliers (primarily Elbit). The protected vehicles systems market segment is dominated, on an international level, by BAE Systems, General Dynamics, Rheinmetall, Krauss-Maffei Wegmann and Nexter, with Thales operating in Europe as an independent integrator both for its own and other suppliers' equipment within complex mission systems.

2.1.3.3.3 Significant events in 2016

In 2016, the Air Traffic Management (ATM) business line secured a variety of contracts across its full portfolio of technologies. Key Air Traffic Control (ATC) centre contracts were secured and delivered in Africa, Asia, Central Asia, Latin America, the Middle East and Europe. The contract to automate the terminal manoeuvring area, area control airspace and operations at Beijing Capital International Airport – the second busiest airport in the world – and the new Beijing Daxing International Airport along with a contract for primary and secondary ATC radars for Beijing are notable examples. Contracts for hundreds of Navigation and Surveillance systems were also secured in 2016 including three next generation Deployable-Instrument Landing Systems for the US Air Force, a significant milestone in this innovative navigation aid contract. Furthermore, underscoring Thales as one of the leaders in civil and military ATC interoperability, the Group started to implement a contract to deploy civil and air defence radars and automation systems to modernise and integrate Bolivia's air defence and civil ATM operations.

In the area of surface radars, 2016 saw a number of Thales product launches:

- a new ultra-tactical version of the Ground Master 60 with a "search on the move" capacity was launched at Eurosatory;
- the NS200 naval radar bringing multi-mission capabilities to naval platforms was introduced at Euronaval;
- the APAR Block2 was launched at CANSEC.

In terms of business successes, the Group continued to deliver a significant number of its Ground Master radars to several air forces worldwide. In the naval domain, Thales was selected for its Sea Fire control radar by the French defence procurement agency for the future intermediate size frigates. Developed with the support of the French authorities, the Sea Fire is a fully solid-state multi-function radar with a four-panel phrased array antenna. It meets the requirements of a broad range of missions, from ship self-defence to extended air defence, and can deploy ASTER missiles. The Sea Fire is designed to perform in the complex conditions of the littoral or in heavily jammed environments to counter conventional, asymmetric or emerging air and surface threats. In the Netherlands, Thales was successful in detecting and tracking a satellite at a range of 2,000 km with its SMART-L EWC demonstrator. SMART-S Mk2 proved itself to be the most successful naval radar world-wide with over 70 radars under contract – the 50th having been delivered in October 2016 to the customer.

(1) International Civil Aviation Organization (ICAO).
(2) Single European Sky ATM Research.

In the area of advanced weapon systems, Italy joined the "Block 1 New Technology" programme (B1NT), launched in December 2015 by the French defence procurement agency (DGA). In continuity with the on-going contract underway in France, Thales will deliver, in cooperation with the Italian industry, a new version of the fire control function and will develop a new missile seeker. Based on the most advanced concept of open architecture, this new fire control function ensures durability and will provide the SAMP/T with a very high level of performance, operational availability and flexibility to take into account the evolution of air and ballistic threats. As part of the FLORAKO programme modernisation, Armasuisse has awarded Thales a contract to upgrade the Master radars for the Swiss Air Force. This contract, which amounts to €74 million, will be the main order within the broader FLORAKO radars life extension project approved by the Swiss government in 2016. This is intended to extend the lifespan of the radars and to ensure operational excellence until 2030.

In the field of armoured vehicles, 2016 has been a year of delivery for Thales compared to 2015 which was more eventful contractually with the contract for 1,100 Hawkei 4x4 vehicles, which provide mobility and protection for soldiers in operation, for the Australian Defence forces. The new generation of the 7-tonne Hawkei Protected Mobility Vehicle was on display at Land Forces Conference 2016 and highlighted the Integral Computing System (ICS) with Generic Vehicle Architecture (GVA).

In 2016, several export optronics contracts were won, in particular in India, Middle East and Africa. The activity also benefited from the Rafale export sales in India, and from export sales of several armoured platform partners. A new market segment was developed with the Spy'Ranger, a mini-reconnaissance UAV for tactical missions, such as offensive reconnaissance or target observation. Selected by the French defence procurement agency, the Spy'Ranger will provide French armed forces with protected access to real-time day and night extended battlefield imagery.

2.1.3.4 Defence mission systems

2.1.3.4.1 General overview

Thales manufactures electronic systems for airborne combat, intelligence, surveillance and reconnaissance, as well as naval surface and underwater combat systems.

For airborne combat missions, Thales produces, in cooperation with Dassault Aviation, radar systems and equipment for the Rafale and the Mirage 2000 fighter aircraft and for future combat unmanned aerial vehicles (UAVs), as well as electronic warfare radar systems, designed to detect threats and protect platforms.

For intelligence, surveillance and reconnaissance missions, Thales designs naval, ground and air patrol and surveillance solutions, including a range of electromagnetic-based information-gathering sensors. These systems – which are installed on aircraft or naval platforms – incorporate surveillance radars, acoustic sub-systems and measurement and data linking equipment. Thales also designs complete UAV systems with intelligence, surveillance, reconnaissance and target acquisition capabilities.

In surface naval warfare, Thales offers comprehensive combat systems that integrate on-board sensors (radar, sonar, electronic warfare, infrared sensors, etc.), weapon systems and communications and command equipment. Thales also has naval platform engineering and support capabilities.

In underwater warfare, the Group offers a broad range of products including submarine sonar suites, hull-mounted and towed array sonar for surface ships, anti-mine systems, including the use of unmanned underwater vehicles, as well as acoustic sensors for submarine guidance.

2.1.3.4.2 Competitive position

In electronic combat systems, Thales is one of the leading European players, competing with BAE Systems, Leonardo, and the US companies Raytheon, Lockheed Martin and Northrop Grumman. In intelligence, surveillance and reconnaissance systems, its main competitors are Airbus Group, Elbit and General Atomics.

In surface naval systems, Thales is one of the principal European players, alongside Leonardo, BAE and Saab, and competes with Lockheed Martin in the United States. In underwater warfare, Thales is one of Europe's main players along with Atlas Elektronik and Ultra Electronics, and is in competition with Lockheed Martin, Raytheon and L3 in the United States.

2.1.3.4.3 Significant events in 2016

Electronic combat systems

As part of the Anglo-French feasibility study for a Future Combat Air System (FCAS), in March 2016 the French and UK governments announced that they were beginning the joint development of prototypes for combat UAVs that will be operational by 2025. In mid-2016, the Rafale team celebrated the delivery of the 150th Rafale fighter aircraft to the French armed forces. And in late September, the Indian Ministry of Defence signed a contract to purchase 36 Rafale, with delivery of the first aircraft scheduled for 2019 and production planned to last until 2022.

Airborne surveillance and intelligence systems

In April, the Qatar armed forces selected the Thales Searchmaster® multirole airborne surveillance radar to equip their optionally piloted vehicles – aircraft (OPV-A) for their land and naval surveillance requirements. Also in April, Thales signed a contract with the Malaysian Maritime Enforcement Agency to deliver six Fulmar Unmanned Air Systems (UAS) to be installed on Malaysia's new generation patrol crafts. The maritime design of Fulmar allows the aircraft to take-off and land whilst the ship is in motion. In June, the French defence procurement agency (DGA) ordered two light aircraft equipped for surveillance and reconnaissance missions. The delivery of the first plane is scheduled for end-2018 and the second for 2019. Also in June, the UK Ministry of Defence awarded Thales a new support contract for the Watchkeeper UAS, covering technical support and training for pilots, mission system operators and maintenance staff.

Surface naval systems

In March, the Royal Thai Navy placed an order with Thales to equip two Krabi patrol vessels with an integrated solution that includes the TACTICOS combat management system, and in September a contract was signed with the South Korean Navy to upgrade all of the Thales systems on board its KDX destroyers. At Euronaval 2016 in October, Thales presented NS200, its latest S-band radar with multi-mission capabilities designed for a wide range of naval ships up to destroyers.

Underwater warfare systems

In February, the Estonian Ministry of Defence selected Thales as prime contractor for the upgrade of three Sandown Class Single Role Minehunters. The upgrade mission package includes the 2193 wideband hull mounted sonar and a fleet mine warfare centre. In April, the Royal Thai Navy ordered two 2022 Mk3 sonars as part of an upgrade of two Bang Rachan class minehunters. In October, stage two of the Anglo-French Maritime Mine Counter Measures (MMCM) programme was announced. This second stage is dedicated to the development and supply of two unmanned mine clearance vehicles – one for France and one for the United Kingdom. This new stage manufactures and experiments the future mine countermeasures capabilities (SLAM-F future mine countermeasures system). Also during the year, the Royal Australian Navy signed a contract for upgrading the Scylla sonars for its Collins submarines.

2.2 RESEARCH AND INNOVATION

Thales needs to be able to offer increasingly sophisticated technologies, particularly in the detection, analysis and decision-making fields, in order to design and develop critical information systems. These innovative solutions serve customers in the aeronautics, space, ground transportation, defence and security markets.

Thales bases its vision of innovation on openness and partnership across multiple dimensions:

- a technological dimension, by collaborating with academic laboratories;
- an entrepreneurial dimension by forging closer ties with SMEs and start-ups;
- a "market" dimension, by jointly innovating with customers and their ecosystems to create new usages.

2.2.1 Research and development, the key to competitiveness and growth

Some 25,000 Thales employees, over 70% of them engineers, are involved in the Group's technical operations, ranging from research to engineering. In 2016, Thales spent €741 million (approximately 5% of sales) purely on self-funded R&D, an essential lever to remain competitive.

A significant portion of this budget is devoted to upstream research, conducted both at Thales Research & Technology (TRT) laboratories and the Group's centres of expertise, in order to develop:

- new technologies;
- new system and product concepts;
- new engineering tools and methods for critical information systems.

2.2.2 Four key technical domains

Governance of research and development for key technologies is split into four domains:

- hardware technologies: electronics, electromagnetism, optronics, acoustics, radiofrequency techniques and management of thermal constraints;
- software technology: processing computers, real-time on-board systems, distributed systems, service-oriented architectures, model-driven engineering, and cybersecurity;
- information and cognitive sciences: data fusion, data mining, autonomous systems, synthetic environments, and human factors;
- systems: focused on systems design architecture, this area provides support for methodology, processes and expertise.

FOCUS 1

Active electronic scanning antennae come of age

Active electronic scanning antennae not only give radars extreme agility, they also enable them to simultaneously track multiple targets. Thales has already produced this type of antenna for all environments – land, sea, air and space – with the most well-known being the one used for the Rafale fighter aircraft.

Thanks to the innovations developed since 2010 by the Group's R&D teams, it can now offer all of the benefits of these new antennae at no extra cost compared with conventional mechanical antennae. Both architectural and technological advances have enabled the Group to fine-tune a "tiled" approach, whereby each of the thousands of active transmitters-receivers making up the active antenna is as compact as a small electronic component.

Available in two versions depending on the density level of the beamed energy, this concept has delivered excellent radioelectric performances. The Group has the necessary manufacturing capabilities in place to mass produce this new generation of active antennae in a cost-effective way.

2.2.3 Thales at the heart of innovation ecosystems

Wherever it is located, Thales seeks to build partnerships within innovation ecosystems, with academic partners, design centres, innovative businesses and industrial groups for joint innovation on applications, business models and technologies.

To develop the technologies it needs, the Group relies heavily on cooperation between its research teams and the academic world. Thales Research & Technology (TRT), an international network of corporate laboratories, is responsible for building relationships with academic partners.

TRT has facilities in France, the United Kingdom, the Netherlands, Singapore and Canada. In France, the Palaiseau laboratory, located on the École Polytechnique campus, is heavily involved in the programme to build up the world-class science and technology complex in Saclay.

Similarly, Thales' research centre in the Netherlands is located at Delft University, while the Singapore centre has partnered with Nanyang Technological University and with France's national research institute CNRS, in one of the few joint international research units with an industrial partner.

In France, Thales has numerous strategic partnerships, for example, with the CNRS, École Polytechnique, Telecom Paris Tech, and Université Pierre et Marie Curie (UPMC-Paris VI), whose partnership was renewed in 2016 for a further five years.

The most advanced form of partnership is the joint laboratory, such as those operated by Thales with the CNRS for physics, with CEA-LETI as part of the III-V Lab (an EIG whose members are Alcatel Lucent SA, Thales and CEA-LETI), with CEA-LIST for artificial vision and the implementation of formal approaches in critical software, and with UPMC in data mining, etc.

Thales is positioned as a major player in numerous high-tech clusters (including Systematic Paris-Région, Aerospace Valley in southwest France, the Maritime clusters in Brittany and Provence-Alpes-Côte d'Azur, the *Images et Réseaux* (images and networks) telecommunications cluster in Brittany, etc.) and the IRT (*Institut de Recherche Technologique Saint-Exupéry*), of which it is a founding member.

In the United Kingdom, TRT has direct links with several major Universities through its R&T centre, including Cambridge, Bristol and Southampton. Thales is an active member of many collaborative partnerships in the United Kingdom: the Centre for Secure Information Technologies (CSIT), based at Queen's University Belfast; the Centre for Smart Infrastructure and Construction (CSIC) and the Institute for Manufacturing (IfM), based at Cambridge University; the UK Defence Growth Partnership (DGP); the mobile Virtual Centre of Excellence (mVCE), with numerous Universities; the Defence Academic Pathways (DAP) and the UK Catapults, particularly the Digital Catapult where Thales has contributed to the emergent IoT defining the security implications of pervasive digital Sensors and their associated data. Thales participates in a number of key UK associations and councils to influence UK government policies in Science, Technology and Innovation: the Engineering & Physical Science Research Council (EPSRC), the Confederation of British Industry (CBI) Inter Company Academic Relations Group (ICARG) and the National Centre for Universities & Business (NCUB) Science & Innovation.

In Canada, the Group regularly works with research networks and institutions such as CRIAQ (*Consortium de Recherche et Innovation en Aérospatiale au Québec*), the University of Toronto, McGill University, the *École Polytechnique de Montréal* and Laval University, with which Thales has entered into an agreement for a joint research unit in urban sciences. In 2016, Thales joined the IVADO – an institute for data valorisation that brings together industry professionals and academic researchers to develop cutting-edge expertise in big data which has significant value-creation potential for numerous business sectors.

In the United States, Thales has forged links with innovation ecosystems in Boston (centred on MIT) and the Silicon Valley.

In emerging countries, the Group is developing its R&D activities by establishing innovation platforms locally, using the tried and tested principles of joint innovation with local players and, in so doing, building long-term, trust-based relationships.

In 2016, Thales continued to step up its work with start-ups. For example, during the year it increased its investment in Starburst – a start-up incubator specialised in aerospace, of which Thales is a founding member – to help it expand its activities in North America and Germany. In just two years, over 300 start-ups have been analysed and 25 real-life case studies have been carried out with the Group's business units.

Training also forms part of this overall strategy of linking the Group with the academic world. The Group supports around 200 Ph.D. students worldwide. They work on subjects directly connected with the technical issues facing Thales, which therefore reinforces its appeal to young scientists. Thales also supports ten teaching chairs in subjects that are in line with its technical priorities.

FOCUS 2

Sentry of the seas

In Autumn 2016, Thales unveiled its Autonomous Underwater and Surface System (AUSS), which represents a veritable breakthrough in terms of both concept and technology in the field of maritime surveillance. In hostile and dangerous environments, autonomous systems constitute the state-of-the-art solution that naval forces need.

AUSS is a hybrid unmanned system based on a totally new propulsion concept. Navigating in total security and with agility, it is capable of operating both above and below the surface and can avoid obstacles. It is designed for missions including naval surveillance, intelligence gathering on the surface, maritime counter-terrorism and mine countermeasures.

In order to complete the development of AUSS in a record three years, Thales teamed up with 18 French SMEs to create a veritable innovation ecosystem in an integrated laboratory that was kept secret. The multidisciplinary team worked in "start-up" mode from the design phase right through to the sea trials.

2.2.4 A dynamic approach to intellectual property management

Thales supports its R&D activities with a dynamic approach to intellectual property management.

The Group filed more than 300 new patent applications in 2016. The continued large number of patent applications in recent years reflects Thales' commitment to innovation and its ability to translate research results into competitive advantages. In 2016, Thales was once again included in the Top 100 Global Innovators ranking compiled by Clarivate Analytics (formerly Thomson Reuters Intellectual Property & Science), with the Group standing out for the volume, success and influence of its patents. This achievement underlines Thales' commitment to innovating, protecting its ideas and bringing its inventions to market. Thales has been included in this prestigious ranking four times since 2011, which testifies to the importance the Group places on implementing an active and ambitious intellectual property management strategy.

The Thales portfolio, which includes more than 15,000 patents and patent applications, is regularly adapted to operational requirements, particularly to protect Thales' market share.

FOCUS 3

In the field of In-Flight Entertainment and Connectivity, Thales is investing in evolutionary innovation, with new connected products, applications and services to answer strong market demand for Internet-enabled high quality in-flight entertainment and streamlined airline operations, as well as in disruptive approaches to accompany Thales' business in its digital transformation.

Building on its experience with the 2014 LiveTV acquisition, Thales has secured strategic partnerships with global and regional satellite connectivity providers, allowing its airline customers all around the world to offer connectivity services to their passengers and take advantage of this capability to develop new data-oriented services.

With a strong investment in its airline-focused secured cloud platform, InFlyt Cloud, Thales can now offer valuable services to help them develop their brand towards their passengers and offer a truly personalised in-flight experience.

2.3 RELATIONS BETWEEN THALES AND ITS SUBSIDIARIES

2.3.1 Simplified organisational chart at 31 December 2016

This simplified organisational chart includes fully consolidated companies that account for more than 0.5% of consolidated sales, in the main countries in which the Group operates.

The companies consolidated under the equity method are not included in this chart (with the exception of DCNS).

2

2.3.2 Role of the parent company within the Group

The parent company acts as a holding company for the Group:

- it holds shares in the Group's major subsidiaries;
- it manages central functions such as Group strategy, trading policy, legal and financial policy, operational monitoring, human resources policy and communications;
- it provides subsidiaries with specialist assistance, including legal, tax and financial expertise, for which the subsidiaries pay a fee;
- it provides financing, cash pooling and, where necessary, guarantees.

In addition to these functions, the parent company conducts its own research, described beginning on pages 112 *et seq.*

A list of the main consolidated companies can be found below.

2.3.3 Financial flows between the parent company and its subsidiaries

The parent company receives dividends from its subsidiaries, as approved by their respective General Meetings of Shareholders, and in accordance with the applicable legislation and regulations in their countries of operation.

In addition to these dividends and the payment of fees for shared services, the main financial flows between the Thales parent company and its subsidiaries relate to cash pooling.

As a rule, the cash surpluses of subsidiaries are transferred to the parent company under a centralisation system known as cash pooling. In return, the parent company meets the cash flow requirements of the subsidiaries. The parent company conducts operations in financial markets to arrange the necessary investments and loans, in the context of cash pooling, to meet its own requirements and those of its subsidiaries. Except in special cases, this system applies to all subsidiaries in which Thales has majority control.

2.4 INFORMATION ABOUT MAJOR OPERATIONAL SUBSIDIARIES AND MANUFACTURING SITES

2.4.1 List of main consolidated companies

The materiality criteria used to prepare these tables have also been applied to the list of the main consolidated companies in Note 17 to the consolidated financial statements.

Company name	Country	% of capital held by Thales	% of voting rights held
1. Controlled companies (fully consolidated)			
TDA Armements SAS	France	100%	100%
Thales Alenia Space SAS	France	67%	67%
Thales Alenia Space Italia SpA	Italy	67%	67%
Thales Air Systems SAS	France	100%	100%
Thales Australia Ltd	Australia	100%	100%
Thales Austria GmbH	Austria	100%	100%
Thales Avionics SAS	France	100%	100%
Thales Avionics Inc	United States	100%	100%
Thales Avionics Electrical Systems SAS	France	100%	100%
Thales Canada Inc	Canada	100%	100%
Thales Communications & Security SAS	France	100%	100%
Thales Defence & Security Inc	United States	100%	100%
Thales Electronic Systems GmbH	Germany	100%	100%
Thales e-Security, Inc	United States	100%	100%
Thales Espana Grp SAU	Spain	100%	100%
Thales Electron Devices SAS	France	100%	100%
Thales Italia SpA	Italy	100%	100%
Thales Nederland BV	Netherlands	99%	99%
Thales Norway AS	Norway	100%	100%
Thales Optronique SAS	France	100%	100%
Thales Polska Sp. z.o.o.	Poland	100%	100%
Thales Transportation Systems GmbH	Germany	100%	100%
Thales Ground Transportation Systems UK Ltd	United Kingdom	100%	100%
Thales Rail Signalling Solutions AG	Switzerland	100%	100%
Thales Air Operations SAS	France	100%	100%
Thales Security Solutions & Services Company	Saudi Arabia	100%	100%
Thales Services SAS	France	100%	100%
Thales Solutions Asia Pte Ltd	Singapore	100%	100%
Thales Systèmes Aéroportés SAS	France	100%	100%
Thales Transport & Security (Hong Kong) Ltd	Hong Kong	100%	100%
Thales Transport & Security Ltd	United Kingdom	100%	100%
Thales Training & Simulation SAS	France	100%	100%
Trixell SAS	France	51%	51%
Thales Underwater Systems SAS	France	100%	100%
Thales UK Ltd	United Kingdom	100%	100%

Company name	Country	% of capital held by Thales	% of voting rights held
2. Joint ventures (under equity method)			
Thales-Raytheon Systems Air and Missile Defense Command and Control SAS	France	50%	50%
Citylink Telecommunications Holding Ltd	United Kingdom	33%	33%
DCNS	France	35%	35%
Diehl Aerospace GmbH	Germany	49%	49%
Sofradir SAS	France	50%	50%
3. Associated companies (under equity method)			
Aviation Communications & Surveillance Systems	United States	30%	30%
Air Tanker Holdings Ltd	United Kingdom	13%	13%
Cloudwatt	France	22%	22%
Elettronica SpA	Italy	33%	33%
ESG Elektroniksystem und Logistik GmbH	Germany	30%	30%
Telespazio SpA	Italy	33%	33%

2.4.2 Major manufacturing sites

As of the end of 2016, there were 15 sites employing more than 1,000 staff.

At 31 December 2016	Headcount	Owned	Size (m^2)
France			
Bordeaux (South-west)	2,269	Leased (Le Haillan), and Owned (Pessac)	59,000
Brest (Brittany)	1,414	Leased	56,000
Cannes (Provence)	2,049	Owned-leased	84,000
Cholet (Pays de la Loire)	1,372	Leased	53,000
Gennevilliers (Île-de-France)	3,576	Leased	90,000
Élancourt (Île-de-France)	3,253	Leased	104,000
Massy (Île-de-France)	1,093	Leased	26,000
Rungis (Île-de-France)	1,128	Leased	23,000
Toulouse (South-west)	3,987	Owned-leased	142,000
Vélizy (Île-de-France)	3,894	Leased	125,000
United Kingdom			
Crawley	1,705	Leased	26,130
Netherlands			
Hengelo	1,152	Owned	87,000
Australia			
Sydney	1,151	Leased	84,327
Germany			
Stuttgart	1,519	Leased	59,000
United States			
Irvine	1,060	Leased	30,440