CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2018

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Key figures

(in € millions)	2018	2017
Revenue (*)	**43,519**	**40,248**
Revenue generated in France (*)	24,768	23,680
% of revenue (*)	*56.9%*	*58.8%*
Revenue generated outside France (*)	18,751	16,568
% of revenue (*)	*43.1%*	*41.2%*
Operating income from ordinary activities	4,997	4,607
% of revenue (*)	*11.5%*	*11.4%*
Recurring operating income	4,924	4,592
Operating income	4,920	4,550
Net income attributable to owners of the parent	**2,983**	**2,747**
% of revenue (*)	*6.9%*	*6.8%*
Diluted earnings per share *(in €)*	5.32	4.91
Net income attributable to owners of the parent excluding non-recurring tax effects (**)	2,983	2,737
Diluted earnings per share excluding non-recurring tax effects *(in €)* (**)	5.32	4.89
Dividend per share *(in €)*	2.67 (***)	2.45
Cash flows from operations before tax and financing costs	**6,898**	**6,500**
Operating investments (net of disposals)	(986)	(745)
Growth investments in concessions and PPPs	(977)	(1,010)
Free cash flow (after investments)	**3,179**	**2,525**
Equity including non-controlling interests	19,818	18,383
Net financial debt	(15,554)	(14,001)

(*) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.

(**) In 2017, net non-recurring tax effects on net income attributable to owners of the parent had a positive impact of €10 million. Those effects resulted from the following tax measures adopted in 2018 Finance Act and 2017 Amended Finance Act in France: the surtax equal to 30% of corporate income tax, the annulment of the 3% dividend tax and the gradual decrease in the corporate income tax rate in France from 33.33% to 25% in 2022, leading to a revaluation of the Group's deferred tax.

(***) Dividend proposed to the Shareholders' General Meeting of 17 April 2019, including an interim dividend of €0.75 per share paid on 8 November 2018.

From 1 January 2018, the Group has applied IFRS 15 “Revenue from Contracts with Customers” and IFRS 9 “Financial instruments” according to the “simplified retrospective” approach, recognising the cumulative effects of first-time adoption on opening equity at 1 January 2018. As a result, the 2017 figures presented for comparison purposes have not been adjusted. The impacts of this first-time adoption are presented in Note A.4.

Consolidated income statement for the period

(in € millions)	Notes	2018	2017
Revenue (*)	**1-2**	**43,519**	**40,248**
Concession subsidiaries' revenue derived from works carried out by non-Group companies		633	629
Total revenue		44,152	40,876
Revenue from ancillary activities	4	202	200
Operating expenses	4	(39,357)	(36,468)
Operating income from ordinary activities	**1-4**	**4,997**	**4,607**
Share-based payments (IFRS 2)	28	(206)	(163)
Profit/(loss) of companies accounted for under the equity method	4-10	88	146
Other recurring operating items		45	-
Recurring operating income	**4**	**4,924**	**4,592**
Non-recurring operating items	4	(4)	(41)
Operating income	**4**	**4,920**	**4,550**
Cost of gross financial debt		(491)	(537)
Financial income from cash investments		29	56
Cost of net financial debt	**5**	**(462)**	**(481)**
Other financial income and expense	6	17	40
Income tax expense	7	(1,418)	(1,271)
of which non-recurring tax effects (**)		-	44
Net income		**3,057**	**2,837**
Net income attributable to non-controlling interests		74	90
Net income attributable to owners of the parent (**)		**2,983**	**2,747**
Basic earnings per share *(in €) (**)*	8	5.38	4.95
Diluted earnings per share *(in €) (**)*	8	5.32	4.91

Net income attributable to owners of the parent excluding non-recurring tax effects (**)	**2,983**	**2,737**
Diluted earnings per share excluding non-recurring tax effects *(in €) (**)*	5.32	4.89

(*) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.
(**) In 2017, the net impact of non-recurring tax effects was a €44 million positive effect on the consolidated tax charge and a €10 million positive impact on net income attributable to owners of the parent. That impact resulted from the following tax measures adopted 2018 Finance Act and 2017 Amended Finance Act in France: the surtax equal to 30% of corporate income tax, the annulment of the 3% dividend tax and the gradual decrease in the corporate income tax rate in France from 33.33% to 25% in 2022, leading to a revaluation of the Group's deferred tax.

Consolidated comprehensive income statement for the period

(in € millions)	2018 Attributable to owners of the parent	2018 Attributable to non-controlling interests	2018 Total	2017 Attributable to owners of the parent	2017 Attributable to non-controlling interests	2017 Total
Net income	**2,983**	**74**	**3,057**	**2,747**	**90**	**2,837**
Changes in fair value of cash flow and net investment hedging instruments (*)	(51)	-	(51)	137	1	137
Hedging costs	3	-	3	-	-	-
Tax (**)	(3)	-	(3)	(47)	-	(47)
Currency translation differences	22	2	23	(335)	(11)	(346)
Share in net income of companies accounted for under the equity method	18	-	18	57	-	57
Other comprehensive income that may be recycled subsequently to net income	**(11)**	**2**	**(10)**	(188)	(11)	(199)
Equity instruments	-	-	-	-	-	-
Actuarial gains and losses on retirement benefit obligations	(46)	-	(46)	137	1	138
Tax	15	-	15	(31)	-	(31)
Share in net income of companies accounted for under the equity method	(1)	-	(1)	(1)	-	(1)
Other comprehensive income that may not be recycled subsequently to net income	**(31)**	**-**	**(31)**	105	1	106
Total other comprehensive income recognised directly in equity	**(42)**	**2**	**(41)**	(83)	(10)	(93)
Total comprehensive income	**2,940**	**76**	**3,016**	2,664	80	2,744

(*) Changes in the fair value of cash flow hedges are recognised in equity for the effective portion. Cumulative gains and losses in equity are taken to profit or loss at the time when the cash flow affects profit or loss.
(**) Tax effects relating to changes in the fair value of cash flow hedging financial instruments (effective portion) and hedging costs.

Consolidated balance sheet

Assets

(in € millions)	Notes	31/12/2018	31/12/2017
Non-current assets			
Concession intangible assets	12	27,118	26,539
Goodwill	9	9,792	8,600
Other intangible assets	16	632	417
Property, plant and equipment	16	5,359	4,421
Investments in companies accounted for under the equity method	10	1,674	1,573
Other non-current financial assets	11-13-17	1,332	1,102
Derivative financial instruments – non-current assets	25	511	621
Deferred tax assets	7	317	255
Total non-current assets		**46,736**	**43,527**
Current assets			
Inventories and work in progress	18	1,173	1,056
Trade and other receivables	18	13,584	12,432
Other current operating assets	18	5,033	5,035
Other current non-operating assets		52	58
Current tax assets		280	406
Other current financial assets		37	38
Derivative financial instruments – current assets	25	258	261
Cash management financial assets	24	245	184
Cash and cash equivalents	24	7,960	6,807
Total current assets		**28,621**	**26,276**
Total assets		**75,357**	**69,803**

Consolidated balance sheet

Equity and liabilities

(in € millions)	Notes	31/12/2018	31/12/2017
Equity			
Share capital	21.1	1,494	1,478
Share premium	21.1	10,339	9,886
Treasury shares	21.2	(2,323)	(1,751)
Consolidated reserves		7,767	6,509
Currency translation reserves		(213)	(276)
Net income attributable to owners of the parent		2,983	2,747
Amounts recognised directly in equity	21.4	(861)	(782)
Equity attributable to owners of the parent		**19,185**	**17,812**
Non-controlling interests	21.5	633	572
Total equity		**19,818**	**18,383**
Non-current liabilities			
Non-current provisions	19	1,135	1,053
Provisions for employee benefits	27	1,519	1,481
Bonds	23	16,588	14,130
Other loans and borrowings	23	3,023	2,512
Derivative financial instruments – non-current liabilities	25	206	288
Other non-current liabilities		345	192
Deferred tax liabilities	7	1,676	1,735
Total non-current liabilities		**24,491**	**21,391**
Current liabilities			
Current provisions	18	4,452	4,322
Trade payables	18	8,240	8,198
Other current operating liabilities	18	12,862	11,852
Other current non-operating liabilities		500	487
Current tax liabilities		282	225
Derivative financial instruments – current liabilities	25	76	114
Current borrowings	23	4,635	4,830
Total current liabilities		**31,048**	**30,029**
Total equity and liabilities		**75,357**	**69,803**

Consolidated cash flow statement

(in € millions)	Notes	2018	2017
Consolidated net income for the period (including non-controlling interests)		**3,057**	**2,837**
Depreciation and amortisation	4.3	2,242	2,128
Net increase/(decrease) in provisions and impairment		(16)	(4)
Share-based payments (IFRS 2) and other restatements		21	53
Gain or loss on disposals		(88)	(44)
Change in fair value of financial instruments		(39)	15
Share of profit or loss of companies accounted for under the equity method and dividends received from unconsolidated companies		(104)	(152)
Capitalised borrowing costs		(56)	(86)
Cost of net financial debt recognised	5	462	481
Current and deferred tax expense recognised	7.1	1,418	1,271
Cash flows from operations before tax and financing costs	**1**	**6,898**	**6,500**
Changes in operating working capital requirement and current provisions	18.1	(266)	(286)
Income taxes paid (1)		(1,222)	(1,647)
Net interest paid		(444)	(470)
Dividends received from companies accounted for under the equity method		176	184
Cash flows (used in)/from operating activities (1)	**I**	**5,142**	**4,280**
Purchases of property, plant and equipment and intangible assets		*(1,095)*	*(865)*
Proceeds from sales of property, plant and equipment and intangible assets		*109*	*120*
Operating investments (net of disposals)	1	(986)	(745)
Operating cash flow (1)	**1**	**4,156**	**3,535**
Investments in concession fixed assets (net of grants received)		*(986)*	*(1,055)*
Financial receivables (PPP contracts and others)		*8*	*45*
Growth investments in concessions and PPPs	1	(977)	(1,010)
Free cash flow (after investments) (1)	**1**	**3,179**	**2,525**
Purchases of shares in subsidiaries and affiliates (consolidated and unconsolidated)	*1-2*	*(1,570)*	*(946)*
Proceeds from sales of shares in subsidiaries and affiliates (consolidated and unconsolidated)	*1-2*	*81*	*16*
Net effect of changes in scope of consolidation		*(1,149)*	*(7)*
Net financial investments (2)		(2,638)	(937)
Other		(165)	(355)
Net cash flows (used in)/from investing activities	**II**	**(4,765)**	**(3,046)**
Share capital increases and decreases and repurchases of other equity instruments		469	443
Transactions on treasury shares	21.2	(639)	(647)
Non-controlling interests in share capital increases and decreases of subsidiaries		-	1
Acquisitions/disposals of non-controlling interests (without acquisition or loss of control)		(25)	(22)
Dividends paid	22	(1,443)	(1,248)
- to shareholders of VINCI SA		*(1,391)*	*(1,197)*
- to non-controlling interests		*(53)*	*(51)*
Proceeds from new long-term borrowings	23.1	4,163	4,112
Repayments of long-term borrowings	23.1	(2,707)	(3,258)
Change in cash management assets and other current financial debts (3)		135	(581)
Net cash flows (used in)/from financing activities	**III**	**(48)**	**(1,200)**
Other changes (3)	IV	751	42
Change in net cash	**I+II+III+IV**	**1,079**	**75**
Net cash and cash equivalents at beginning of period		**5,703**	**5,628**
Net cash and cash equivalents at end of period	**24.1**	**6,782**	**5,703**
Change in cash management assets and other current financial debts		(135)	581
(Proceeds from)/repayment of loans		(1,456)	(855)
Other changes (3)		(1,042)	136
Change in net financial debt		**(1,553)**	**(63)**
Net financial debt at beginning of period		**(14,001)**	**(13,938)**
Net financial debt at end of period	**23**	**(15,554)**	**(14,001)**

(1) Including non-recurring tax effects in 2018: net inflow of €103 million (in 2017, net outflow of €200 million).
(2) Including, in 2018, investments by VINCI Airports (Belgrade Nikola Tesla Airport in Serbia and Airports Worldwide), VINCI Energies (PrimeLine Utility Services and Wah Loon Engineering) and Eurovia (Lane Construction's Plants & Paving division).
In 2017, investment in the Salvador Airport concession in Brazil and around 30 acquisitions made by VINCI Energies.
(3) Including the debt of entities integrated during the year on the respective dates on which control was acquired.

Consolidated statement of changes in equity

(in € millions)	Equity attributable to owners of the parent									
	Share capital	Share premium	Treasury shares	Consolidated reserves	Net income	Currency translation reserves	Amounts recognised directly in equity	Total attributable to owners of the parent	Non-controlling interests	Total
Balance at 01/01/2017	**1,473**	**9,463**	**(1,581)**	**5,549**	**2,505**	**88**	**(1,032)**	**16,465**	**541**	**17,006**
Net income for the period	-	-	-	-	2,747	-	-	2,747	90	2,837
Other comprehensive income recognised directly in the equity of controlled companies	-	-	-	-	-	(335)	197	(139)	(10)	(149)
Other comprehensive income recognised directly in the equity of companies accounted for under the equity method	-	-	-	-	-	(27)	82	55	-	55
Total comprehensive income for the period	**-**	**-**	**-**	**-**	**2,747**	**(362)**	**279**	**2,664**	**80**	**2,744**
Increase in share capital	19	423	-	-	-	-	-	443	1	443
Decrease in share capital	(14)	-	421	(407)	-	-	-	-	-	-
Transactions on treasury shares	-	-	(592)	(55)	-	-	-	(647)	-	(647)
Allocation of net income and dividend payments	-	-	-	1,308	(2,505)	-	-	(1,197)	(51)	(1,248)
Share-based payments (IFRS 2)	-	-	-	109	-	-	-	109	-	109
Impact of acquisitions or disposals of non-controlling interests after acquisition of control	-	-	-	8	-	(2)	-	6	(5)	1
Changes in consolidation scope	-	-	-	(8)	-	2	6	-	6	6
Other	-	-	-	5	-	(1)	(35)	(32)	1	(30)
Reported balance at 31/12/2017	**1,478**	**9,886**	**(1,751)**	**6,509**	**2,747**	**(276)**	**(782)**	**17,812**	**572**	**18,383**
Impact of changed methods (*)	-	-	-	(134)	-	-	2	(132)	-	(132)
Adjusted balance at 31/12/2017	**1,478**	**9,886**	**(1,751)**	**6,375**	**2,747**	**(276)**	**(780)**	**17,679**	**572**	**18,251**
Net income for the period	-	-	-	-	2,983	-	-	2,983	74	3,057
Other comprehensive income recognised directly in the equity of controlled companies	-	-	-	-	-	22	(82)	(60)	2	(58)
Other comprehensive income recognised directly in the equity of companies accounted for under the equity method	-	-	-	-	-	18	(1)	17	-	17
Total comprehensive income for the period	**-**	**-**	**-**	**-**	**2,983**	**40**	**(82)**	**2,940**	**76**	**3,016**
Increase in share capital	16	453	-	-	-	-	-	469	-	469
Decrease in share capital	-	-	-	-	-	-	-	-	-	-
Transactions on treasury shares	-	-	(572)	(67)	-	-	-	(639)	-	(639)
Allocation of net income and dividend payments	-	-	-	1,357	(2,747)	-	-	(1,391)	(53)	(1,443)
Share-based payments (IFRS 2)	-	-	-	138	-	-	-	138	-	138
Impact of acquisitions or disposals of non-controlling interests after acquisition of control	-	-	-	(3)	-	-	-	(3)	(3)	(6)
Changes in consolidation scope	-	-	-	-	-	(1)	-	-	41	41
Other	-	-	-	(32)	-	23	-	(8)	-	(8)
Balance at 31/12/2018	**1,494**	**10,339**	**(2,323)**	**7,767**	**2,983**	**(213)**	**(861)**	**19,185**	**633**	**19,818**

(*) Change in accounting methods related to the first-time adoption on 1 January 2018 of IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments", described in Note A.4.

A. Accounting policies, measurement methods and changes in methods

1. Basis for preparing the financial statements

Pursuant to Regulation (EC) No. 1606/2002 of 19 July 2002, VINCI's consolidated financial statements for the period ended 31 December 2018 have been prepared under the International Financial Reporting Standards (IFRS) as adopted by the European Union at 31 December 2018 (*).

The accounting policies used at 31 December 2018 are the same as those used in preparing the consolidated financial statements at 31 December 2017, except for the standards and/or amendments of standards described below, adopted by the European Union and mandatorily applicable as from 1 January 2018.

The Group's consolidated financial statements are presented in millions of euros, rounded to the nearest million. This may in certain circumstances lead to non-material differences between the sum of the figures and the subtotals that appear in the tables.

The information relating to 2016, presented in the 2017 registration document D.18-0076 filed with the AMF on 26 February 2018, is deemed to be included herein.

The consolidated financial statements were adopted by the Board of Directors on 5 February 2019 and will be submitted to the Shareholders' General Meeting for approval on 17 April 2019.

New standards and interpretations applicable from 1 January 2018

The impacts of applying IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" from 1 January 2018 are described in Note A.4.
Other standards and interpretations mandatorily applicable from 1 January 2018 have no material impact on VINCI's consolidated financial statements at 31 December 2018. These are mainly:

- Amendments to IFRS 2 "Classification and Measurement of Share-Based Payment Transactions";
- IFRIC 22 "Foreign Currency Transactions and Advance Consideration";
- Annual Improvements 2014-2016;

Standards and interpretations adopted by the IASB but not yet applicable at 31 December 2018

The Group has not applied early the following standards and interpretations that could concern the Group and of which application was not mandatory at 1 January 2018:

- IFRS 16 "Leases";
- IFRIC 23 "Uncertainty over Income Tax Treatments".
- Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement";
- Amendments to IFRS 9 "Prepayment Features with Negative Compensation";
- Amendments to IAS 28 "Investments in Associates and Joint Ventures";
- Annual Improvements 2015-2017.

A study of the impacts and practical consequences of applying these standards, amendments and interpretations is under way.

IFRS 16 "Leases" is leading to changes in the way that lessees recognise leases. It will replace accounting standard IAS 17 and interpretations IFRIC 4, SIC 15 and SIC 27. IFRS 16, which will come into force on 1 January 2019, requires lessees to use a single method for recognising leases, affecting the balance sheet in a similar way to current finance leases.
Given the relatively short average term of movable-asset leases (mainly relating to vehicles and worksite equipment) and the ongoing changes in the Group's scope, any estimate of how adjustments under the new accounting standard will affect the Group's financial statements at the present date may not be representative of the impact to be recognised on first-time adoption of IFRS 16 on 1 January 2019.
Because of the specific features of some leases (particularly regarding renewal arrangements), the timeframes used to measure leases under IFRS 16 could, in some cases, differ from those used to measure off-balance sheet commitments in which only the firm commitment period is taken into account. The obligations mentioned in Note 20.1 "Other contractual obligations of an operational nature" may therefore be different from the liabilities to be recognised when IFRS 16 is adopted.

(*) Available at http://ec.europa.eu/finance/company-reporting/ifrs-financial-statements/index_en.htm

The work to implement and evaluate the amounts that will be recognized as assets and liabilities, as at 1 January 2019, is currently being finalized and verified; the impact on the Group equity at 1 January 2019 should be limited. At 31 December 2018, lease-related commitments are estimated at € 1.5 billion and presented in Note 20.1 "Other contractual obligations of an operational nature".
The Group will use the retrospective transition approach, recognising the cumulative effect of first-time adoption of the standard on the first-time adoption date.

IFRIC 23 "Uncertainty over Income Tax Treatments"
IFRIC 23 supplements IAS 12 "Income Taxes" by specifying arrangements for measuring and recognising uncertainty relating to income tax. This interpretation is mandatory for accounting periods beginning on or after 1 January 2019. The Group does not expect the implementation of IFRIC 23 to have a material impact on opening equity at 1 January 2019.

Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement": the new amendments to IAS 19, application of which is mandatory from 1 January 2019 subject to their endorsement by the European Union, state that in the event of an amendment, curtailment or settlement of a defined benefit plan during an accounting period, current service cost and net interest must be remeasured for the following period based on the same assumptions as those used to remeasure the net liability (asset). The requirements relating to the asset ceiling effect at the time of this remeasurement have been clarified.

The Group's analysis has confirmed that the clarifications provided by the new amendments to IAS 19 are consistent with the methods and assumptions currently used within the Group to measure retirement benefit plans.

2. Consolidation methods

In accordance with IFRS 10, companies in which the Group holds, whether directly or indirectly, the majority of voting rights in shareholders' general meetings, in the Boards of Directors or in the equivalent management bodies, giving it the power to direct their operational and financial policies, are generally deemed to be controlled and are fully consolidated. To determine control, VINCI carries out an in-depth analysis of the established governance arrangements and of the rights held by other shareholders. Where necessary, an analysis is performed in relation to

3. Use of estimates

The preparation of financial statements under IFRSs requires estimates to be used and assumptions to be made that affect the amounts shown in those financial statements.
These estimates assume the operation is a going concern and are made on the basis of information available at the time. Estimates may be revised if the circumstances on which they were based alter or if new information becomes available. Actual results may be different from these estimates.

The consolidated financial statements for the period have been prepared with reference to the immediate environment, in particular as regards the estimates given below.

Measurement of revenue from construction and service contracts

For revenue and income or losses on construction and service contracts, the Group applies general revenue recognition rules based on progress towards completion.
Progress towards completion and the revenue to be recognised are determined on the basis of a large number of estimates made by monitoring the work performed. Adjustments may therefore be made to initial estimates throughout contracts and may materially affect future results.

Values used in impairment tests

The assumptions and estimates made to determine the recoverable amount of goodwill, intangible assets and property, plant and equipment relate in particular to the assessment of market prospects needed to estimate the cash flow, and the discount rates adopted. Any change in these assumptions could have a material effect on the recoverable amount. The main assumptions used by the Group are described in Note E.9 "Goodwill and goodwill impairment tests".

Measurement of provisions

The factors that may cause a material change in the amount of provisions are:

- the estimates made using statistical methods on the basis of expenses incurred in previous years, to determine after-sales-service provisions;
- the forecasts of expenditures on major maintenance over several years used as a basis for the provisions for obligations to maintain the condition of concession assets. These forecasts are estimated taking account of indexation clauses included in construction and civil engineering contracts (mainly the TP01, TP02 and TP09 indexes for France);
- the estimates of forecast profit or loss on construction contracts, which serve as a basis for the determination of losses on completion (see Note G.15 "Construction and service contracts (Contracting business and VINCI Immobilier)" and Note H.18.3 "Breakdown of current provisions");
- the discount rates used.

Measurement of fair value

The Group mainly uses fair value in measuring, on a consistent basis, the derivative instruments, cash and cash equivalents, shares in unconsolidated subsidiaries and affiliates, cash management financial assets and identifiable assets and liabilities acquired in business combinations on its balance sheet. The fair value of other financial instruments (particularly debt instruments and assets measured at amortised cost as defined in Note A.4.2 on IFRS 9 "Financial Instruments") is stated in Note J.26 "Book and fair value of financial instruments by accounting category" below.

Fair value is the price that would be received from selling an asset or paid to transfer a liability in a normal transaction. It is recognised on the basis of the asset or liability's main market (or the most advantageous market if there is no main market), i.e. the one that offers the highest volume and activity levels. The fair value of derivative financial instruments includes a "counterparty risk" component for derivatives carried as assets and an "own credit risk" component for derivatives carried as liabilities.

To determine these fair values, the Group uses the following measurement methods:

- market-based approaches, based on observable market prices or transactions;
- revenue-based approaches, which convert future cash flow into a single present value;
- cost-based approaches, which take into account the asset's physical, technological and economic obsolescence.

The following three-level hierarchy of fair values is used:

- Level 1 – price quoted on an active market. Marketable securities, some shares in unconsolidated subsidiaries and affiliates and listed bond issues are measured in this way;
- Level 2 – internal model using internal measurement techniques with observable factors: these techniques are based on usual mathematical computation methods, which incorporate observable market data (forward prices, yield curves, etc.). The calculation of the fair value of most derivative financial instruments (swaps, caps, floors, etc.) traded over the counter is made on the basis of models commonly used by market participants to price such financial instruments.
Every quarter, the internally calculated values of derivative instruments are checked for consistency with those sent to VINCI by the counterparties;
- Level 3 – internal model using non-observable factors: this model applies to customer relationships and contracts acquired through business combinations, as well as to holdings of unlisted shares, which, in the absence of an active market, are measured at their cost of acquisition plus transaction costs.

Measurement of retirement benefit obligations

The Group is involved in defined contribution and defined benefit retirement plans. Its obligations in connection with these defined benefit plans are measured using the actuarial projected unit credit method based on assumptions such as the discount rate, future increases in wages and salaries, employee turnover, mortality rates and the rate of increase of health expenses. Those obligations may therefore change if assumptions change, most of which are updated annually. Details of the assumptions used and how they are determined are given in Note K.27 "Provisions for employee benefits". The Group considers that the actuarial assumptions used are appropriate and justified in the current conditions.

Measurement of share-based payment expense

The Group recognises a share-based payment expense relating to share subscription, performance share and Group savings plans offered to employees or some of its employees. This expense is measured on the basis of actuarial calculations using estimated behavioural assumptions based on observation of past behaviour.
The main actuarial assumptions (volatility, return on shares, etc.) adopted by the Group are described for each plan in Note K.28 "Share-based payments".

4. Changes in accounting methods

4.1 IFRS 15 "Revenue from contracts with customers"

The Group adopted IFRS 15 on 1 January 2018, the date on which the standard came into force in the European Union. Given that the impacts identified were not material, IFRS 15 was applied retrospectively to currently existing contracts according to the "simplified retrospective" approach. The 2017 data presented for the purpose of comparison were not adjusted and are still presented in accordance with the previous accounting standards (IAS 11 "Construction contracts", IAS 18 "Revenue" and the various interpretations including IFRIC 15 "Agreements for the Construction of Real Estate").

At 1 January 2018, the Group reduced the amount of its opening equity by €125 million, net of deferred tax, to reflect the cumulative impact of IFRS 15's first-time adoption. That impact arose from the assessment, required under IFRS 15, of the highly probable nature of certain items of variable revenue, whereas IAS 11 allowed them to be recognised when they were probable. This new approach to variable revenue is now applied to all of the Group's contracts. Its impact is regarded as non-material given the number of contracts performed by the Group.

Since 1 January 2018, the Group has applied the provisions of IFRS 15 to measure and recognise consolidated revenue. The new accounting policies are detailed in Note C.2 "Breakdown of revenue by geographical area", Notes F "Concession and PPP contracts" and Note G.15 "Construction and service contracts (Contracting business and VINCI Immobilier)".

4.2 IFRS 9 "Financial Instruments"

Since 1 January 2018, the Group has applied IFRS 9 "Financial instruments", which sets out rules for recognising and measuring assets, financial liabilities and certain contracts for the purchase or sale of non-financial items. It replaces IAS 39 "Financial instruments: recognition and measurement", which was applied until 31 December 2017.
At 1 January 2018, the Group reduced the amount of its opening equity by €7 million to reflect the cumulative impact of IFRS 15's first-time adoption. The main impacts for each phase are set out below.

Phase I - Classification and measurement of financial assets
IFRS 9's arrangements for classifying and measuring financial assets are based on the company's management method and the contractual characteristics of the financial assets.
When implementing this standard, the Group reviewed the characteristics of its financial assets, particularly as regards remuneration. Because of the Group's approach to managing its financial assets and because the Group does not hold any complex financial instruments, the Group concluded that all its financial assets met the "Solely Payments of Principal and Interest (SSPI)" criterion as defined by IFRS 9. As a result, financial assets recognised at amortised cost under IAS 39 did not undergo any change in accounting method when IFRS 9 was adopted for the first time.
The Group also reviewed its portfolio of equity instruments, mainly consisting of shares in unconsolidated subsidiaries and affiliates, in order to determine the measurement method for each share (either at fair value through profit and loss or at fair value through equity). The vast majority of shares in the portfolio at 1 January 2018 were measured at fair value through profit and loss.
The fair value of shares in listed companies is determined on the basis of the stock market price at the balance sheet date. For unlisted shares, if their fair value cannot be determined reliably at each balance sheet date, they continue to be measured at their initial fair value, of which the best estimate is their cost of acquisition plus transaction costs, adjusted for any increases or decreases in value determined in particular by analysing the change in the proportion of equity held.
Whenever equity securities are acquired, a similar analysis will be carried out to determine the Group's management intention, which will determine the way in which changes in fair value are recognised.

Loans and receivables are now classified under "Financial assets at amortised cost" and available-for-sale assets are classified under "Equity instruments" and remain on the balance sheet under "Other financial assets" (see details in Note I.23 "Book and fair value of financial instruments by accounting category").

Phase II – Financial asset impairment model
IFRS 9 has also changed the Group's arrangements regarding the impairment of financial assets, because it now requires a model based on expected loss. Portfolios of trade and financial receivables, and of loans granted to entities such as companies accounted for under the equity method, have been analysed.
The Group has opted for the simplified approach to measuring impairment of its trade receivables. Analysis of historical losses on those receivables did not show any material risk of loss.
Credit risk related to financial receivables and loans was measured according to the full model of IFRS 9. No material increase in credit risk was identified, except for a limited number of financial receivables in respect of which the Group recorded additional impairment of around €4 million, charged to opening equity. That impairment corresponds to credit risk taken into account over the life of the receivables.
To estimate the risk of non-recovery relating to the Group's financial assets, actual losses experienced during a period will be analysed annually in order to adjust impairment rates where appropriate.

Phase III – Hedge accounting

Provisions relating to hedge accounting will allow the Group to bring its accounting methods and risk management policy into line.

For transactions qualifying for hedge accounting, IFRS 9 allows changes in the value of all hedging costs (contango/backwardation, basis swaps and option premiums) to be recognised under other comprehensive income and to be recycled through profit or loss on a straight-line basis where a period of time is hedged or, where a transaction is hedged, at the same rate at which the hedged transaction is recognised. That recycling will be presented in the income statement under "Cost of net financial debt" for financial transactions and under "Operating income from ordinary activities" for operational transactions.

The Group has chosen to apply these new arrangements for recognising hedging costs retrospectively, for all of its instruments that qualify for hedge accounting. The application of this new model has led to a €3 million reduction in equity.

New model for recognising renegotiated financing arrangements

The Group has analysed the substance of debt renegotiations taking place before 1 January 2018. Continuity of treatment was adopted in respect of only one debt. Since changes to that debt were minor (reduction in the interest rate), the impact arising from adopting the standard in this area was not material.

As under IAS 39, analysing changes to debts will depend on quantitative criteria (10% test) and qualitative criteria (change in covenant, currency or interest rate structure, etc.). If the analysis leads to continuity of treatment, the debt's carrying amount will be adjusted in accordance with IFRS 9.

The impacts of the first-time adoption of IFRS 15 and IFRS 9 at 1 January 2018 on the Group's opening balance sheet are set out below:

Consolidated balance sheet at 1 January 2018

Assets

(in € millions)	01/01/2018 reported	IFRS 15 impacts	IFRS 9 impacts	01/01/2018 adjusted
Non-current assets				
Concession intangible assets	26,539	-	-	26,539
Goodwill	8,600	-	-	8,600
Other intangible assets	417	-	-	417
Property, plant and equipment	4,421	-	-	4,421
Investments in companies accounted for under the equity method	1,573	(22)	(2)	1,549
Other non-current financial assets	1,102	-	1	1,102
Derivative financial instruments – non-current assets	621	-	-	622
Deferred tax assets	255	44	1	300
Total non-current assets	**43,527**	**22**	**-**	**43,549**
Current assets				
Inventories and work in progress	1,056	-	-	1,056
Trade and other receivables	12,432	(147)	(3)	12,282
Other current operating assets	5,035	-	(7)	5,028
Other current non-operating assets	58	-	-	58
Current tax assets	406	-	-	406
Other current financial assets	38	-	-	38
Derivative financial instruments – current assets	261	-	-	261
Cash management financial assets	184	-	-	184
Cash and cash equivalents	6,807	-	-	6,807
Total current assets	**26,276**	**(147)**	**(9)**	**26,120**
Total assets	**69,803**	**(125)**	**(10)**	**69,668**

Equity and liabilities

(in € millions)	01/01/2018 reported	IFRS 15 impacts	IFRS 9 impacts	01/01/2018 adjusted
Equity				
Share capital	1,478	-	-	1,478
Share premium	9,886	-	-	9,886
Treasury shares	(1,751)	-	-	(1,751)
Consolidated reserves	6,509	(125)	(9)	6,375
Currency translation reserves	(276)	-	-	(276)
Net income attributable to owners of the parent	2,747	-	-	2,747
Amounts recognised directly in equity	(782)	-	2	(780)
Equity attributable to owners of the parent	**17,812**	**(125)**	**(7)**	**17,679**
Non-controlling interests	572	-	-	572
Total equity	**18,383**	**(125)**	**(7)**	**18,251**
Non-current liabilities				
Non-current provisions	1,053	-	-	1,053
Provisions for employee benefits	1,481	-	-	1,481
Bonds	14,130	-	2	14,132
Other loans and borrowings	2,512	-	-	2,512
Derivative financial instruments – non-current liabilities	288	-	-	288
Other non-current liabilities	192	-	-	192
Deferred tax liabilities	1,735	-	1	1,735
Total non-current liabilities	**21,391**	**-**	**3**	**21,394**
Current liabilities				
Current provisions	4,322	-	-	4,322
Trade payables	8,198	-	-	8,198
Other current operating liabilities	11,852	-	(6)	11,847
Other current non-operating liabilities	487	-	-	487
Current tax liabilities	225	-	-	225
Derivative financial instruments – current liabilities	114	-	-	114
Current borrowings	4,830	-	-	4,830
Total current liabilities	**30,029**	**-**	**(6)**	**30,023**
Total equity and liabilities	**69,803**	**(125)**	**(10)**	**69,668**

Equity at 1 January 2018

	Equity attributable to owners of the parent									
(in € millions)	Share capital	Share premium	Treasury shares	Consolidated reserves	Net income	Currency translation reserves	Amounts recognised directly in equity	Total attributable to owners of the parent	Non-controlling interests	Total
Equity at 01/01/2018 reported	**1,478**	**9,886**	**(1,751)**	**6,509**	**2,747**	**(276)**	**(782)**	**17,812**	**572**	**18,383**
IFRS 15 impacts	-	-	-	(125)	-	-	-	(125)	-	(125)
IFRS 9 impacts	-	-	-	(9)	-	-	2	(7)	-	(7)
Equity at 01/01/2018 adjusted	**1,478**	**9,886**	**(1,751)**	**6,375**	**2,747**	**(276)**	**(780)**	**17,679**	**572**	**18,251**

B. Key events in the period and changes in consolidation scope

1. Key events

1.1 Growth of Concessions

VINCI Airports

VINCI Airports maintained its international growth:

- In August 2018, VINCI Airports acquired Airports Worldwide, a portfolio of eight airports, of which two are wholly owned, two are under concession and four are under full operating contracts. Together, those airports handled more than 19 million passengers in 2018 (see Note 2.1 "Acquisition of Airports Worldwide").
- On 22 December 2018, it started operating Belgrade airport in Serbia. The 25-year concession contract covering the financing, operation, maintenance, extension and renovation of the airport's terminal and runways. The airport handled 5.6 million passengers in 2018 and is Serbia's largest.
- In December 2018, VINCI Airports signed an agreement to acquire a 50.01% stake in Gatwick Airport Limited, which owns London Gatwick, the UK's second-largest airport. The transaction is likely to be completed in the first half of 2019. Gatwick Airport Limited will then be fully consolidated. The purchase price is expected to be around £2.9 billion (€3.2 billion at 31 December 2018), subject to adjustments until the transaction is completed.

1.2 Growth of Contracting

The Contracting business continued its international expansion, which included the following developments at VINCI Energies and Eurovia.

VINCI Energies

In 2018, VINCI Energies carried out several acquisitions in France and abroad. Details of its main acquisitions can be found in Note 2.2. "Main acquisitions by VINCI Energies".

Eurovia

In April 2018, Eurovia acquired the business activities of TNT, a Quebec-based public works contractor that also operates a quarry in Laval and asphalt production units in the Montreal region of Canada.
In December 2018, Eurovia completed the acquisition of Plants & Paving, the industrial and roadworks division of Lane Construction in the United States, which operates in 10 states on the east coast and Texas (see Note 2.3. "Main acquisitions by Eurovia").

2. Changes in consolidation scope

	31/12/2018			31/12/2017		
(number of companies)	**Total**	France	Foreign	**Total**	France	Foreign
Controlled companies	**2,003**	1,114	889	**1,969**	1,109	860
Joint ventures (*)	**158**	101	57	**165**	110	55
Associates (*)	**41**	20	21	**41**	20	21
Total	**2,202**	**1,235**	**967**	**2,175**	**1,239**	**936**

(*) Entities accounted for under the equity method.

The main changes during the period concern the creation or acquisition of project companies handling new concession contracts and the international growth of VINCI Airports, VINCI Energies and Eurovia.

Other changes relate mainly to legal restructuring within the Group's scope.

2.1 Acquisition of Airports Worldwide

On 28 August 2018, VINCI Airports completed the acquisition of Airports Worldwide, which manages a portfolio of eight airports in the United Kingdom, the United States, Sweden and Costa Rica. The deal to take control of Airports Worldwide involved the Group paying €321 million in cash and repaying a €186 million shareholder loan. Airports Worldwide has been fully consolidated in VINCI's consolidated financial statements since 28 August 2018.

In accordance with IFRS 3, VINCI is assessing the fair value of the identifiable assets and liabilities acquired, and determining the related deferred tax effects. Values were provisionally allocated to identifiable assets and liabilities on the date control was acquired, based on information available. They may be adjusted during the 12 months following the acquisition on the basis of new information obtained relating to the facts and circumstances prevailing at the time of the acquisition.

Provisional determination of assets and liabilities acquired in relation to Airports Worldwide at the date of acquiring control

(in € millions)	Airports Worldwide
Fair value of assets and liabilities acquired	
Concession intangible assets	94
Others intangible assets	195
Property, plant and equipment	148
Non-current financial assets	78
Total non-current assets	**515**
Trade, other operating receivables, inventories and work in progress	16
Other current assets	2
Cash and cash equivalents	46
Total current assets	**64**
Provisions and other non-current liabilities	4
Loans and financial debt	56
Deferred tax liabilities	66
Total non-current liabilities	**126**
Current provisions	2
Trade payables	19
Other current liabilities (including tax liabilities)	22
Total current liabilities	**44**
Net assets acquired	**409**
Acquisition-date fair value of the total consideration transferred	**507**
Provisional goodwill	**98**

Provisional goodwill, as shown in the table above, represents the future economic benefits that VINCI expects to derive from the acquisition of Airports Worldwide. It has been allocated to the VINCI Airports business segment.

Airports Worldwide made a €33 million contribution to VINCI's revenue, a €2 million contribution to its operating income from ordinary activities and a €2 million negative contribution to its net income in 2018.

For full-year 2018, Airports Worldwide's revenue, operating income from ordinary activities and net income, on the basis of the same assumptions as those retained at the acquisition date, would have been €101 million, €9 million and €2 million respectively (unaudited figures).

2.2 Main acquisitions by VINCI Energies

Acquisition of PrimeLine Utility Services

In March 2018, VINCI Energies completed the acquisition of PrimeLine Utility Services, a US group specialising in services associated with transmission and distribution networks for electricity and gas, as well as telecoms infrastructure.
The price paid to acquire the company's shares was €358 million. The measurement of identifiable assets and liabilities acquired in accordance with IFRS 3 led to the recognition of goodwill provisionally measured at €562 million on the date VINCI Energies took control.
PrimeLine Utility Services has been fully consolidated in VINCI's consolidated financial statements since 13 March 2018.

Provisional determination of acquired PrimeLine Utility Services assets and liabilities at the date of acquiring control

(in € millions)	**PrimeLine Utility Services**
Fair value of assets and liabilities acquired	
Intangible assets and property, plant and equipment	90
Deferred tax assets	3
Total non-current assets	**93**
Trade, other operating receivables, inventories and work in progress	195
Cash and cash equivalent	38
Total current assets	**233**
Bond debt and other financial debt	350
Deferred tax liabilities	1
Total non-current liabilities	**351**
Current provisions	3
Current borrowings	10
Trade payables and other current liabilities	167
Total current liabilities	**179**
Net assets acquired	**(204)**
Acquisition-date fair value of the total consideration transferred	**358**
Provisional goodwill	**562**

Provisional goodwill, as shown above, represents the future economic benefits that VINCI expects to derive from the acquisition of PrimeLine Utility Services. It has been allocated to the VINCI Energies USA business segment.

PrimeLine Utility Services made a €404 million contribution to VINCI's revenue, a €24 million contribution to its operating income from ordinary activities and a €13 million contribution to its net income in 2018.

For full-year 2018, PrimeLine Utility Services' revenue, operating income from ordinary activities and net income, on the basis of the same assumptions as those retained at the acquisition date, would have been €489 million, €20 million and €6 million respectively (unaudited figures).

Acquisition of Wah Loon Engineering

In April 2018, VINCI Energies completed the acquisition of Wah Loon Engineering in Singapore, a leading provider of integrated electrical and mechanical engineering services with a particular specialism in the construction of data centres.
The purchase price was €120 million, and goodwill was provisionally measured at €107 million in accordance with IFRS 3 on the date the VINCI Energies took control.
Wah Loon Engineering has been fully consolidated in VINCI's consolidated financial statements since 5 April 2018.

2.3 Main acquisitions by Eurovia

Acquisition of Lane Construction's Plants & Paving division

In December 2018, Eurovia completed the acquisition of Plants & Paving, the industrial and roadworks division of Lane Construction in the United States. The purchase price was €507 million. The measurement of identifiable assets and liabilities acquired in accordance with IFRS 3 led to the recognition of goodwill provisionally measured at €167 million on the date Eurovia took control.
The business has been fully consolidated in VINCI's consolidated financial statements since 12 December 2018.

Provisional determination of the Plants & Paving division's assets and liabilities acquired at the date of acquiring control

(in € millions)	Plants & Paving
Fair value of acquired assets and liabilities	
Intangible assets	254
Total non-current assets	**254**
Trade receivables and other operating receivables	116
inventories and work in progress	23
Total current assets	**140**
Current provisions	1
Trade payables and other current liabilities	54
Total current liabilities	**55**
Net assets acquired	**339**
Fair value of the total consideration transferred at the acquisition date	**507**
Provisional goodwill	**167**

Provisional goodwill, as shown above, represents the future economic benefits that VINCI expects to derive from the acquisition of the Plants & Paving industrial and roadworks division. It has been allocated to the Eurovia USA business segment.

Plants & Paving's contribution to VINCI's revenue, operating income from ordinary activities and net income in 2018 was not material.

For full-year 2018, Plants & Paving's revenue, operating income from ordinary activities and net income, on the basis of the same assumptions as those retained at the acquisition date, would have been €553 million, €27 million and €20 million respectively (unaudited figures).

2.4 Acquisitions and disposals in previous periods

The main acquisitions in 2017 concerned VINCI Energies (Infratek, Horlemann, Acuntia) and VINCI Construction (Seymour Whyte).
In relation to these companies, VINCI assessed the fair value of the identifiable assets and liabilities acquired in accordance with IFRS 3. The values allocated to identifiable acquired assets and liabilities on the dates when control was acquired in 2017 were not adjusted materially in 2018. At 31 December 2018, the allocation of purchase prices resulted in the recognition of the following finalised goodwill amounts:

- at VINCI Energies: Infratek (€203 million), Horlemann (€85 million) and Acuntia (€74 million);
- at VINCI Construction: Seymour Whyte (€56 million).

Details of these transactions are provided in Note B.2. "Changes in consolidation scope" in the 2017 registration document.

C. Financial indicators by business line and geographical area

1. Information by operating segment

Based on the Group's organisational structure and internal reporting system, segment information is presented by business line.

The Group consists of two core businesses (Concessions and Contracting) and VINCI Immobilier, a business line reporting directly to the holding company. Each business in turn consists of business lines.

Concessions business

- VINCI Autoroutes: motorway concessions in France (ASF, Escota, Cofiroute, Arcour and Arcos).
- VINCI Airports: operation of airports in France and abroad, both wholly owned and under concession or management contracts.
- Other concessions: VINCI Highways (motorway and road infrastructure, mainly outside France), VINCI Railways (rail infrastructure) and VINCI Stadium (management of stadiums).

Contracting business

- VINCI Energies: industry, infrastructure, facilities management, and information and communication technology.
- Eurovia: building and maintenance of roads, motorways and railways, urban infrastructure, production of materials (asphalt mixes), quarries, and services.
- VINCI Construction: design and construction of buildings (residential and commercial property) and civil engineering infrastructure, specialised civil engineering, water and pipeline infrastructure and major projects.

VINCI Immobilier: property development (residential properties, business properties, managed residences and property services).

1.1 Information by business

The data below is for the Concessions business and each Contracting business line separately and is stated before elimination, at their own level, of transactions with the rest of the Group.

2018

		Contracting						
(in € millions)	**Concessions**	**VINCI Energies**	**Eurovia**	**VINCI Construction**	**Total**	**VINCI Immobilier and holding companies**	**Eliminations**	**Total**
Income statement								
Revenue (*)	**7,261**	**12,603**	**8,934**	**14,231**	**35,769**	**1,104**	**(615)**	**43,519**
Concession subsidiaries' works revenue	823	-	-	-	-	-	(190) (**)	633
Total revenue	8,084	12,603	8,934	14,231	35,769	1,104	(806)	44,152
Operating income from ordinary activities	**3,429**	**727**	**345**	**400**	**1,472**	**95**	**-**	**4,997**
% of revenue (*)	*47.2%*	*5.8%*	*3.9%*	*2.8%*	*4.1%*	*-*	*-*	*11.5%*
Recurring operating income	**3,456**	**664**	**329**	**359**	**1,351**	**116**	**-**	**4,924**
Operating income	**3,480**	**654**	**320**	**355**	**1,328**	**111**	**-**	**4,920**
Cash flow statement								
Cash flows from operations before tax and financing costs	**4,963**	**749**	**513**	**553**	**1,815**	**120**	**-**	**6,898**
% of revenue (*)	*68.4%*	*5.9%*	*5.7%*	*3.9%*	*5.1%*	*-*	*-*	*15.9%*
Depreciation and amortisation	*1,537*	*146*	*256*	*299*	*700*	*5*	*-*	*2,242*
Operating investments (net of disposals)	(45)	(172)	(285)	(353)	(810)	(131)	-	(986)
Operating cash flow	**3,444**	**473**	**150**	**(169)**	**453**	**259**	**-**	**4,156**
Growth investments in concessions and PPPs	(980)	3	-	-	2	-	-	(977)
Free cash flow (after investments)	**2,465**	**475**	**150**	**(170)**	**455**	**259**	**-**	**3,179**
Balance sheet								
Capital employed at 31/12/2018	**31,115**	**3,981**	**1,676**	**576**	**6,233**	**923**	**-**	**38,270**
of which investments in companies accounted for under the equity method	*1,143*	*8*	*109*	*293*	*411*	*120*	*-*	*1,674*
Net financial surplus (debt)	**(27,029)**	**(1,330)**	**(331)**	**752**	**(908)**	**12,382**	**-**	**(15,554)**

(*) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.
(**) Intragroup revenue of the Contracting business derived from works carried out for the Group's concession-operating companies.

2017

(in € millions)	Concessions	Contracting: VINCI Energies	Contracting: Eurovia	Contracting: VINCI Construction	Contracting: Total	VINCI Immobilier and holding companies	Eliminations	Total
Income statement								
Revenue (*)	**6,945**	**10,759**	**8,112**	**13,960**	**32,830**	**896**	**(423)**	**40,248**
Concession subsidiaries' works revenue	861	-	-	-	-	-	(232) (**)	629
Total revenue	7,805	10,759	8,112	13,960	32,830	896	(655)	40,876
Operating income from ordinary activities	**3,251**	**615**	**301**	**344**	**1,260**	**96**	**-**	**4,607**
% of revenue (*)	*46.8%*	*5.7%*	*3.7%*	*2.5%*	*3.8%*	-	-	*11.4%*
Recurring operating income	**3,270**	**566**	**287**	**356**	**1,208**	**113**	**-**	**4,592**
Operating income	**3,270**	**548**	**292**	**323**	**1,163**	**117**	**-**	**4,550**
Cash flow statement								
Cash flows from operations before tax and financing costs	**4,710**	**627**	**455**	**547**	**1,629**	**162**	**-**	**6,500**
% of revenue (*)	*67.8%*	*5.8%*	*5.6%*	*3.9%*	*5.0%*	-	-	*16.2%*
Depreciation and amortisation	*1,462*	*119*	*236*	*306*	*661*	*5*	-	*2,128*
Operating investments (net of disposals)	(47)	(127)	(251)	(320)	(697)	-	-	(745)
Operating cash flow	**3,013**	**373**	**109**	**(143)**	**339**	**182**	**-**	**3,535**
Growth investments in concessions and PPPs	(1,045)	2	-	33	35	-	-	(1,010)
Free cash flow (after investments excluding non-recurring tax effects)	**2,093**	**375**	**109**	**(110)**	**374**	**257**	**-**	**2,725**
Balance sheet								
Capital employed at 31/12/2017	**29,605**	**3,083**	**877**	**387**	**4,348**	**1,122**	**-**	**35,075**
of which investments in companies accounted for under the equity method	*1,054*	*7*	*108*	*290*	*405*	*115*	-	*1,573*
Net financial surplus (debt)	**(27,145)**	**(700)**	**229**	**948**	**477**	**12,667**	**-**	**(14,001)**

(*) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.
(**) Intragroup revenue of the Contracting business derived from works carried out for the Group's concession-operating companies.

1.2 Information relating to the Concessions business

2018

(in € millions)	Concessions VINCI Autoroutes	VINCI Airports	VINCI Highways and other concessions	Total
Income statement				
Revenue (*)	**5,356**	**1,607**	**298**	**7,261**
Concession subsidiaries' works revenue	604	184	35	823
Total revenue	5,961	1,791	333	8,084
Operating income from ordinary activities	**2,686**	**689**	**54**	**3,429**
% of revenue (*)	*50.2%*	*42.9%*	*18.1%*	*47.2%*
Recurring operating income	**2,635**	**806**	**15**	**3,456**
Operating income	**2,634**	**806**	**40**	**3,480**
Cash flow statement				
Cash flows from operations before tax and financing costs	**3,895**	**941**	**127**	**4,963**
% of revenue (*)	*72.7%*	*58.6%*	*42.5%*	*68.4%*
Depreciation and amortisation	*1,221*	*245*	*71*	*1,537*
Operating investments (net of disposals)	(19)	(12)	(14)	(45)
Operating cash flow	**2,607**	**711**	**126**	**3,444**
Growth investments in concessions and PPPs	(673)	(274)	(33)	(980)
Free cash flow (after investments)	**1,934**	**438**	**93**	**2,465**
Balance sheet				
Capital employed at 31/12/2018	**21,132**	**6,994**	**2,989**	**31,115**
of which investments in companies accounted for under the equity method	*14*	*988*	*141*	*1,143*
Net financial surplus (debt)	**(20,345)**	**(4,951)**	**(1,734)**	**(27,029)**

(*) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.

2017

(in € millions)	Concessions			
	VINCI Autoroutes	**VINCI Airports**	**VINCI Highways and other concessions**	**Total**
Income statement				
Revenue (*)	**5,277**	**1,409**	**258**	**6,945**
Concession subsidiaries' works revenue	633	52	176	861
Total revenue	5,910	1,462	434	7,805
Operating income from ordinary activities	**2,685**	**563**	**3**	**3,251**
% of revenue (*)	*50.9%*	*39.9%*	*1.2%*	*46.8%*
Recurring operating income	**2,676**	**589**	**6**	**3,270**
Operating income	**2,676**	**589**	**6**	**3,270**
Cash flow statement				
Cash flows from operations before tax and financing costs	**3,850**	**808**	**51**	**4,710**
% of revenue (*)	*73.0%*	*57.3%*	*19.8%*	*67.8%*
Depreciation and amortisation	*1,184*	*235*	*44*	*1,462*
Operating investments (net of disposals)	(16)	(8)	(23)	(47)
Operating cash flow	**2,346**	**629**	**39**	**3,013**
Growth investments in concessions and PPPs	(702)	(169)	(175)	(1,045)
Free cash flow (after investments excluding non-recurring tax effects)	**1,769**	**459**	**(135)**	**2,093**
Balance sheet				
Capital employed at 31/12/2017	**21,319**	**5,783**	**2,502**	**29,605**
of which investments in companies accounted for under the equity method	*14*	*923*	*117*	*1,054*
Net financial surplus (debt)	**(20,954)**	**(4,048)**	**(2,143)**	**(27,145)**

(*) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.

2. Breakdown of revenue by geographical area

Accounting policies

The Group's consolidated revenue corresponds to revenue from the Contracting business lines, the Concessions business and VINCI Immobilier.
The Group has applied IFRS 15 since 1 January 2018. It requires a contract as well as the various performance obligations contained in the contract to be identified. The number of performance obligations depends on the types of contracts and activities. Most of the Group's contracts involve only one performance obligation.
IFRS 15's fundamental principle is that the recognition of revenue from contracts with customers must reflect:

- the rate at which performance obligations are fulfilled, corresponding to the transfer to a customer of control of a good or service;
- the amount to which the seller expects to be entitled as consideration for its activities.

The way in which transfer of control of a good or service is analysed is crucial, since that transfer determines the recognition of revenue.
The transfer of control of a good or service may take place continuously (revenue recognition on a progress towards completion basis) or on a specific date (recognition on completion).
The method for recognising revenue under concession contracts is explained in Notes F "Concession and PPP contracts". This revenue consists of:

- tolls for the use of motorway infrastructure operated under concession, revenue from airport service concessions, and ancillary income such as fees for the use of commercial installations, rental of telecommunications infrastructure and advertising space; and
- revenue in respect of the construction of new infrastructure under concession recognised on a progress towards completion basis in accordance with IFRS 15, corresponding to work done by companies outside the Group.

Consolidated revenue of the Contracting business (VINCI Energies, Eurovia and VINCI Construction) is recognised in accordance with IFRS 15. It includes the total of the work, goods and services generated by the consolidated subsidiaries pursuing their main activity and the revenue for construction work on infrastructure under concession.
In the French property sector, revenue arising on lots sold is recognised as the property development proceeds, in accordance with IFRS 15 and statutory provisions relating to off-plan sales. In that respect, to measure progress towards completion of works, VINCI Immobilier uses the cost-based method. The cost of land is included in the progress towards completion calculation at the start of each contract.

The method for recognising revenue under construction and service contracts is explained in Note G.15 "Construction and service contracts (Contracting business and VINCI Immobilier)".

Revenue from ancillary activities mainly comprises revenue from leases, sales of equipment, materials and merchandise, study work and fees.

(in € millions)	2018	%	2017	%
France	**24,768**	**56.9%**	**23,680**	**58.8%**
Germany	3,002	6.9%	2,726	6.8%
United Kingdom	2,222	5.1%	2,269	5.6%
Central and Eastern Europe (1)	2,202	5.1%	1,849	4.6%
Portugal	942	2.2%	862	2.1%
Other European countries	3,355	7.7%	2,471	6.1%
Europe excluding France	**11,723**	**26.9%**	**10,178**	**25.3%**
Europe (2)	**36,491**	**83.9%**	**33,858**	**84.1%**
of which European Union	*35,426*	*81.4%*	*33,000*	*82.0%*
North America	1,992	4.6%	1,461	3.6%
Central and South America	1,146	2.6%	1,210	3.0%
Africa	1,342	3.1%	1,345	3.3%
Asia Pacific and Middle East (3)	2,548	5.9%	2,373	5.9%
International excluding Europe	**7,028**	**16.1%**	**6,390**	**15.9%**
International excluding France	**18,751**	**43.1%**	**16,568**	**41.2%**
Revenue (4)	**43,519**	**100.0%**	**40,248**	**100.0%**

(1) Albania, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and Ukraine.
(2) Including the eurozone for €30,819 million (70.8% of total revenue) in 2018 and for €29,011 million (72% of total revenue) in 2017.
(3) Including Russia.
(4) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.

Revenue arising outside France amounted to €18,751 million in 2018, up 13.2% compared with 2017. It accounted for 43.1% of revenue excluding concession subsidiaries' revenue derived from works carried out by non-Group companies (41.2% in 2017).

3. Detail of capital employed and breakdown by geographical area

Reconciliation between capital employed and the balance sheet

(in € millions)	Note	31/12/2018	31/12/2017
Capital employed – assets			
Concession intangible assets	12	27,118	26,539
- Deferred tax on business combination fair value adjustments		(1,647)	(1,697)
Goodwill, gross	9	10,016	8,818
Other intangible assets		632	417
Property, plant and equipment	16	5,359	4,421
Investments in companies accounted for under the equity method	10	1,674	1,573
Other non-current financial assets	11-13-17	1,843	1,723
- Derivative financial instruments (non-current assets)	23-25	(511)	(621)
Inventories and work in progress	18	1,173	1,056
Trade and other receivables	18	13,584	12,432
Other current operating assets	18	5,033	5,035
Other current non-operating assets		52	58
Current tax assets		280	406
Capital employed – liabilities			
Current provisions	18	(4,452)	(4,322)
Trade payables	18	(8,240)	(8,198)
Other current operating liabilities	18	(12,862)	(11,852)
Other current non-operating liabilities		(500)	(487)
Current tax liabilities		(282)	(225)
Total capital employed		**38,270**	**35,075**

Capital employed by geographical area

(in € millions)	31/12/2018	31/12/2017
France	26,763	26,841
Germany	259	311
United Kingdom	624	140
Portugal	2,605	2,641
Other European countries	2,439	1,126
Total Europe excluding France	**5,927**	**4,217**
Total Europe	**32,691**	**31,058**
North America	1,859	474
Central and South America	3,102	3,116
Africa	(124)	(104)
Asia, Pacific and Middle East (*)	743	530
Total capital employed	**38,270**	**35,075**

(*) Including Russia.

At 31 December 2018, 81% of the Group's capital employed was in the eurozone and represented €30.9 billion (€30.7 billion and 88% of the total in 2017).

D. Main income statement items

4. Operating income

Accounting policies

Operating income from ordinary activities measures the operational performance of fully consolidated Group subsidiaries before taking into account share-based payment expense (IFRS 2). It also excludes the share of the income or loss of companies accounted for under the equity method, and other recurring operating items and non-recurring items.

Recurring operating income is intended to present the Group's recurring operational performance excluding the impact of non-recurring transactions and events during the period. It is obtained by adding the impacts associated with share-based payments (IFRS 2), income/losses from companies accounted for under the equity method and other recurring operating income and expense to operating income from ordinary activities.

Goodwill impairment losses and other material non-recurring operating items, including gains or losses on the disposal of shares and the impact of remeasuring equity interests at fair value when changes of control take place, are recognised under **operating income**. Operating income is therefore obtained by adding income and expenses regarded as non-recurring to recurring operating income.

(in € millions)	2018	2017
Revenue (*)	**43,519**	**40,248**
Concession subsidiaries' revenue derived from works carried out by non-Group companies	633	629
Total revenue	44,152	40,876
Revenue from ancillary activities (**)	202	200
Purchases consumed	(9,833)	(8,626)
External services	(5,503)	(5,342)
Temporary staff	(1,122)	(1,039)
Subcontracting (including concession operating companies' construction costs)	(8,848)	(8,293)
Taxes and levies	(1,124)	(1,106)
Employment costs	(10,877)	(9,916)
Other operating income and expense on activity	98	72
Depreciation and amortisation	(2,242)	(2,128)
Net provision expense	94	(89)
Operating expenses	**(39,357)**	**(36,468)**
Operating income from ordinary activities	**4,997**	**4,607**
% of revenue (*)	*11.5%*	*11.4%*
Share-based payments (IFRS 2)	(206)	(163)
Profit/(loss) of companies accounted for under the equity method	88	146
Other recurring operating items	45	-
Recurring operating income	**4,924**	**4,592**
Goodwill impairment losses	(11)	(4)
Impact from changes in scope and gain/(loss) on disposals of shares	7	(12)
Other non-recurring operating items	-	(25)
Total non-recurring operating items	*(4)*	*(41)*
Operating income	**4,920**	**4,550**

(*) Excluding concession subsidiaries' revenue derived from works carried out by non-Group companies.
(**) Revenue from ancillary activities mainly comprises rental income, sales of equipment, materials and merchandise, study work and fees other than those generated by concession operators.

Other recurring operating items include financial income from shareholder loans and advances granted by the Group to certain associates, along with the impact of changes in indexation assumptions used to measure the provision for the obligation to maintain the condition of concession assets.

Non-recurring operating items in 2018 were not material. In 2017, they consisted mainly of restructuring charges in France.

4.1 Employment costs

(in € millions)	Note	2018	2017
Wages and salaries – I		**(10,678)**	**(9,723)**
Of which wages and salaries		*(8,066)*	*(7,325)*
Of which employer social contributions		*(2,014)*	*(1,847)*
Of which contributions to defined contribution plans	*27.1*	*(598)*	*(552)*
Profit-sharing and incentive plans - II		**(198)**	**(193)**
Total (I+II)		**(10,877)**	**(9,916)**

In 2018, the average full-time equivalent headcount was 204,775, up 6.5% compared with 2017.

	2018	2017
Average number of employees (in full-time equivalent)	**204,775**	**192,282**
of which managers	*39,886*	*37,620*
of which other employees	*164,889*	*154,662*

4.2 Other operating income and expense from ordinary activities

(in € millions)	2018	2017
Net gains or losses on disposal of property, plant and equipment and intangible assets	66	68
Share in operating income or loss of joint operations	19	24
Other	13	(20)
Total	**98**	**72**

4.3 Depreciation and amortisation

Depreciation and amortisation break down as follows:

(in € millions)	2018	2017
Concession intangible assets	(1,265)	(1,095)
Intangible assets	(53)	(48)
Property, plant and equipment	(925)	(985)
Depreciation and amortisation	**(2,242)**	**(2,128)**

5. Cost of net financial debt

Accounting policies

The cost of net financial debt includes:

- the cost of gross financial debt, which includes the interest expense calculated at the effective interest rate, and gains and losses on interest rate derivatives allocated to gross financial debt whether designated as hedges for accounting purposes or not;
- financial income from investments, which comprises the return on investments of cash and cash equivalents measured at fair value through profit and loss;
- recycling of financial hedging costs.

The cost of net financial debt amounted to €462 million in 2018 compared with €481 million in 2017, a decrease of €19 million.
The improvement resulted mainly from a lower average interest rate on long-term debt after refinancing took place at interest rates lower than those of the maturing borrowings.

The cost of net financial debt in 2018 can be analysed as follows:

(in € millions)	2018	2017
Financial liabilities at amortised cost	(635)	(653)
Financial assets and liabilities at fair value through profit and loss	29	56
Derivatives designated as hedges: assets and liabilities	152	114
Derivatives at fair value through profit and loss: assets and liabilities	(9)	1
Total cost of net financial debt	**(462)**	**(481)**

The "Derivatives designated as hedges: assets and liabilities" item breaks down as follows:

(in € millions)	2018	2017
Net interest on derivatives designated as fair value hedges	196	177
Change in value of derivatives designated as fair value hedges	(4)	(214)
Change in value of the adjustment to fair value hedged financial debt	4	214
Fluctuations in the value of derivatives designated as FVH	-	-
Reserve recycled through profit or loss in respect of cash flow hedges	(42)	(63)
Ineffective portion of cash flow hedges	(2)	-
Gains and losses on derivative instruments allocated to net financial debt	**152**	**114**

Since the Group started applying IFRS 9 on 1 January 2018, impacts relating to the retrospective application of new methods for recognising hedging costs are presented under opening equity (see Note A.4 "Changes in accounting methods"). Accordingly, comparative data at 31 December 2017 has not been adjusted.

6. Other financial income and expense

Accounting policies

Other financial income and expense comprises mainly discounting effects, the impact of capitalised borrowing costs, foreign exchange gains and losses relating to financial items and changes in the value of derivatives not allocated to hedging interest rate or exchange rate risk.
Capitalised borrowing costs relate to infrastructure under concession and are included during the construction period in the value of those assets. They are determined as follows:

- to the extent that funds are borrowed specifically for the purpose of constructing an asset, the borrowing costs eligible for capitalisation on that asset are the actual borrowing costs incurred during the period less any investment income arising from the temporary investment of those borrowings;
- when borrowing is not intended to finance a specific project, the interest eligible for capitalisation on an asset is determined by applying a capitalisation rate to the expenditure on that asset. This capitalisation rate is equal to the weighted average of the costs of borrowing funds for construction work, other than those specifically intended for the construction of given assets.

This does not relate to the construction of concession assets accounted for using the financial asset model (see Note F.13 "PPP financial receivables").

Other financial income and expense break down as follows:

(in € millions)	2018	2017
Effect of discounting to present value	(31)	(35)
Borrowing costs capitalised	56	86
Foreign exchange gains and losses	(9)	(11)
Total other financial income and expense	**17**	**40**

The effect of discounting to present value mainly relates to provisions for retirement benefit obligations for €27 million in 2018 (€23 million in 2017).

Capitalised borrowing costs in 2018 related mainly to Lamsac for €29 million (€56 million in 2017), the decrease being attributable to completion of the construction of the second section of the Linea Amarilla expressway (Lima ring road), the ASF group for €12 million (€19 million in 2017) and Arcos for €13 million (€10 million in 2017).

7. Income tax expense

Accounting policies

Income tax is computed in accordance with the tax legislation in force in the countries where the income is taxable.

In accordance with IAS 12, deferred tax is recognised on the temporary differences between the carrying amount and the tax base of assets and liabilities. It is calculated using the latest tax rates enacted or substantively enacted at the accounts closing date. The effects of a change in the tax rate from one period to another are recognised in the income statement in the period in which the change occurs, except where they relate to transactions recognised under other comprehensive income or directly in equity.

Deferred tax relating to share-based payments (IFRS 2) is taken to income to the extent that the deductible amount does not exceed the fair value of plans established according to IFRS 2.

Whenever subsidiaries have distributable reserves, a deferred tax liability is recognised in respect of the probable distributions that will be made in the foreseeable future. Moreover, shareholdings in associates and certain joint ventures give rise to recognition of a deferred tax liability in respect of all the differences between the carrying amount and the tax base of the shares.

Net deferred tax is determined on the basis of the tax position of each entity or group of entities included in the tax group under consideration and is shown under assets or liabilities for its net amount per tax jurisdiction. Deferred tax is reviewed at each balance sheet date to take account in particular of the impact of changes in tax law and the prospect of recovery. Deferred tax assets are only recognised if their recovery is probable. Deferred tax assets and liabilities are not discounted.

7.1 Breakdown of net tax expense

(in € millions)	2018	2017
Current tax	(1,529)	(1,537)
Deferred tax	111	265
of which temporary differences	*49*	*249*
of which losses carried forward	*62*	*17*
Total	**(1,418)**	**(1,271)**
of which non-recurring tax effects	*-*	*44*
Total excluding non-recurring tax effects	(1,418)	(1,315)

The net tax expense for the period comprises:

- a tax expense recognised by French subsidiaries for €1,055 million (€972 million in 2017), including €1,031 million at VINCI SA, the lead company in the tax consolidation group that comprises 969 subsidiaries (€949 million in 2017);
- a tax expense of €363 million for foreign subsidiaries (€343 million in 2017).

7.2 Effective tax rate

The Group's effective tax rate was 32.3% in 2018 as opposed to 33.2% in 2017 (excluding non-recurring tax effects).

The effective tax rate for 2018 is slightly lower than the theoretical tax rate of 34.43% in force in France, because of some foreign subsidiaries being taxed at rates lower than the French rate. The difference between the tax calculated using the standard tax rate in force in France and the amount of tax effectively recognised in the year can be analysed as follows:

(in € millions)	2018	2017
Income before tax and income/(loss) of companies accounted for under the equity method	4,387	3,962
Theoretical tax rate in France	34.4%	34.4%
Theoretical tax expense expected	**(1,511)**	**(1,364)**
Impact of taxes due on income taxed at a lower rate in France	9	8
Tax rate differential on foreign income	127	124
Impact of tax loss carryforwards and other temporary differences that are not recognised or that have previously been subject to limitation	11	(5)
Goodwill impairment losses	(3)	(1)
Permanent differences and other	(50)	(76)
Tax expense recognised excluding non-recurring tax effects	**(1,418)**	**(1,315)**
Effective tax rate excluding non-recurring tax effects (*)	**32.3%**	**33.2%**
Non-recurring tax effects	-	44
Effective tax rate (*)	**32.3%**	**32.1%**

(*) Excluding the Group's share of companies accounted for under the equity method.

7.3 Breakdown of deferred tax assets and liabilities

(in € millions)	31/12/2018	Changes: Profit or loss	Changes: Equity	Changes: Other	31/12/2017
Deferred tax assets					
Losses carried forward	456	98	(4)	(9)	371
Temporary differences on retirement benefit obligations	336	(1)	12	-	324
Temporary differences on provisions	580	(30)	-	8	602
Temporary differences on financial instruments	74	(4)	(5)	1	81
Temporary differences related to finance leases	25	2	-	-	23
Other	397	(23)	4	42	374
Netting of deferred tax assets and liabilities by tax jurisdiction	(1,126)	-	-	(72)	(1,054)
Total deferred tax assets before impairment	**740**	**41**	**7**	**(30)**	**721**
Impairment	(423)	11	17	16	(466)
Total deferred tax assets after impairment	**317**	**52**	**24**	**(14)**	**255**
Deferred tax liabilities					
Remeasurement of assets (*)	(2,151)	124	(11)	(68)	(2,196)
Temporary differences related to finance leases	(29)	(1)	-	(1)	(27)
Temporary differences on financial instruments	(41)	3	2	(1)	(46)
Other	(581)	(68)	(3)	9	(520)
Netting of deferred tax assets and liabilities by tax jurisdiction	1,126	-	-	72	1,054
Total deferred tax liabilities	**(1,676)**	**58**	**(11)**	**12**	**(1,735)**
Net deferred tax	**(1,359)**	**111**	**13**	**(2)**	**(1,480)**

(*) Including measurement at fair value of the assets and liabilities of ASF, Lamsac, Aéroports de Lyon and ANA at date of first consolidation: €973 million, €208 million, €154 million and €115 million respectively at 31 December 2018.

Recognised deferred tax assets whose recovery is not probable are written down. They amounted to €423 million at 31 December 2018 (€466 million at 31 December 2017), including €392 million outside France (€414 million at 31 December 2017).

8. Earnings per share

Accounting policies

Basic earnings per share is the net income for the period after non-controlling interests, divided by the weighted average number of shares outstanding during the period less the weighted average number of treasury shares.

In calculating diluted earnings per share, the weighted average number of shares outstanding is adjusted for the potentially dilutive effect of all equity instruments issued by the company, in particular share subscription options and performance shares. The dilution resulting from the exercise of share subscription options and from performance shares is determined using the method defined in IAS 33. In accordance with this standard, plans of which the stock market price is greater than the average price during the period are excluded from the diluted earnings per share calculation.

In calculating basic and diluted earnings per share, earnings are also adjusted as necessary for changes in income and expenses taken directly to equity resulting from the conversion into shares of all potentially dilutive instruments.

The table below shows the reconciliation between basic and diluted earnings per share:

	2018			2017		
	Average number of shares	**Net income** *(in € millions)*	**Earnings per share** *(in €)*	**Average number of shares**	**Net income** *(in € millions)*	**Earnings per share** *(in €)*
Total shares	**595,046,296**			**592,838,481**		
Treasury shares	(40,269,807)			(38,254,966)		
Basic earnings per share	**554,776,489**	**2,983**	**5.38**	**554,583,515**	**2,747**	**4.95**
Subscription options	347,209			838,180		
Group savings plan	90,843			226,266		
Performance shares	5,206,228			3,988,482		
Diluted earnings per share	**560,420,769**	**2,983**	**5.32**	**559,636,443**	**2,747**	**4.91**

E. Investments in other companies

9. Goodwill and goodwill impairment tests

Accounting policies

Goodwill is the excess of the cost of a business combination over the Group's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities at the date of acquisition, recognised on first consolidation.

Goodwill in fully consolidated subsidiaries is recognised under goodwill in consolidated assets. Goodwill relating to companies accounted for under the equity method is included in the line item "Investments in companies accounted for under the equity method".

Goodwill is not amortised but is tested for impairment at least annually and when there is an indication that an impairment loss has arisen. If a goodwill impairment loss is recognised as a result, the difference between its carrying amount and its recoverable amount is charged irreversibly to operating income in the period.

Negative goodwill is recognised directly in profit or loss in the year of acquisition.

According to IFRS 3 (amended), an option is available to measure non-controlling interests on the acquisition date either at fair value (the full goodwill method) or for the portion of the net assets acquired that they represent (the partial goodwill method). The choice can be made for each business combination.

9.1 Main goodwill items

Changes in the period were as follows:

(in € millions)	31/12/2018	31/12/2017
Net at beginning of period	**8,600**	**8,113**
Goodwill recognised during the period	1,127	608
Impairment losses	(11)	(4)
Entities no longer consolidated	-	-
Currency translation differences	39	(120)
Other movements	38	3
Net at end of period	**9,792**	**8,600**

The increase in goodwill during the period resulted mainly from the recognition of provisional goodwill related to acquisitions during 2018, including:

- at VINCI Airports: Airports Worldwide (€98 million);
- at VINCI Energies: PrimeLine Utility Services in the United States (€562 million) and Wah Loon Engineering in Singapore (€107 million);
- at Eurovia: Lane Plants & Paving, the industrial and roadworks division of Lane Construction in the United States (€167 million).

Other movements mainly concerned goodwill adjustments recognised during 2018.

In 2017, the principal changes related to acquisitions by VINCI Energies (Infratek in Scandinavia, Horlemann in Germany, Acuntia in Spain and Novabase IMS in Portugal for a total amount of €373 million, and by VINCI Construction, in particular Seymour Whyte in Australia (€55 million).

The main items of goodwill at 31 December 2018 were as follows:

	31/12/2018			31/12/2017
(in € millions)	**Gross**	**Impairment losses**	**Net**	**Net**
VINCI Energies France	2,375	-	2,375	2,353
ASF group	1,935	-	1,935	1,935
VINCI Airports	1,081	-	1,081	969
VINCI Energies Germany	631	-	631	625
VINCI Energies North America	609	-	609	1
VINCI Energies Benelux	334	-	334	312
VINCI Energies Scandinavia	333	-	333	268
VINCI Highways	247	-	247	246
Entrepose	201	-	201	201
VINCI Energies Switzerland	199	-	199	155
Soletanche Bachy	171	-	171	171
Eurovia USA	166	-	166	-
VINCI Energies Australia – New Zealand	142	-	142	147
Nuvia	127	-	127	128
VINCI Energies Singapore	111	-	111	-
ETF	108	-	108	108
VINCI Energies Spain	107	-	107	94
Other goodwill	1,140	(223)	917	887
Total	**10,016**	**(223)**	**9,792**	**8,600**

9.2 Goodwill impairment tests

Accounting policies

In accordance with IAS 36 "Impairment of Assets", the goodwill and other non-financial assets of cash-generating units (CGUs) were tested for impairment losses at 31 December 2018.

CGUs are identified in line with operational reporting and their recoverable amounts are based on a value in use calculation. Values in use are determined by discounting the forecast operating cash flow before tax (operating income plus depreciation and amortisation plus/minus the change in non-current provisions minus operating investments plus/minus the change in operating working capital requirement) at the rates below.

For concessions, forecast cash flow is determined across the length of contracts by applying a variable discount rate, determined for each period depending on the debt to equity ratio of the entity in question.

For the other CGUs, projected cash flow is generally established for a five-year period on the basis of management forecasts. At the end of that period, a terminal value is determined by capitalising the final year's projected cash flow to infinity, and that value is discounted to present value.

Goodwill was tested for impairment losses using the following assumptions:

	Parameters of the model applied to cash flow forecasts				Impairment losses recognised in the period	
			Discount rates			
(in € millions)	Growth rate (years n+1 to n+5)	Growth rate (terminal value)	31/12/2018	31/12/2017	2018	2017
VINCI Energies France	1.7%	1.0%	7.3%	7.7%	-	-
ASF group	(*)	(*)	7.1%	8.1%	-	-
VINCI Airports	(*)	(*)	9.5%	9.3%	-	-
VINCI Energies Germany	1.0%	1.0%	6.7%	7.2%	-	-
VINCI Energies North America	4.7%	2.0%	8.2%	N/A	-	-
VINCI Energies Benelux	1.5%	1.0%	7.2%	7.5%	-	-
VINCI Energies Scandinavia	1.5%	1.0%	6.7%	6.8%	-	-
VINCI Highways	(*)	(*)	9.5%	8.9%	-	-
Entrepose	8.5%	1.0%	8.1%	9.2%	-	-
VINCI Energies Switzerland	1.2%	1.0%	5.1%	5.0%	-	-
Soletanche Bachy	3.5%	1.5%	8.1%	9.3%	-	-
Other goodwill	-3% - 7%	0% - 6%	7% - 17%	7% - 17%	(11)	(4)
Total					**(11)**	**(4)**

(*) For concessions, cash flow projections are determined over the length of concession contracts.
The average revenue growth rate for the ASF group (ASF and Escota), based on the residual periods of concessions contracts, is 1.5%. Those used by VINCI Airports and VINCI Highways are respectively 4.0% and 7.4%.

Sensitivity of the value in use of cash-generating units to the assumptions made

The following table shows the sensitivity of enterprise value to the assumptions made for the main goodwill items:

Sensitivity to discount and perpetual growth rates and to cash flow

	Sensitivity to rates				Sensitivity to cash flows	
	Discount rate for cash flows		Perpetual growth rate for cash flows		Change in forecast operating cash flows (before tax)	
(in € millions)	0.5%	-0.5%	0.5%	-0.5%	5.0%	-5.0%
VINCI Energies France	(452)	530	429	(366)	315	(315)
ASF group	(881)	929	(*)	(*)	1,339	(1,339)
VINCI Airports	(718)	790	(*)	(*)	622	(622)
VINCI Energies Germany	(204)	242	200	(168)	130	(130)
VINCI Energies North America	(60)	71	58	(49)	41	(41)
VINCI Energies Benelux	(70)	83	67	(57)	48	(48)
VINCI Energies Scandinavia	(56)	67	55	(46)	35	(35)
VINCI Highways	(190)	208	(*)	(*)	157	(157)
Entrepose	(44)	50	40	(35)	31	(31)
VINCI Energies Switzerland	(98)	125	109	(85)	46	(46)
Soletanche Bachy	(227)	265	213	(183)	157	(157)

(*) Forecasts of cash flows are determined over the residual periods of the concession contracts.

These sensitivity calculations show that a change of 50 basis points in the assumptions for discount and perpetual growth rates or a +/-5% change in projected operating cash flow would not have a material impact on the results of impairment tests or, therefore, on the Group's consolidated financial statements at 31 December 2018.

10. Investments in companies accounted for under the equity method: associates and joint ventures

Accounting policies

Investments in companies accounted for under the equity method are initially recognised at the cost of acquisition, including any goodwill arising, and acquisition costs. Their carrying amount is then increased or decreased to recognise the Group's share of the entity's profits or losses after the date of acquisition. Whenever losses are greater than the value of the Group's net investment in the equity-accounted company, those losses are not recognised unless the Group has entered into a commitment to recapitalise the company or provide it with funding.

If there is an indication that an impairment loss has arisen, the investment's recoverable amount is tested in a way similar to that described in Note E.9.2 "Goodwill impairment tests". Impairment losses shown by these impairment tests are recognised in profit and loss and as a deduction from the carrying amount of the corresponding investments.

In order to present business lines' operational performance in the best way possible, the income or loss of companies accounted for under the equity method is reported on a specific line between the "Operating income from ordinary activities" and "Recurring operating income" lines.

10.1 Movements during the period

	2018			2017		
(in € millions)	**Associates**	**Joint ventures**	**Total**	**Associates**	**Joint ventures**	**Total**
Value of shares at beginning of period	**1,127**	**446**	**1,573**	**1,083**	**423**	**1,505**
of which Concessions	*722*	*333*	*1,054*	*686*	*320*	*1,006*
of which Contracting	*403*	*87*	*490*	*393*	*83*	*476*
of which VINCI Immobilier	*2*	*27*	*29*	*4*	*20*	*24*
Increase in share capital of companies accounted for under the equity method	-	18	18	11	32	43
Group share of profit or loss for the period	75	13	88	118	29	146
Group share of other comprehensive income for the period	(4)	22	17	(7)	62	55
Dividends paid	(52)	(124)	(176)	(77)	(106)	(184)
Changes in consolidation scope and other (*)	(28)	18	(10)	(4)	(43)	(47)
Reclassifications (**)	37	128	165	4	51	54
Value of shares at end of period	**1,154**	**520**	**1,674**	**1,127**	**446**	**1,573**
of which Concessions	*745*	*398*	*1,143*	*722*	*333*	*1,054*
of which Contracting	*408*	*90*	*497*	*403*	*87*	*490*
of which VINCI Immobilier	*2*	*32*	*34*	*2*	*27*	*29*

(*) Including impact of first-time adoption on 1 January 2018 of IFRS 15 "Revenue from contracts with customers" and IFRS 9 "Financial Instruments" for a total negative amount of €24 million.
(**) Reclassifications of shares in the negative net equity of equity-accounted companies under provisions for financial risks.
N.B. Associates are companies over which the Group has only significant influence, while joint ventures are jointly controlled activities held via companies that have legal personality.

At 31 December 2018, the Group's interests in associates included, for the Concessions business, the stake in the Aéroports de Paris group (€725 million) and, for the Contracting business, the stake in the CFE group (€231 million).

Impacts included under "Group share of other comprehensive income for the period" relate mainly to cash flow and interest rate hedging transactions on concession and public-private partnership projects.

10.2 Aggregated financial information

The contribution of equity-accounted companies to the Group's consolidated comprehensive income is as follows:

(in € millions)	2018 Associates	2018 Joint ventures	2018 Total	2017 Associates	2017 Joint ventures	2017 Total
Net income	**75**	**13**	**88**	**118**	**29**	**146**
of which Concessions	*43*	*(33)*	*10*	*41*	*(7)*	*34*
of which Contracting	*33*	*22*	*55*	*77*	*17*	*94*
of which VINCI Immobilier	*-*	*24*	*24*	*-*	*19*	*19*
Other comprehensive income	(4)	22	17	(7)	62	55
of which Concessions	*1*	*23*	*24*	*6*	*56*	*62*
of which Contracting	*(6)*	*(1)*	*(7)*	*(13)*	*6*	*(7)*
Comprehensive income	**70**	**35**	**105**	**111**	**91**	**202**
of which Concessions	*44*	*(10)*	*34*	*47*	*49*	*96*
of which Contracting	*27*	*21*	*48*	*64*	*23*	*87*
of which VINCI Immobilier	*-*	*24*	*24*	*-*	*19*	*19*

The revenue of companies accounted for under the equity method breaks down as follows (data reflecting the Group's share):

(in € millions)	2018 Associates	2018 Joint ventures	2018 Total	2017 Associates	2017 Joint ventures	2017 Total
Revenue (*)	**1,413**	**2,102**	**3,515**	**1,376**	**2,019**	**3,395**
of which Concessions	*819*	*1,087*	*1,906*	*792*	*981*	*1,772*
of which Contracting	*593*	*785*	*1,377*	*583*	*808*	*1,391*
of which VINCI Immobilier	*1*	*230*	*232*	*2*	*231*	*232*

(*) Excluding works revenue related to concession activities.

In accordance with IAS 28, the Group's recognition of its share of losses at associates and joint ventures is limited to its liabilities. At 31 December 2018, losses thus unrecognised amounted to €150 million (€125 million at 31 December 2017).

The main features of concession and PPP contracts are given in Note F.14 "Concession and PPP contracts of companies accounted for under the equity method". The list of companies accounted for under the equity method is available on the Group website (www.vinci.com/vinci.nsf/en/investors-composition-group.htm).

10.3 Commitments made in respect of associates and joint ventures

At 31 December 2018, Group funding commitments to equity-accounted companies (via capital or subordinated loans) amounted to €162 million (€126 million at 31 December 2017). Changes in the period mainly relate to entities in the Concessions business, including the company that holds the concession for Arturo Merino Benitez International Airport in Santiago, Chile, for which the Group made a funding commitment of €87 million at 31 December 2018.

Collateral security has also been granted in the form of pledges of shares in companies accounted for under the equity method.
The net carrying amount of the shares pledged at 31 December 2018 was €39 million and included shares in WVB East End Partners (the company holding the concession for the Ohio River Bridges – East End Crossing project in the United States) for €19 million SMTPC (the holder of the concession for the Prado Carénage road tunnel in Marseille) for €10 million and Synérail (GSM-R – Global System for Mobile communication-Railway public-private partnership contract) for €10 million.

10.4 Investment commitments given by associates and joint ventures

At 31 December 2018, the Group's share of investment commitments given by these companies amounted to €642 million (€1,004 million at 31 December 2017). These commitments relate mainly to projects involving infrastructure under construction in the Concessions business, the Via 40 Express motorway between the cities of Bogotá and Girardot in Colombia (€241 million), the new section of the A7 motorway in Germany (€116 million), sections 7 and 8 of the M11 motorway between Moscow and St Petersburg (€96 million) and Santiago airport in Chile (€94 million). The €361 million decrease in these commitments during the year was due to progress with works carried out on projects, including the Moscow-St Petersburg motorway, Santiago airport in Chile, and the Regina Bypass in Canada.

10.5 Controlled subsidiaries' transactions with associates and joint ventures

The financial statements include certain commercial transactions between controlled subsidiaries and associates and joint ventures. The main transactions are as follows:

	31/12/2018			31/12/2017		
(in € millions)	**Associates**	**Joint ventures**	**Total**	**Associates**	**Joint ventures**	**Total**
Revenue	382	570	**952**	386	759	**1,144**
Trade receivables	95	90	**186**	58	113	**170**
Purchases	3	18	**21**	3	33	**36**
Trade payables	1	6	**7**	1	5	**6**

11. Other non-current financial assets

Accounting policies

At the balance sheet date, shares in unconsolidated subsidiaries and affiliates are measured at their fair value through profit and loss or through equity, depending on the choice made at initial recognition, as set out below. The fair value of shares in listed companies is determined on the basis of the stock market price at the relevant balance sheet date. For unlisted shares, if their fair value cannot be determined reliably, they continue to be measured at their initial fair value, of which the best estimate is the cost of acquisition plus transaction costs, adjusted for any increases or decreases in value determined by analysing the change in the proportion of equity.

Whenever further equity securities are acquired, an analysis of the Group's management intention is carried out to determine whether they will be measured at fair value through profit and loss or through equity. Only shares regarded as strategic may be measured at fair value through other comprehensive income (see Note J.26 "Book and fair value of financial instruments by accounting category").

At 31 December 2018, "Financial assets measured at amortised cost" mainly comprised receivables relating to shareholdings, such as shareholders' advances to subsidiaries managing concessions or PPP projects. The "Equity instruments" item consists of shareholdings in subsidiaries that do not meet VINCI's minimum financial criteria for consolidation. These are presented on the asset side of the consolidated balance sheet under "Other non-current financial assets" along with "PPP financial receivables" and "Financial assets measured at amortised cost":

(in € millions)	31/12/2018	31/12/2017
Equity instruments	101	95
Amortised cost financial assets (*)	1,059	830
PPP financial receivables (*)	172	177
Other non-current financial assets	**1,332**	**1,102**

(*) Information relating to "PPP financial receivables" is provided in Note F.13 and information relating to "Amortised cost financial assets" is provided in Note H.17.

During the period, the change in equity instruments broke down as follows:

(in € millions)	2018	2017
Beginning of period	**95**	**134**
Acquisitions during period	18	16
Acquisitions as part of business combinations	5	-
Fair value adjustment recognised in equity	(1)	-
Impairment losses	(7)	(8)
Disposals during period	(2)	(3)
Other movements and currency translation differences	(8)	(45)
End of period	**101**	**95**

F. Concession and PPP contracts

Accounting policies

Under the terms of IFRIC 12 "Service Concession Arrangements", a concession operator may have a twofold activity:

- a construction activity in respect of its obligations to design, build and finance a new asset that it delivers to the grantor;
- an operating and maintenance activity in respect of concession assets.

Revenue from each activity is recognised in accordance with IFRS 15.

In return for its activities, the operator receives remuneration from:

- **users: in this case, the intangible asset model applies.** The operator has a right to receive tolls (or other forms of remuneration) from users in consideration for the financing and construction of the infrastructure. This model also applies whenever the concession grantor remunerates the concession operator based on the extent of use of the infrastructure by users, but with no guarantees as to the amounts that will be paid to the operator (under a simple "pass through" or "shadow toll" agreement).

Under this model, the right to receive toll payments (or other forms of remuneration) is recognised in the concession operator's balance sheet under "Concession intangible assets", net of any investment grants received. This right corresponds to the fair value of the asset under concession plus the borrowing costs capitalised during the construction phase. It is amortised over the term of the arrangement in a manner that reflects the pattern in which the concession asset's economic benefits are consumed by the entity, starting from the entry into service of the asset.

This treatment applies to most infrastructure concessions, in particular the concessions of VINCI Autoroutes in France, the main airports managed by VINCI Airports Group and certain bridges.

The motorway concession companies ASF, Cofiroute, Escota, Arcour and Arcos, along with most of the Group's airport concession companies, use the straight-line method for amortising concession intangible assets.

- **the grantor: in this case, the financial asset model applies.** The operator has an unconditional contractual right to receive payments from the concession grantor, irrespective of the amount of use made of the infrastructure.

Under this model, the operator recognises a financial asset, attracting interest, in its balance sheet, in consideration for the services it provides (design and construction). Such financial assets are recognised in the balance sheet under "Other financial assets", in an amount corresponding to the fair value of the infrastructure on first recognition and subsequently at amortised cost. The receivable is settled by means of the grantor's payments received. The income calculated on the basis of the effective interest rate is recognised under operating income (revenue from ancillary activities).

In the case of **bifurcated models**, the operator is remunerated partly by users and partly by the grantor. The part of the investment that is covered by an unconditional contractual right to receive payments from the grantor (in the form of grants or rental) is recognised as a financial receivable up to the amount guaranteed. The unguaranteed balance, of which the amount is dependent on the extent of use of the infrastructure, is recognised under "Concession intangible assets".

12. Concession intangible assets

12.1 Breakdown of concession intangible assets

(in € millions)	VINCI Autoroutes	VINCI Airports	Other concessions	Total
Gross				
01/01/2017	**31,625**	**4,168**	**1,950**	**37,743**
Acquisitions during period (*)	661	381	235	1,277
Disposals during period	(2)	(2)	(1)	(5)
Currency translation differences	-	(152)	(167)	(319)
Changes in scope and other	15	(25)	-	(10)
	32,299	**4,370**	**2,017**	**38,686**
Grants received	(22)	-	-	(22)
31/12/2017	**32,278**	**4,370**	**2,017**	**38,665**
Acquisitions during period (*)	630	184	68	881
Disposals during period	(2)	(6)	-	(8)
Currency translation differences	-	17	11	28
Changes in scope and other	23	686	269	979
	32,929	**5,251**	**2,365**	**40,544**
Grants received	(2)	-	-	(2)
31/12/2018	**32,927**	**5,251**	**2,365**	**40,542**
Amortisation and impairment losses				
01/01/2017	**(10,529)**	**(365)**	**(160)**	**(11,053)**
Amortisation during period	(931)	(128)	(35)	(1,095)
Impairment losses	-	(2)	-	(2)
Reversals of impairment losses	-	1	-	1
Disposals during period	1	-	3	4
Currency translation differences	-	25	2	27
Other	(12)	12	(7)	(8)
31/12/2017	**(11,471)**	**(458)**	**(197)**	**(12,126)**
Amortisation during period	(1,063)	(138)	(64)	(1,265)
Impairment losses	-	(5)	(3)	(8)
Disposals during period	-	2	-	2
Currency translation differences	-	(11)	-	(11)
Other	(14)	(2)	-	(16)
31/12/2018	**(12,548)**	**(612)**	**(264)**	**(13,424)**
Net				
01/01/2017	**21,096**	**3,804**	**1,791**	**26,691**
31/12/2017	**20,807**	**3,912**	**1,820**	**26,539**
31/12/2018	**20,379**	**4,639**	**2,101**	**27,118**

(*) Including capitalised borrowing costs.

In 2018, acquisitions of intangible concession assets totalled €881 million.
They include investments by the ASF group for €388 million (€456 million in 2017), by Cofiroute for €139 million (€119 million in 2017), by VINCI Airports for €184 million, and by VINCI Highways for €36 million (€177 million in 2017).
The ASF group's investments include works under the 2015 stimulus plan.

Concession intangible assets include assets under construction for €1,210 million at 31 December 2018 (€2,044 million at 31 December 2017). These relate to VINCI Autoroutes subsidiaries for €994 million (including ASF for €504 million, Escota for €125 million, Cofiroute for €198 million and Arcos for €165 million), and VINCI Airports subsidiaries for €213 million.
Scope effects at VINCI Airports reflect that division's expansion during the year and relate mainly to Belgrade airport in Serbia and Orlando Sanford airport in the United States (Airports Worldwide).

12.2 Main features of concession and PPP contracts – intangible asset model

	Control and regulation of prices by concession grantor	Remuneration paid by	Grant or guarantee from concession grantor	Residual value	Concession end date
VINCI Autoroutes					
ASF group					
ASF 2,737 km of toll motorways (France)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor.	Users	Nil	Infrastructure returned to grantor for no consideration at end of contract. In the event that it is purchased before term by the grantor, compensation on the basis of economic value	2036
Escota 471 km of toll motorways (France)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor	Users	Nil	Infrastructure returned to grantor for no consideration at end of contract. In the event that it is purchased before term by the grantor, compensation on the basis of economic value	2032
Cofiroute					
Intercity network 1,100 km of toll motorways (France)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor	Users	Nil	Infrastructure returned to grantor for no consideration at end of contract. In the event that it is purchased before term by the grantor, compensation on the basis of economic value	2034
A86 Duplex 11 km toll tunnel west of Paris (France)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor	Users	Nil	Infrastructure returned to grantor for no consideration at end of contract. In the event that it is purchased before term by the grantor, compensation on the basis of economic value	2086
Arcour					
A19 101 km of toll motorways (France)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor	Users	Investment grant	Infrastructure returned to grantor for no consideration at end of contract	2070
Arcos					
A355 24 km of toll motorways (France)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor	Users	Nil	Infrastructure returned to grantor for no consideration at end of contract. In the event that it is purchased before term by the grantor, compensation on the basis of economic value	2070
VINCI Highways					
Lamsac Línea Amarilla: 25 km toll expressway in Lima (Peru)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor	Pricing law as defined in the concession contract. Price increases subject to agreement by grantor	Nil	Infrastructure returned to grantor for no consideration at end of contract	2049
Gefyra Toll bridge in the Gulf of Corinth, between Rion and Antirion (Greece)	Pricing law as defined in the concession contract. Price increases must be validated by the grantor	Users	Construction grant paid by the grantor	Infrastructure returned to grantor for no consideration at end of contract	2039
VINCI Airports					
ANA Group 10 airports in Portugal	Regulated air tariffs; unregulated non-air revenue	Users, airlines	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2063
Cambodia Airports Phnom Penh, Siem Reap and Sihanoukville airports (Cambodia)	Pricing law as defined in the concession contract. Price increases subject to agreement by grantor	Users, airlines	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2040
Société Concessionnaire Aéroports du Grand Ouest Nantes Atlantique and Saint-Nazaire airports in western France	Regulated air tariffs. Unregulated non-air revenue	Users, airlines	Investment grant to finance the construction of a new airport	Infrastructure returned to grantor for no consideration at end of contract	Initial date 2065 (1)
Aerodom Six airports in the Dominican Republic	Regulated air tariffs. Unregulated non-air revenue	Users, airlines	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2030

(1) *The grantor has notified its intention to terminate the concession contract early.*

Control and regulation of prices by concession grantor

Collateral security connected with the financing of concessions

Some concession operating companies have given collateral security to guarantee the financing of their investments in infrastructure under concession. These break down as follows:

(in € millions)	**Start date**	**End date**	**Amount**
Lamsac	2016	2037	669
Arcour	2008	2047	650
Aerodom	2017	2029	358
Aéroports de Lyon (ADL)	2016	2032	225
Gefyra	1997	2029	207
Belgrade airport	2018	2035	148
Arcos	2018	2045	62

13. PPP financial receivables (controlled companies)

13.1 Movements during the period and maturity schedule

PPP financial receivables related to concession and PPP contracts managed by the Group are presented on the consolidated balance sheet, for their part at more than one year, under the "Other non-current financial assets" item.

Changes in PPP financial receivables during the period and their breakdown by maturity are as follows:

(in € millions)	2018	2017
Beginning of period	**177**	**215**
Acquisitions during period	12	11
Redemptions	(20)	(49)
Other movements and currency translation differences	3	-
End of period	**172**	**177**
Of which:		
Between 1 and 5 years	*49*	*36*
Over 5 years	*123*	*141*

The part at less than one year of PPP financial receivables is included in the balance sheet under "Other current financial assets". At 31 December 2018, it amounted to €6 million (€10 million at 31 December 2017).

13.2 Main features of concession and PPP contracts – financial asset and/or bifurcated model

The main features of concession and PPP contracts operated by controlled subsidiaries (financial asset and/or bifurcated model) are as follows:

	Control and regulation of prices by concession grantor	Remuneration paid by	Grant or guarantee from concession grantor	Residual value	Concession end date	IFRIC 12 accounting model
Caraibus:						
Bus rapid transit system (Martinique)	Annual fee paid by grantor. No traffic level risk	Grantor	Nil	Infrastructure returned to grantor for no consideration at end of contract	2035	Financial asset
MMArena						
Le Mans stadium (France)	Pricing schedule subject to grantor approval	Ticketing + miscellaneous revenue	Investment grant and operating grant (in the absence of a resident club)	Infrastructure returned to grantor for no consideration at end of contract	2043	Bifurcated: intangible asset and financial asset
Park Azur						
Car rental firm business complex at Nice - Côte d'Azur airport (France)	Rent paid by car rental companies as set out in the concession contract and guaranteed by the grantor	Grantor and car rental companies Sale of photovoltaic electricity	Investment grant and operating grant	Infrastructure returned to grantor for no consideration at end of contract	2040	Bifurcated: intangible asset and financial asset

13.3 Commitments made under concession and PPP contracts – financial asset and/or bifurcated model

Contractual investment, renewal or financing obligations

Under their concession and/or PPP contracts, Group subsidiaries undertake to make investments. Where the financial asset or bifurcated model applies, they receive a guarantee of payment from the concession grantor in return for their investment commitment.
At 31 December 2018, the Group's investment commitments with respect to concession and PPP contracts under the financial asset or bifurcated models amounted to €48 million (€52 million at 31 December 2017). The increase was mainly the result of the public-private partnership for the La Cotinière fishing port at Saint Pierre d'Oléron at VINCI Construction.

Collateral security connected with the financing of PPPs

Some companies have given collateral security to guarantee the financing of their investments relating to infrastructure under concession. This collateral amounted to €153 million at 31 December 2018 (€156 million at 31 December 2017), including Caraibus in Martinique for €69 million, Park Azur in Nice for €35 million and the MMArena stadium in Le Mans for €32 million.

14. Concession and PPP contracts of companies accounted for under the equity method

14.1 Main features of concession and PPP contracts of companies accounted for under the equity method

	Control and regulation of prices by concession grantor	Remuneration paid by	Grant or guarantee from concession grantor	Residual value	Concession end date	IFRIC 12 accounting model
Motorway and road infrastructure (including bridges and tunnels) outside France						
A5 Malsch–Offenburg A-Modell 60 km to be renovated, including 41.5 km to be widened to 2x3 lanes (Germany)	Inflation-linked price increases based on the 2009 toll level (excluding increases decided by the grantor). Effect of environmental regulations on prices (with traffic level risk)	Heavy vehicle users through the tolls levied by the grantor	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2039	Intangible asset
A7 Göttingen–Bockenen A-Modell 60 km to be renovated, including 29 km to be widened to 2x3 lanes (Germany)	Annual fee paid by grantor (with no traffic level risk)	Grantor	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2047	Financial asset
Moscow–St Petersburg motorway section 1 First section (43.2 km) of M11 motorway between Moscow and St Petersburg (Russia)	Pricing law as defined in the concession contract. Price increases possible subject to a price limit (with traffic level risk)	Users	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2040	Intangible asset
Moscow–St Petersburg motorway sections 7 and 8 Sections 7 and 8 (138 km) of M11 motorway between Moscow and St Petersburg (Russia)	Annual fee paid by grantor (with no traffic level risk)	Grantor	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2041	Financial asset
Olympia Odos Toll motorway connecting Elefsina, Corinth and Patras (Greece)	Pricing law as defined in the concession contract. Price increases possible subject to a price limit (with traffic level risk)	Users	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2038	Intangible asset
Via Express 40 Toll motorway connecting Bogotá and Girardot (141 km including construction of a third lane over 65 km; Colombia)	Pricing law as defined in the concession contract. Price increases subject to a price limit (with traffic level risk)	Users	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2042	Intangible asset
Granvia R1 Expressway (Slovakia)	Annual fee paid by grantor (with no traffic level risk)	Grantor	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2041	Financial asset
Ohio River Bridges East End Crossing Bridge over the Ohio River and access tunnel (USA)	Annual fee paid by grantor (with no traffic level risk)	Grantor	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2051	Financial asset
Regina Bypass 61 km dual carriageway around Regina (Canada)	Annual fee paid by grantor (with no traffic level risk)	Grantor	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2049	Financial asset
Hounslow Rehabilitation and maintenance of roadways, traffic signs and lighting (UK)	Fee paid by grantor (with no traffic level risk)	Grantor	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2037	Financial asset
Isle of Wight Rehabilitation and maintenance of roadways, traffic signs and lighting (UK)	Annual fee paid by grantor (with no traffic level risk)	Grantor	Investment grant	Infrastructure returned to grantor for no consideration at end of contract.	2038	Financial asset

	Control and regulation of prices by concession grantor	Remuneration paid by	Grant or guarantee from concession grantor	Residual value	Concession end date	IFRIC12 accounting model
Airports						
Kansai Airports Kansai, Osaka and Kobe airports (Japan)	Regulated air tariffs; unregulated non-air revenue	Users, airlines	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2060	Intangible asset
Nuevo Pudahuel Santiago-Arturo Merino Benítez Airport (Chile)	Pricing law as defined in the concession contract. Price increases possible subject to a price limit (with traffic level risk)	Users, airlines	Nil	Infrastructure returned to grantor for no consideration at end of contract.	2035	Intangible asset
Liberia international airport Daniel Oduber Quiros International Airport, Liberia (Costa Rica)	Regulated air tariffs; unregulated non-air revenue	Users, airlines, concession grantor	Revenue Guarantee	Infrastructure returned to grantor for no consideration at end of contract.	2030	Bifurcated model: intangible asset and financial asset
Railway infrastructure						
LISEA South Europe Atlantic high-speed rail line (302 km) between Tours and Bordeaux (France)	Inflation-linked price increases (with traffic level risk)	Pricing law as defined in the concession contract (on the basis of train kilometre and slot kilometre)	Investment grant paid by the concession grantor and local authorities	Infrastructure returned to grantor for no consideration at end of contract.	2061	Bifurcated model: intangible asset and financial asset

14.2 Commitments made under concession and PPP contracts of companies accounted for under the equity method

The commitments made under concession and PPP contracts of companies accounted for under the equity method are presented in Note E.10.3 “Commitments made in respect of associates and joint ventures”.

G. Construction and service contracts (Contracting business and VINCI Immobilier)

15. Information on construction and service contracts

Accounting policies

Consolidated revenue relating to construction and service contracts is recognised in accordance with IFRS 15.

In view of the Group's main activities, the majority of construction and service contracts involve only one performance obligation, which is fulfilled as contract execution progresses.
Where a contract includes several distinct performance obligations, the Group allocates the overall price of the contract to each performance obligation in accordance with IFRS 15. That price corresponds to the amount of the consideration to which it expects to be entitled. Where the price includes a variable component, the Group only recognises that consideration from the time its receipt is regarded as highly probable.

To measure the progress towards completion of construction and service contracts, the Group uses either a method based on physical progress towards completion or a cost-to-cost method depending on the type of activity.

Contract amendments (relating to the price and/or scope of the contract) are recognised when approved by the client. Where amendments relate to new goods or services regarded as distinct under IFRS 15, and where the contract price increases by an amount reflecting "stand-alone selling prices" of the additional goods or services, those amendments are recognised as a distinct contract.

Where a third party (such as a subcontractor) is involved in the supply of a distinct good or service, the Group determines whether it obtains control of that good or service before it is transferred to the client. Where control is obtained before transfer to the client, the Group recognises as revenue the gross amount to which it expects to be entitled in exchange. Where control is not obtained, the Group takes the view that it is not the principal in the transaction and only recognises as revenue the amount corresponding to its remuneration as intermediary.

The cost of winning the contract that would not have been incurred if the Group had not won the contract is recognised as an asset where it is recoverable and amortised over the estimated contract term. At the Group level, the cost of winning contracts, capitalised and amortised over a period of more than one year, is not material.

The Group's trade receivables represent the unconditional right to receive consideration ("a payment") when the goods or services promised to the customer in the contract have been transferred. In accordance with IFRS 15, the opening and closing balances of trade receivables are presented in Note H.18 "Working capital requirement and current provisions". However, where the right is dependent on the transfer of other goods or services and/or the completion of milestones or stages defined in the contract, the Group regards the amount representing that "conditional" right as a contract asset. Amounts relating to any Group obligation to transfer goods or services for which it has already received a payment, or for which the right to such payment is enforceable, are regarded as contract liabilities under IFRS 15.

Within the Group, contract assets correspond to invoices not yet raised, advances paid to subcontractors and retention payments. In accordance with IFRS 9, contract assets are analysed to assess any risk of non-recovery ("credit risk"). Contract liabilities mainly consist of advances received and prepaid income.

If the estimate of the final outcome of a contract indicates a loss, a provision is made for the loss on completion in accordance with IAS 37, regardless of progress towards completion, and based on the best estimates of income, including, if need be, any rights to additional revenue or claims, where it is regarded as highly probable and can be reliably estimated. Provisions for losses on completion, which fall outside the scope of IFRS 15, are shown under liabilities on the balance sheet (see Note H.18.3 "Breakdown of current provisions").

15.1 Financial information on contracts

Contract assets

(in € millions)		31/12/2018	Changes: Business-related changes	Changes: Changes in consolidation scope	Changes: Other changes(*)	31/12/2017
VINCI Energies		2,318	249	83	-	1,986
Eurovia		649	49	125	(5)	480
VINCI Construction		3,321	66	17	(145)	3,384
Contracting	I	6,288	363	226	(151)	5,850
VINCI Immobilier	II	138	66	3	-	69
Contract assets	**I+II**	**6,426**	**429**	**229**	**(151)**	**5,919**

(*) Including currency translation differences and the impacts of the first-time application on 1 January 2018 of IFRS 15 "Revenue from Contracts with Customers" described in Note A.4.

At 31 December 2018, contract assets amounted to €6,426 million, up 9% compared with 2017 (€5,919 million). Scope effects reflect acquisitions during the period, particularly at VINCI Energies and Eurovia.

Contract assets related to the portion of performance obligations already fulfilled by the Group and for which the definitive right to receive cash was subject to completing other work specified in the relevant contracts. Contract assets turn into receivables as works are received by the client, giving rise to the Group's unconditional right to receive cash. Contract assets therefore represent a portion of future payments receivable by the Group under existing contracts.

Contract liabilities

(in € millions)		31/12/2018	Changes: Business-related changes	Changes: Changes in consolidation scope	Changes: Other changes(*)	31/12/2017
VINCI Energies		2,306	312	30	(47)	2,011
Eurovia		666	109	17	1	538
VINCI Construction		2,251	(74)	17	(29)	2,337
Contracting	I	5,222	347	64	(75)	4,886
VINCI Immobilier	II	92	33	2	-	57
Contract liabilities	**I+II**	**5,315**	**381**	**66**	**(75)**	**4,944**

(*) Including currency translation differences.

Contract liabilities amounted to €5,315 million at 31 December 2018, an increase of 8% relative to the end-2017 figure of €4,944 million.

Those liabilities correspond mainly to advances and payments on account received on orders and other current liabilities representing the amount of performance obligations still to be fulfilled and for which payment has already been received from the client.

The fulfilment of the performance obligations will extinguish these liabilities as the counterpart of revenue recognition, with no impact on the Group's cash position. Only the fulfilment of performance obligations in excess of contract liabilities will affect the Group's future revenue and cash flow.

15.2 Order book

(in € billions)	31/12/2018	Number of months of average business activity
VINCI Energies	8.4	8
Eurovia	7.0	9
VINCI Construction	17.7	15
Contracting	**33.1**	**11**
VINCI Immobilier	**0.8**	**N/A**

The Group manages an order book. In accepting orders, it makes commitments to carry out work or render services.

The order book in the Contracting business (VINCI Energies, Eurovia, VINCI Construction) represents the volume of business yet to be carried out on projects where the contract is in force (in particular after service orders have been obtained or after conditions precedent have been met) and financed.

VINCI Immobilier's order book corresponds to the revenue, recognised on a progress towards completion basis, that is yet to be generated on a given date with respect to property sales confirmed by a notarised deed or with respect to property development contracts on which the works order has been given by the project owner.

15.3 Commitments made and received in connection with construction and service contracts

The Group makes and receives guarantees (personal sureties) in connection with these contracts.
The amount of the guarantees given below consists mainly of guarantees on works contracts, issued by financial institutions or insurers.
Moreover, Group companies benefit from guarantees issued by financial institutions at the request of the joint contractors or subcontractors (guarantees received).

	31/12/2018		31/12/2017	
(in € millions)	Guarantees given	Guarantees received	Guarantees given	Guarantees received
Performance guarantees and performance bonds	5,929	799	5,441	839
Retentions	3,213	464	3,631	543
Deferred payments to subcontractors and suppliers	1,776	300	1,691	530
Bid bonds	164	-	186	-
Total	**11,082**	**1,563**	**10,949**	**1,912**

Whenever events such as late completion or disputes about the execution of a contract make it likely that a liability covered by a guarantee will materialise, a provision is taken in respect of that liability.

In general, under the rules in force, any risk of loss in connection with performance of a commitment given by VINCI or its subsidiaries would result in a provision being recognised in the Group's financial statements. VINCI therefore considers that the off-balance sheet commitments above are unlikely to have a material impact on the Group's financial position or net assets.

VINCI also grants after-sales service warranties covering several years in its normal course of business. These warranties lead to provisions estimated either on a statistical basis having regard to past experience or on an individual basis in the case of any problems identified. These commitments are therefore not included in the above table.

In connection with the construction of the South Europe Atlantic high-speed rail line between Tours and Bordeaux, the Group provided various security interests and guarantees in favour of concession company LISEA under which the Group guarantees contract performance by the design and construction joint venture (GIE COSEA). At 31 December 2018, GIE COSEA's remaining commitments consisted of a performance guarantee and the retention money, which will remain in force until the end of a period of 32 months after acceptance of the infrastructure.

Joint and several guarantees covering unconsolidated partnerships (SNCs, Economic Interest Groupings, etc.)

Part of VINCI's construction and roadworks business is conducted through unincorporated joint venture partnerships (SEPs), in line with industry practice. In partnerships, partners are legally jointly and severally liable for its debts to non-Group companies, without limit. In this context, the Group may set up crossed counter guarantees with its partners.

Whenever the Group is aware of a particular risk relating to a joint venture partnership's activity, a provision is taken if this risk gives rise to an obligation for the Group that can only be extinguished through an outflow of resources.

The amount shown under off-balance sheet commitments in respect of joint and several guarantees is the Group's share of the liabilities of the partnerships in question less equity and financial debt (loans or current account advances) due to partners. That amount was €49 million at 31 December 2018 (€60 million at 31 December 2017), as opposed to total commitments of €125 million at 31 December 2018 (€141 million at 31 December 2017).

Given the quality of its partners, the Group considers that the risk of its guarantee being invoked in respect of these commitments is not material.

H. Other balance sheet items and business-related commitments

16. Property, plant and equipment and other intangible assets

16.1 Property, plant and equipment

Accounting policies

Items of property, plant and equipment are recorded at their acquisition or production cost net of investment grants received, less cumulative depreciation and any impairment losses. They are not revalued. They also include concession operating assets that are not controlled by the grantor but that are necessary for operation of the concession such as buildings intended for use in the operation, equipment for signage, data transmission, vehicles and other equipment.

Depreciation is generally calculated on a straight-line basis over the period of use of the asset. Accelerated depreciation may sometimes be used when it appears more appropriate to the conditions under which the asset is used.

For certain complex assets comprising several components, in particular buildings and constructions, each component of the asset is depreciated over its own period of use. To reflect the consumption of economic benefits associated with the asset, quarries are depreciated as materials are extracted (volumes extracted during the period are compared with the estimated total volume of deposits to be extracted from the quarry over its useful life).

Investment property is property held to earn rentals or for capital appreciation. It is recorded at its acquisition cost less cumulative depreciation and any impairment losses.

The main periods of use of the various categories of items of property, plant and equipment are as follows:

Constructions:	
- Structure	Between 20 and 50 years
- General technical installations	Between 5 and 20 years
Site equipment and technical installations	Between 3 and 12 years
Vehicles	Between 3 and 5 years
Fixtures and fittings	Between 8 and 10 years
Office furniture and equipment	Between 3 and 10 years

Depreciation commences as from the date when the asset is ready to enter service.

Assets acquired under finance leases are recognised as non-current assets, whenever the effect of the lease is to transfer to the Group substantially all the risks and rewards incidental to ownership of these assets, with recognition of a corresponding financial liability. Assets held under finance leases are depreciated over their period of use.

(in € millions)	Concession operating fixed assets	Land	Constructions and investment property	Plant, equipment and fixtures	Total
Gross					
01/01/2017	**4,052**	**873**	**1,158**	**6,883**	**12,966**
Acquisitions as part of business combinations	-	10	11	146	167
Other acquisitions during period	149	15	214	594	972
Disposals during period	(56)	(10)	(49)	(461)	(576)
Currency translation differences	(25)	4	(5)	(114)	(140)
Changes in scope and other	49	14	(128)	93	27
31/12/2017	**4,169**	**905**	**1,201**	**7,141**	**13,416**
Acquisitions as part of business combinations	-	196	130	457	783
Other acquisitions during period	192	31	331	669	1,223
Disposals during period	(37)	(13)	(50)	(460)	(560)
Currency translation differences	10	(8)	(2)	(3)	(4)
Changes in scope and other	(12)	16	(39)	50	16
31/12/2018	**4,321**	**1,126**	**1,572**	**7,855**	**14,874**
Depreciation and impairment losses					
01/01/2017	**(2,497)**	**(314)**	**(624)**	**(5,063)**	**(8,498)**
Depreciation during period	(339)	(18)	(49)	(579)	(985)
Impairment losses	-	(2)	(2)	(7)	(10)
Reversals of impairment losses	-	3	4	3	10
Disposals during period	54	5	30	432	521
Currency translation differences	5	(4)	1	77	79
Other movements	(27)	(3)	(6)	(77)	(113)
31/12/2017	**(2,804)**	**(333)**	**(645)**	**(5,213)**	**(8,996)**
Depreciation during period	(240)	(21)	(50)	(613)	(925)
Impairment losses	-	-	(1)	(7)	(7)
Reversals of impairment losses	-	4	2	6	11
Disposals during period	35	6	39	431	511
Currency translation differences	(4)	2	1	2	1
Other movements	(2)	(7)	(17)	(83)	(110)
31/12/2018	**(3,015)**	**(349)**	**(672)**	**(5,478)**	**(9,515)**
Net					
01/01/2017	**1,555**	**559**	**534**	**1,820**	**4,468**
31/12/2017	**1,365**	**572**	**556**	**1,928**	**4,421**
31/12/2018	**1,306**	**777**	**900**	**2,377**	**5,359**

Property, plant and equipment includes assets under construction for €544 million at 31 December 2018 (€313 million at 31 December 2017).

The net value of assets acquired under finance leases amounted to €150 million (€127 million at 31 December 2017). They relate mainly to plant and equipment used in operations. The debts relating to these assets are shown in Note J.23.1 “Detail of long-term financial debt by business”.

At 31 December 2018, the breakdown of property, plant and equipment by business was as follows:

		Contracting					
(in € millions)	Concessions	VINCI Energies	Eurovia	VINCI Construction	Total	VINCI Immobilier and holding companies	Total
Concession operating fixed assets	1,305	-	-	-	-	-	1,306
Land	33	53	627	62	742	1	777
Constructions and investment property	96	143	250	263	656	148	900
Plant, equipment and fixtures	109	372	994	888	2,254	13	2,377
Total at 31 December 2018	**1,544**	**569**	**1,870**	**1,213**	**3,653**	**162**	**5,359**
Total at 31 December 2017	**1,439**	**436**	**1,412**	**1,120**	**2,968**	**14**	**4,421**

16.2 Other intangible assets

Accounting policies

Other intangible assets are measured at cost less amortisation and any cumulative impairment losses. Quarrying rights are amortised as materials are extracted (volumes extracted during the period are compared with the estimated total volume of deposits to be extracted from the quarry over its useful life) in order to reflect the decline in value due to depletion. Other intangible assets are amortised on a straight-line basis over their useful life.

At 31 December 2018, other intangible assets amounted to €632 million (€417 million at 31 December 2017). They include patents and licences for €209 million (€212 million at 31 December 2017), software for €76 million (€68 million at 31 December 2017) and other intangible assets for €347 million (€137 million at 31 December 2017).

Amortisation recognised during the period totalled €53 million (€48 million in 2017).

16.3 Impairment losses on property, plant and equipment and intangible assets

Accounting policies

Impairment tests are performed on property, plant and equipment and intangible assets where evidence of an impairment loss arises. For intangible assets with an indefinite useful life and construction work in progress, a test is performed at least annually and whenever there is an indication of an impairment loss.

Assets to be tested for impairment losses are grouped within cash-generating units (CGUs) that correspond to homogeneous groups of assets that generate identifiable cash inflows from their use.
In accordance with IAS 36, the criteria adopted to assess indications that an impairment loss has arisen are either external (e.g. a material change in market conditions) or internal (e.g. a material reduction in revenue), without distinction.

The Group did not recognise any material impairment losses on property, plant and equipment or intangible assets in either 2018 or 2017.

17. Financial assets measured at amortised cost

Accounting policies

Financial assets measured at amortised cost mainly consist of loans and receivables.
When first recognised, loans and receivables are recognised at their fair value less the directly attributable transaction costs.
From the outset, the Group recognises impairment on its loans and receivables in relation to their risk of non-recovery, in accordance with IFRS 9.

At each balance sheet date, these assets are measured at their amortised cost using the effective interest method and the Group analyses the change in credit risk to determine whether further impairment must be recognised.
If credit risk is found to have increased, additional impairment will be recognised in profit and loss, taking into account the credit risk over the asset's life.

Loans and receivables at amortised cost mainly comprise receivables relating to shareholdings, including shareholders' advances to Concessions business or PPP project companies for €774 million (€659 million at 31 December 2017). They are presented on the asset side of the consolidated balance sheet under "Other non-current financial assets" (for the part at more than one year). The part at less than one year of loans and receivables is included under "Other current financial assets" for €30 million at 31 December 2018 (€28 million at 31 December 2017).

Changes in loans and receivables at amortised cost during the period and their breakdown by maturity are as follows:

(in € millions)	2018	2017
Beginning of period	**830**	**531**
Acquisitions during period	248	454
Acquisitions as part of business combinations	1	11
Impairment losses	(4)	(29)
Disposals during period	(65)	(81)
Other movements and currency translation differences	48	(56)
End of period	**1,059**	**830**
Of which:		
Between 1 and 5 years	*556*	*337*
Over 5 years	*502*	*494*

For 2018, the "Acquisitions during period" item includes the €56 million loan granted to Testimonio 2, a property development project in Monaco.

In 2017, the increase mainly concerned the loan granted to LISEA (South Europe Atlantic high-speed rail line) for €256 million.

18. Working capital requirement and current provisions

Accounting policies

Trade receivables are current financial assets and are initially measured at their fair value, which is generally their nominal value, unless the effect of discounting is material.
The group uses the simplified approach as defined in IFRS 9, and therefore records impairment on its trade receivables to correspond with the expected credit loss at maturity.

At each balance sheet date, trade receivables are measured at their amortised cost less any impairment losses taking account of any likelihood of non-recovery. Actual losses experienced during a period are analysed in order to adjust impairment rates where appropriate. The likelihood of non-recovery is assessed in the light of payment delays and guarantees obtained.

Trade payables correspond to current financial liabilities and are initially measured at their fair value, which is usually their nominal value, unless the effect of discounting is material.

Inventories and work in progress are recognised at their cost of acquisition or of production by the entity. At each balance sheet date, they are measured at the lower of cost and net realisable value.

18.1 Change in working capital requirement

(in € millions)	31/12/2018	31/12/2017	Changes	
			Changes in operating WCR	Other changes (*)
Inventories and work in progress	1,173	1,056	153	(37)
Trade and other receivables	13,584	12,432	887	265
Other current operating assets	5,033	5,035	(160)	159
of which derivatives related to WCR - assets	*8*	*24*	*-*	*(17)*
Inventories and operating receivables (I)	**19,790**	**18,523**	**880**	**387**
Trade payables	(8,240)	(8,198)	124	(165)
Other current operating liabilities	(12,862)	(11,852)	(737)	(273)
of which derivatives related to WCR - liabilities	*(8)*	*(16)*	*-*	*8*
Trade and other operating payables (II)	**(21,102)**	**(20,051)**	**(613)**	**(438)**
Working capital requirement (excluding current provisions) (I + II)	**(1,311)**	**(1,528)**	**267**	**(51)**
Current provisions	**(4,452)**	**(4,322)**	**(1)**	**(130)**
of which part at less than one year of non-current provisions	*(234)*	*(208)*	*(42)*	*16*
Working capital requirement (including current provisions)	**(5,764)**	**(5,849)**	**266**	**(181)**

(*) Mainly currency translation differences and changes in consolidation scope.

18.2 Current operating assets and liabilities

Current operating assets and liabilities break down as follows:

(in € millions)		31/12/2018	Maturity: Within 1 year: 1 to 3 months	3 to 6 months	6 to 12 months	Between 1 and 5 years	After 5 years
Inventories and work in progress		1,173	478	71	144	473	7
Trade and other receivables		13,584	11,347	788	695	697	56
Other current operating assets		5,033	4,098	262	287	373	14
Inventories and operating receivables	**I**	**19,790**	**15,923**	**1,120**	**1,127**	**1,542**	**78**
Trade payables		(8,240)	(7,210)	(448)	(175)	(401)	(6)
Other current operating liabilities		(12,862)	(10,658)	(563)	(517)	(982)	(142)
Trade and other operating payables	**II**	**(21,102)**	**(17,868)**	**(1,011)**	**(692)**	**(1,383)**	**(147)**
Working capital requirement connected with operations	**I + II**	**(1,311)**	**(1,945)**	**109**	**435**	**159**	**(69)**

(in € millions)		31/12/2017	Maturity: Within 1 year: 1 to 3 months	3 to 6 months	6 to 12 months	Between 1 and 5 years	After 5 years
Inventories and work in progress)		1,056	392	326	75	203	60
Trade and other receivables		12,432	10,430	853	727	366	56
Other current operating assets		5,035	4,150	480	213	182	10
Inventories and operating receivables	**I**	**18,523**	**14,972**	**1,659**	**1,015**	**751**	**126**
Trade payables		(8,198)	(7,258)	(602)	(144)	(193)	(2)
Other current operating liabilities		(11,852)	(10,009)	(716)	(472)	(515)	(140)
Trade and other operating payables	**II**	**(20,051)**	**(17,268)**	**(1,318)**	**(616)**	**(707)**	**(142)**
Working capital requirement connected with operations	**I + II**	**(1,528)**	**(2,295)**	**341**	**399**	**44**	**(16)**

Breakdown of trade receivables

Trade receivables and allowances were as follows:

(in € millions)	31/12/2018	31/12/2017
Trade receivables invoiced	7,578	6,882
Allowances against trade receivables	(541)	(521)
Trade receivables, net	**7,036**	**6,361**

At 31 December 2018, trade receivables between six and 12 months past due amounted to €508 million (compared with €525 million at 31 December 2017). €70 million of impairment has been recognised in consequence (€58 million at 31 December 2017). Receivables more than one year past due amounted to €387 million (€346 million at 31 December 2017) and impairment of €257 million has been recognised in consequence (€239 million at 31 December 2017).

18.3 Breakdown of current provisions

Accounting policies

Current provisions are provisions directly linked to each business line's own operating cycle, whatever the expected time of settlement of the obligation. They are recognised in accordance with IAS 37. They also include the part at less than one year of provisions not directly linked to the operating cycle.

These provisions are recognised at their present value. The effect of discounting provisions is recognised under "Other financial income and expense".

Provisions are taken for contractual obligations to maintain the condition of concession assets, principally by the motorway concession operating companies to cover the expense of major road repairs (surface courses, restructuring of slow lanes, etc.), bridges, tunnels and hydraulic infrastructure. They also include expenses to be incurred by airport concession companies (repairs to runways, traffic lanes and other paved surfaces). Provisions are calculated on the basis of maintenance expense plans spanning several years, which are updated annually. These expenses are reassessed on the basis of appropriate indexes (mainly the TP01, TP02 and TP09 indexes in France). Provisions are also taken whenever recognised signs of defects are encountered on identified infrastructure.

Provisions for after-sales service cover Group entities' commitments under statutory warranties relating to completed projects, in particular the 10-year warranty on building projects in France. They are estimated statistically on the basis of expenses incurred in previous years or individually on the basis of specifically identified events.

Provisions for losses on completion of contracts and construction project liabilities are set aside mainly when end-of-contract projections, based on the most likely estimated outcome, indicate a loss, and those covering work yet to be carried out in respect of completed projects under completion warranties.

Provisions for disputes connected with operations relate mainly to disputes with customers, subcontractors, joint contractors or suppliers.

Restructuring provisions include the cost of plans and measures for which there is a commitment whenever these have been announced before the period end.

Provisions for other current liabilities comprise mainly provisions for other risks related to operations.

Changes in current provisions reported in the balance sheet were as follows in 2018 and 2017:

(in € millions)	Opening	Provisions taken	Provisions used	Other reversals	Changes in consolidation scope and miscellaneous	Change in the part at less than one year	Currency translation differences	Closing
01/01/2017	**4,053**	**1,524**	**(1,291)**	**(171)**	**52**	**18**	**(13)**	**4,172**
Obligation to maintain the condition of concession assets	812	128	(96)	(14)	4	-	(8)	827
After-sales service	386	192	(155)	(18)	3	-	(3)	406
Losses on completion and construction project liabilities	1,265	847	(740)	(47)	21	-	(10)	1,336
Disputes	505	202	(110)	(50)	(4)	-	(1)	541
Restructuring costs	42	11	(14)	(10)	1	-	-	30
Other current liabilities	920	362	(268)	(56)	27	-	(11)	974
Reclassification of the part at less than one year	241	-	-	-	(4)	(29)	-	208
31/12/2017	**4,172**	**1,741**	**(1,383)**	**(195)**	**48**	**(29)**	**(33)**	**4,322**
Obligation to maintain the condition of concession assets	827	135	(94)	(14)	47	-	2	903
After-sales service	406	105	(99)	(30)	9	-	-	391
Losses on completion and construction project liabilities	1,336	738	(718)	(58)	49	-	(1)	1,346
Disputes	541	138	(114)	(52)	-	-	(1)	513
Restructuring costs	30	18	(17)	(3)	3	-	-	31
Other current liabilities	974	400	(298)	(39)	(1)	-	(1)	1,035
Reclassification of the part at less than one year	208	-	-	-	(16)	42	-	234
31/12/2018	**4,322**	**1,534**	**(1,339)**	**(196)**	**92**	**42**	**(2)**	**4,452**

At 31 December 2018, contractual obligations to maintain the condition of concession assets mainly comprised €418 million for the ASF group (€379 million at 31 December 2017), €258 million for Cofiroute (€240 million at 31 December 2017), and VINCI Airports for €189 million (€177 million at 31 December 2017) including €74 million for the ANA group (€69 million at 31 December 2017).
Provisions for other current liabilities include provisions for worksite restoration and removal costs for €176 million (€194 million at 31 December 2017).

19. Non-current provisions

Accounting policies

Non-current provisions are recognised whenever, at the balance sheet date, the Group has a legal or constructive present obligation towards non-Group companies arising from a past event, whenever it is probable that an outflow of resources embodying economic benefits will be required to settle this obligation and whenever a reliable estimate can be made of the amount of the obligation. These provisions are measured at their present value, corresponding to the best estimate of the outflow of resources required to settle the obligation.

The part at less than one year of other employee benefits is reported under "Other current non-operating liabilities". The part at less than one year of provisions not directly linked to the operating cycle is reported under "Current provisions".

Detail of non-current provisions

Changes in other non-current provisions reported in the balance sheet (excluding employee benefits) were as follows in 2018 and 2017:

(in € millions)	Opening	Provisions taken	Provisions used	Other reversals not used	Changes in consolidation scope and miscellaneous	Change in the part at less than one year	Currency translation differences	Closing
01/01/2017	**949**	**195**	**(129)**	**(91)**	**39**	**(18)**	**(1)**	**945**
Financial risks	643	27	(34)	(2)	52	-	-	685
Other liabilities	543	174	(105)	(30)	-	-	(6)	576
Reclassification of the part at less than one year	(241)	-	-	-	4	29	-	(208)
31/12/2017	**945**	**201**	**(140)**	**(32)**	**56**	**29**	**(6)**	**1,053**
Financial risks	685	4	(30)	(4)	170	-	-	826
Other liabilities	576	165	(125)	(26)	(47)	-	1	544
Reclassification of the part at less than one year	(208)	-	-	-	16	(42)	-	(234)
31/12/2018	**1,053**	**169**	**(155)**	**(29)**	**139**	**(42)**	**1**	**1,135**

Provisions for financial risks

Provisions for financial risks include the Group's share of the negative net equity of companies accounted for under the equity method. That negative net equity results from the measurement of interest rate derivative instruments (cash flow hedges) at fair value in the financial statements of the companies concerned.

Provisions for other liabilities

Provisions for other liabilities, not directly linked to the operating cycle, include provisions for disputes and arbitration, some of which are described in Note M "Note on litigation". These amounted to €544 million at 31 December 2018 (€576 million at 31 December 2017), including €326 million at more than one year (€384 million at 31 December 2017).

20. Other contractual obligations of an operational nature and other commitments given and received

Other contractual obligations of an operational nature and commitments given and received break down as follows:

20.1 Other contractual obligations of an operational nature

(in € millions)	31/12/2018	31/12/2017
Operating leases	1,500	1,237
Purchase and capital expenditure obligations (*)	339	387

(*) Excluding capital investment obligations related to concession and PPP contracts (see Note F "Concession and PPP contracts").

Operating lease commitments amounted to €1,500 million at 31 December 2018. Of this, €1,024 million was for property (€807 million at 31 December 2017) and €476 million for movable items (€430 million at 31 December 2017). The increase in commitments for property related mainly to the development of the Ovelia (serviced residences for seniors) and Student Factory (student halls of residence) programmes, those two entities now being controlled by VINCI Immobilier.

Purchase and capital expenditure obligations, excluding those relating to concession contracts, mainly concern Eurovia in relation to its quarrying rights, along with VINCI Energies and VINCI Immobilier.

The breakdown by maturity of contractual obligations is as follows:

		Payments due by period		
(in € millions)	Total	Within 1 year	Between 1 and 5 years	After 5 years
Operating leases	1,500	452	782	267
Purchase and capital expenditure obligations (*)	339	261	27	52

(*) Excluding capital investment obligations related to concession and PPP contracts.

20.2 Other commitments made and received

(in € millions)	31/12/2018	31/12/2017
Collateral security	70	44
Other commitments made (received)	791	277

Collateral security (mortgages and collateral for finance) may be given in addition to commitments in connection with concession and PPP contracts. This relates mainly to VINCI Energies and Eurovia.
The increase in other commitments is due in particular to the performance guarantee given by VINCI Autoroutes concerning Arcos.

The Group's off-balance sheet commitments are subject to specific reporting at each full-year and half-year closing.
They are presented according to the activity to which they relate, in the corresponding notes.

Accordingly, the commitments made and received by the Group in connection with concession contracts, construction and service contracts and items connected with unrecognised retirement benefit obligations are shown in the following notes:

- E.10.3 "Commitments made in respect of associates and joint ventures";
- F.12.3 "Commitments made under concession contracts – intangible asset model";
- F.13.3 "Commitments made under concession and PPP contracts – financial asset and/or bifurcated model";
- G.15.3 "Commitments made and received in connection with construction and service contracts";
- K.27.1 "Provisions for retirement benefit obligations".

I. Equity

21. Information on equity

Capital management policy

In 2018, VINCI continued its policy of purchasing its own shares under the programme approved by the Shareholders' General Meeting held on 20 April 2017 and the new programme approved by the Shareholders' General Meeting of 17 April 2018, for a period of 18 months and relating to a maximum amount €2 billion at a maximum share price of €120. In 2018, 7,667,561 shares were bought at an average price of €83.11, for a total of €637 million.

Treasury shares (see Note I.21.2 "Treasury shares") are allocated to financing external growth transactions and to covering performance share plans and the employer contributions to international employee share ownership plans. They may also be cancelled.

VINCI's employee savings policy aims to make it easier for Group employees to become shareholders. At 31 December 2018, over 50% of the Group's employees were VINCI shareholders through unit funds invested in VINCI shares. Since those funds own 8.99% of the company's shares, the Group's current and former employees form its largest group of shareholders.

There are no financial covenants taking into account the Group's consolidated equity or the equity of parent company VINCI SA.

21.1 Share capital

At 31 December 2018, the parent company's share capital was represented by 597,515,984 ordinary shares of €2.5 nominal value each.

The changes in the number of shares during the period were as follows:

	31/12/2018	31/12/2017
Number of shares at beginning of period	**591,216,948**	**589,305,520**
Increases in share capital	6,299,036	7,648,416
Cancelled treasury shares		(5,736,988)
Number of shares at end of period	**597,515,984**	**591,216,948**
Number of shares issued and fully paid	597,515,984	591,216,948
Nominal value of one share *(in €)*	2.5	2.5
Treasury shares held directly by VINCI	42,749,600	36,317,368
of which shares allocated to covering performance share plans and employee share ownership plans	*13,586,645*	*7,154,413*

The changes in capital during 2017 and 2018 break down as follows:

	Increases (reductions) in share capital *(in €)*	Share premiums arising on contributions or mergers *(in €)*	Number of shares representing the share capital
01/01/2017	**1,473,263,800**	**9,565,963,094**	**589,305,520**
Group savings plan	14,623,400	358,172,600	5,849,360
Exercise of share subscription options	4,497,640	65,231,103	1,799,056
Cancelled treasury shares	(14,342,470)		(5,736,988)
Other operations		(138,935)	
31/12/2017	**1,478,042,370**	**9,989,227,862**	**591,216,948**
Group savings plan	14,511,260	433,848,415	5,804,504
Exercise of share subscription options	1,236,330	18,933,679	494,532
31/12/2018	**1,493,789,960**	**10,442,009,956**	**597,515,984**

21.2 Treasury shares

Accounting policies

Treasury shares held by the Group are booked as a deduction from equity at their cost of acquisition. Any gains or losses connected with the purchase, sale or cancellation of treasury shares are recognised directly in equity without affecting the income statement.

Changes in treasury shares were as follows:

	31/12/2018	31/12/2017
Number of shares at beginning of period	**36,317,368**	**34,685,354**
Purchases of shares	7,667,561	8,573,859
Allocation of 2014 performance shares to employees		(944,799)
Allocation of 2015 performance shares to employees	(935,763)	(1,600)
Allocation of 2016 performance shares to employees		(4,600)
Allocation of 2017 performance shares to employees		(1,500)
Allocation of 2018 performance shares to employees		
Employer contribution in connection with the Castor International plan	(299,566)	(252,358)
Cancelled treasury shares		(5,736,988)
Number of shares at end of period	**42,749,600**	**36,317,368**

At 31 December 2018, the total number of treasury shares held was 42,749,600. These were recognised as a deduction from consolidated equity for €2,323 million.

A total of 13,586,645 shares are allocated to covering long-term incentive plans and employee share ownership transactions and 29,162,955 are intended to be used as payment in external growth transactions, sold or cancelled.

21.3 Distributable reserves and statutory reserve

At 31 December 2018, VINCI SA's distributable reserves amounted to €29 billion (€28.7 billion at 31 December 2017) and its statutory reserve to €150 million (€150 million at 31 December 2017).

21.4 Amounts recognised directly in equity

(in € millions)		31/12/2018 Attributable to owners of the parent	Attributable to non-controlling interests	Total	31/12/2017 Attributable to owners of the parent	Attributable to non-controlling interests	Total
Hedging costs							
Reserve at beginning of period (*)		**(3)**	**-**	**(3)**	**-**	**-**	**-**
Gross reserve before tax effect at balance sheet date	**I**	**2**	**-**	**2**	**-**	**-**	**-**
Cash flow hedge and net investment hedges							
Reserve at beginning of period (*)		**(589)**	**-**	**(590)**	**(847)**	**(1)**	**(848)**
Changes in fair value of companies accounted for under the equity method		1	-	1	115	-	115
Other changes in fair value in the period		(93)	-	(93)	74	1	75
Items recognised in profit or loss		42	-	42	63	-	63
Changes in consolidation scope and miscellaneous		(24)	-	(24)	-	-	-
Gross reserve before tax effect at balance sheet date	**II**	**(663)**	**-**	**(664)**	**(596)**	**-**	**(596)**
of which gross reserve relating to companies accounted for under the equity method		*(549)*	-	*(549)*	*(551)*	-	*(551)*
Total gross reserve before tax effects (items that may be recycled to income)	**I+II**	**(661)**	**-**	**(662)**	**(596)**	**-**	**(596)**
Associated tax effect		167	-	167	159	-	159
Reserve net of tax (items that may be recycled to income)	**III**	**(495)**	**-**	**(495)**	**(437)**	**-**	**(437)**
Equity instruments (*)							
Reserve at beginning of period		**1**	**-**	**1**	**3**	**-**	**3**
Gross reserve before tax effect at balance sheet date	**IV**	**1**	**-**	**1**	**1**	**-**	**1**
Actuarial gains and losses on retirement benefit obligations							
Reserve at beginning of period		**(346)**	**-**	**(345)**	**(458)**	**-**	**(458)**
Actuarial gains and losses recognised in the period		(46)	-	(46)	136	1	137
Associated tax effect		15	-	15	(31)	-	(31)
Changes in consolidation scope and miscellaneous		9	-	9	7	-	7
Reserve net of tax at end of period	**V**	**(367)**	**-**	**(367)**	**(346)**	**-**	**(345)**
Total reserve net of tax (items that may not be recycled to income)	**IV+V**	**(366)**	**-**	**(366)**	**(345)**	**-**	**(345)**
Total amounts recognised directly in equity	**III+IV+V**	**(861)**	**-**	**(861)**	**(782)**	**-**	**(782)**

(*) Amounts adjusted in accordance with the change in accounting methods related to the first-time adoption on 1 January 2018 of IFRS 9 "Financial Instruments", described in Note A.4. "Available-for-sale financial assets" under IAS 39 are now classified under "Equity instruments" for those evaluated at fair value through OCI.

The amounts recorded directly in equity relate to cash flow hedging transactions (negative effect of €632 million), net investment hedging transactions (negative effect of €31 million) and actuarial gains and losses on retirement benefit obligations.
Transactions relating to the hedging of interest rate risk had a negative effect of €620 million, comprising:

- a negative effect of €76 million concerning fully consolidated subsidiaries, including VINCI Autoroutes (negative effect of €68 million) and VINCI SA (positive effect of €24 million)";
- a negative effect of €544 million relating to companies accounted for under the equity method, mainly relating to LISEA (negative effect of €339 million) and other companies handling infrastructure projects on a PPP or concession basis.

These transactions are described in Note J.25.1.2 "Cash flow hedges".

21.5 Non-controlling interests

At 31 December 2018, non-controlling interests amounted to €633 million (€572 million at 31 December 2017).

22. Dividends

The dividend paid by VINCI SA to its shareholders in respect of 2018 and 2017 breaks down as follows:

	2018	2017
Dividend per share *(in €)*		
Interim dividend	0.75	0.69
Final dividend	1.92	1.76
Net total dividend	**2.67**	**2.45**
Amount of dividend *(in € millions)*		
Interim dividend	417	384
Final dividend	1,065 (*)	974
Net total dividend	**1,482**	**1,358**

(*) Estimate based on the number of shares giving rights to a dividend at 26 January 2019, i.e. 554,898,331 shares.

VINCI paid the final dividend in respect of 2017 on 26 April 2018 and an interim dividend in respect of 2018 on 8 November 2018.

The Shareholders' Ordinary General Meeting of 17 April 2019 will be asked to approve the overall dividend that will be paid in respect of 2018 (see Note N.31 "Appropriation of 2018 net income").

J. Financing and financial risk management

23. Net financial debt

Accounting policies

Bonds, other loans and financial debt are recognised at amortised cost using the effective interest method. The effective interest rate is determined after taking account of redemption premiums and issuance expenses. Under this method, the interest expense is measured actuarially and reported under the cost of gross financial debt.

The economic benefit of a loan at a significantly below-market rate of interest, which is the case in particular for project finance granted by public sector organisations, is treated as a government grant and recognised as a reduction of the debt and the related investments, in accordance with IAS 20.

Certain financing contracts provide for early redemption options, for amounts that are always close to the amortised cost of the financial liabilities that are recognised as a result. Consequently, the Group does not recognise any derivative financial instrument separately from the original contracts.

The part at less than one year of borrowings is included in "Current borrowings".

At 31 December 2018, net financial debt, as defined by the Group, stood at almost €15.6 billion, up €1,553 million compared with 31 December 2017. It breaks down as follows:

Analysis by accounting heading	*(in € millions)*	Note	31/12/2018 Non-current	31/12/2018 Current (*)	31/12/2018 Total	31/12/2017 Non-current	31/12/2017 Current (*)	31/12/2017 Total
Financial liabilities at amortised cost	Bonds	23.1	(16,588)	(1,576)	(18,164)	(14,130)	(1,427)	(15,558)
	Other bank loans and other financial debt	23.1	(2,900)	(439)	(3,339)	(2,415)	(1,180)	(3,595)
	Finance lease debt	23.1	(123)	(44)	(166)	(97)	(33)	(130)
	Long-term financial debt (**)		**(19,611)**	**(2,059)**	**(21,669)**	**(16,642)**	**(2,641)**	**(19,282)**
	Commercial paper	24.2	-	(1,281)	(1,281)	-	(998)	(998)
	Other current financial liabilities	24.1	-	(41)	(41)	-	(30)	(30)
	Bank overdrafts	24.1	-	(1,178)	(1,178)	-	(1,105)	(1,105)
	Financial current accounts, liabilities	24.1	-	(77)	(77)	-	(58)	(58)
	I - Gross financial debt		**(19,611)**	**(4,635)**	**(24,246)**	**(16,642)**	**(4,830)**	**(21,472)**
	of which impact of fair value hedges		*(413)*	*(27)*	*(440)*	*(435)*	*(7)*	*(442)*
Loans and receivables	Collateralised loans and financial receivables		-	-	-	-	-	-
	Financial current accounts, assets	24.1	-	29	29	-	41	41
Financial assets at fair value through profit and loss	Cash management financial assets	24.1	-	216	216	-	142	142
	Cash equivalents	24.1	-	3,595	3,595	-	2,658	2,658
	Cash	24.1	-	4,364	4,364	-	4,150	4,150
	II - Financial assets		**-**	**8,204**	**8,204**	**-**	**6,991**	**6,991**
Derivatives	Derivative financial instruments – liabilities	25	(206)	(76)	(282)	(288)	(114)	(402)
	Derivative financial instruments – assets	25	511	258	769	621	261	882
	III - Derivative financial instruments		**305**	**182**	**487**	**334**	**146**	**480**
	Net financial debt (I+II+III)		**(19,305)**	**3,751**	**(15,554)**	**(16,308)**	**2,307**	**(14,001)**
	Net financial debt breaks down by business as follows:							
	Concessions		*(26,698)*	*(331)*	*(27,029)*	*(25,474)*	*(1,671)*	*(27,145)*
	Contracting		*(4,227)*	*3,319*	*(908)*	*(3,219)*	*3,695*	*477*
	Holding companies and VINCI Immobilier		*11,619*	*763*	*12,382*	*12,384*	*282*	*12,667*

(*) The current part includes accrued interest not matured.
(**) Including the part at less than one year.

Change in in net financial debt:

(in € millions)	Opening	Cash flows	Ref.	"Non-cash" changes: Changes in consolidation scope	Exchange rate effect	Changes in fair value	Other changes	Total "non-cash"	Ref.	Closing
Bonds	(14,130)	(3,669)	(3)	-	(55)	23	1,244	1,212	(4)	(16,588)
Other loans and borrowings	(2,512)	28	(3)	(635)	(39)	-	135	(539)	(4)	(3,023)
Current borrowings	(4,830)	1,983		(181)	(8)	(19)	(1,580)	(1,788)		(4,635)
of which the part at less than one year of long-term debts	*(2,316)*	*2,185*	*(3)*	*(33)*	*(3)*	*(19)*	*(1,576)*	*(1,631)*	*(4)*	*(1,762)*
of which current financial debts at inception	*(1,085)*	*(181)*	*(2)*	*(121)*	*(12)*	*-*	*-*	*(133)*	*(4)*	*(1,398)*
of which accrued interest on bank debts	*(325)*	*30*	*(4)*	*(1)*	*-*	*-*	*-*	*(2)*	*(4)*	*(297)*
of which bank overdrafts	*(1,105)*	*(50)*	*(1)*	*(26)*	*7*	*-*	*(4)*	*(23)*	*(1)*	*(1,178)*
Cash management financial assets	184	47		10	5	-	(1)	15		245
of which cash management financial assets (excluding accrued interest)	*184*	*46*	*(2)*	*10*	*5*	*-*	*(1)*	*15*	*(4)*	*244*
of which accrued interest on cash management assets	*-*	*-*	*(4)*	*-*	*-*	*-*	*-*	*-*	*(4)*	*-*
Cash and cash equivalents	6,807	1,528	(1)	(331)	23	(1)	(66)	(375)	(1)	7,960
Derivative financial instruments	480	12		(4)	26	(27)	-	(5)		487
of which fair value of derivatives	*357*	*1*	*(3)*	*(4)*	*26*	*(27)*	*-*	*(5)*	*(4)*	*353*
of which accrued interest on derivatives	*123*	*12*	*(4)*	*-*	*-*	*-*	*-*	*-*	*(4)*	*134*
Net financial debt	**(14,001)**	**(74)**	**(5)**	**(1,139)**	**(49)**	**(24)**	**(267)**	**(1,479)**	**(5)**	**(15,554)**

Changes in the consolidation scope led to a €1,139 million cash outflow and related mainly to the integration of Lane Construction's Plants & Paving division, PrimeLine Utility Services and Airports Worldwide, as well as the change of control of Greek concession-holder Gefyra (previously accounted for under the equity method, now fully consolidated). Other changes include the reclassification of the non-current portion of long-term financial debt as current debts.

The table below reconciles changes in net financial debt with the cash flow statement.

Reconciliation of net financial debt with financing flows on the cash flow statement:

(in € millions)	Ref.	2018
Change in net cash	(1)	1,079
Change in cash management assets and other current financial debts	(2)	(135)
(Proceeds from)/repayment of loans	(3)	(1,456)
Other changes	(4)	(1,042)
Change in net financial debt	(5)	(1,553)

23.1 Detail of long-term financial debt by business

The breakdown of net long-term financial debt (including the part at less than one year) by business at 31 December 2018 was as follows:

	31/12/2018				31/12/2017			
(in € millions)	**Concessions**	**Contracting**	**Holding companies and VINCI Immobilier**	**Total**	**Concessions**	**Contracting**	**Holding companies and VINCI Immobilier**	**Total**
Bonds	(14,238)	-	(3,926)	(18,164)	(13,669)	(66)	(1,823)	(15,558)
Other bank loans and other financial debt	(3,012)	(81)	(246)	(3,339)	(3,503)	(98)	6 (*)	(3,595)
Finance lease debt	(22)	(144)	(1)	(166)	(16)	(114)	-	(130)
Long-term financial debt	**(17,272)**	**(225)**	**(4,172)**	**(21,669)**	**(17,188)**	**(278)**	**(1,816)**	**(19,282)**

(*) Net of arrangement commissions relating to the undrawn VINCI syndicated credit facility, recognised as a reduction in debt.

At 31 December 2018, long-term financial debt amounted to €21.7 billion, up €2.4 billion relative to 31 December 2017 (€19.3 billion). The increase was due mainly to the following transactions:

- In March 2018, VINCI SA arranged a $300 million credit facility. VINCI carried out two bond issues as part of its EMTN (Euro Medium Term Notes) programme: in September 2018 it issued €750 million of bonds maturing in September 2025 and paying an annual coupon of 1%, along with €1 billion of bonds maturing in September 2030 followed by a €100 million tap issue in October, both paying an annual coupon of 1.75%. VINCI SA also placed $70 million of 10-year bonds in October 2018 and €120 million of 16-year bonds in November 2018.
- ASF carried out two bond issues as part of its EMTN programme: in January 2018 it issued €1 billion of bonds maturing in January 2030 and in June 2018 it issued €700 million of bonds maturing in June 2028, both paying an annual coupon of 1.375%. In March 2018, ASF repaid a €750 million CNA loan bearing interest at 4.50%; in June, it repaid early a €100 million credit facility; in September, it redeemed €500 million of bonds paying a coupon of 4% and repaid EIB loans totalling €51 million.
- In April 2018, Cofiroute redeemed €600 million of bonds paying an annual coupon of 5.25% and EIB loans totalling €128 million.
- In December 2018, the company holding the concession for Belgrade airport took out two bank loans: one for €220 million maturing in September 2033 on which drawings were €151 million at the end of the year, and the other for €200 million maturing in September 2035 on which drawings were €137 million at the end of the year.
- At 31 December 2018, Gefyra, the company holding the concession for the Rion–Antirion bridge in Greece and which has been fully consolidated again since 1 January 2018, had an EIB loan amounting to €207 million with a term of June 2029.

Details of the Group's main financial debts are given in the tables below:

Concessions

				31/12/2018			31/12/2017	
(in € millions)	Currency	Contractual interest rate	Maturity	Capital remaining due	Carrying amount	of which accrued interest not matured	Capital remaining due	Carrying amount
Bonds I				**13,676**	**14,238**	**256**	**13,061**	**13,669**
ASF group				**9,495**	**10,028**	**217**	**8,293**	**8,863**
of which:								
ASF 2011 bond issue	EUR	4.0%	September 2018	-	-	-	500	511
ASF 2009 bond issue and supplement	EUR	7.4%	March 2019	970	1,028	56	970	1,038
ASF 2010 bond issue and supplement	EUR	4.1%	April 2020	650	697	19	650	717
ASF 2007 bond issue	EUR	5.6%	July 2022	1,575	1,752	44	1,575	1,781
ASF 2013 bond issue	EUR	2.9%	January 2023	700	763	19	700	765
ASF 2014 bond issue	EUR	3.0%	January 2024	600	613	17	600	613
ASF 2016 bond issue	EUR	1.0%	May 2026	500	497	3	500	489
ASF 2017 bond issue	EUR	1.1%	April 2026	500	502	4	500	501
ASF 2017 bond issue	EUR	1.3%	January 2027	1,000	1,003	12	1,000	1,002
ASF 2018 bond issue	EUR	1.4%	June 2028	700	706	5	-	-
ASF 2018 bond issue	EUR	1.4%	January 2030	1,000	1,016	13	-	-
Cofiroute				**3,157**	**3,187**	**39**	**-**	**3,802**
of which:								
2003 bond issue	EUR	5.3%	April 2018	-	-	-	600	622
2006 bond issue and supplement in 2007	EUR	5.0%	May 2021	1,100	1,166	33	1,100	1,177
2016 bond issue	EUR	0.4%	February 2025	650	648	2	650	645
2016 bond issue	EUR	0.8%	September 2028	650	619	2	650	607
2017 bond issue	EUR	1.1%	October 2027	750	746	2	750	742
Arcour				**415**	**412**	**-**	**417**	**414**
of which Arcour 2017	EUR	2.8%	November 2047	415	412	-	417	414
VINCI Airports				**277**	**271**	**-**	**264**	**254**
of which Aerodom 2017	USD	6.8%	March 2029	277	271	-	264	254
Other concessions				**333**	**342**	**-**	**328**	**337**
of which Lamsac 2012	PEN	inflation	June 2037	239	248	-	234	244
Other bank loans and other financial debt II				**3,066**	**3,012**	**6**	**3,556**	**3,503**
ASF group				**691**	**675**	**1**	**1,593**	**1,575**
CNA loans				**-**	**-**	**-**	***750***	***770***
of which ASF - CNA 2004 to 2005	EUR	4.5%	March 2018	-	-	-	750	770
EIB loans				***691***	***675***	***1***	***743***	***708***
Credit facilities				**-**	**-**	**-**	***100***	***97***
Cofiroute				**716**	**714**	**4**	**844**	**844**
Arcour				**190**	**171**	**-**	**191**	**171**
VINCI Airports				**1,090**	**1,084**	**1**	**747**	**733**
of which ADL group (Aéroports de Lyon)				327	326	1	324	323
of which Aerodom	USD	L3M	March 2024	146	143	-	177	164
of which VINCI Airports Serbia	EUR	E3M	September 2033	151	151	-	-	-
	EUR	4.6%	September 2035	137	137	-	-	-
Other concessions				**381**	**376**	**-**	**181**	**179**
Finance lease debt III				**22**	**22**	**-**	**16**	**16**
Long-term financial debt I+II+III				**16,764**	**17,272**	**262**	**16,633**	**17,188**

Holding companies

(in € millions)	Currency	Contractual interest rate	Maturity	31/12/2018 Capital remaining due	31/12/2018 Carrying amount	31/12/2018 of which accrued interest not matured	31/12/2017 Capital remaining due	31/12/2017 Carrying amount
Bonds I				**3,916**	**3,926**	**34**	**1,876**	**1,823**
VINCI SA				**3,916**	**3,926**	**34**	**1,876**	**1,823**
of which:								
2012 bond issue	EUR	3.4%	March 2020	750	784	19	750	794
Bond issue and supplement in 2017 (*)	USD	0.4%	February 2022	662	596	1	653	562
2018 bond issue	EUR	1.0%	September 2025	750	755	2	-	-
Bond issue and supplement in 2018	EUR	1.8%	September 2030	1,100	1,115	5	-	-
Other bank loans and other financial debt II				**263**	**247**	**-**	**-**	**(6)**
VINCI SA (**)				**262**	**246**	**-**	**-**	**(6)**
Long-term financial debt I+II				**4,179**	**4,172**	**34**	**1,876**	**1,816**

(*) Corresponding to non-dilutive convertible bonds.
(**) Net of arrangement commissions relating to the undrawn VINCI syndicated credit facility, recognised as a reduction in debt.

Breakdown of long-term financial debt by currency

At 31 December 2018, 89% of the Group's long-term financial debt was denominated in euros. Debts in foreign currency of companies of which the functional currency is the euro (mainly VINCI and ASF) have mostly been hedged at their time of issue and do not generate any exposure to exchange rate risk. Generally, the Group's activities in foreign countries are financed in the local currency.

23.2 Net financial debt maturity schedule

On the basis of interest rates at 31 December 2018, the Group's debt and associated interest payments break down as follows, by maturity date:

(in € millions)	31/12/2018 Carrying amount	Capital and interest	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Bonds						
Capital	(18,164)	(17,592)	(1,258)	(1,407)	(4,615)	(10,312)
Interest payments	-	(2,898)	(511)	(424)	(908)	(1,055)
Other bank loans and other financial debt						
Capital	(3,339)	(3,409)	(432)	(290)	(1,165)	(1,523)
Interest payments	-	(441)	(67)	(62)	(151)	(160)
Finance lease debt			-			
Capital	(166)	(166)	(43)	(58)	(38)	(27)
Interest payments	-	(8)	(4)	(2)	(2)	(1)
Long-term financial debt	**(21,669)**	**(24,515)**	**(2,315)**	**(2,243)**	**(6,879)**	**(13,078)**
Commercial paper	(1,281)	(1,281)	(1,281)	-	-	-
Other current financial liabilities	(41)	(41)	(41)	-	-	-
Bank overdrafts	(1,178)	(1,178)	(1,178)	-	-	-
Financial current accounts, liabilities	(77)	(77)	(77)	-	-	-
Financial debt I	**(24,246)**	**(27,092)**	**(4,892)**	**(2,243)**	**(6,879)**	**(13,078)**
Financial assets II	**8,204 (*)**	**8,204**	**8,204**			
Derivative financial instruments – liabilities	(282)	1,250	234	207	437	372
Derivative financial instruments – assets	769	(80)	(4)	(2)	3	(78)
Derivative financial instruments III	**487**	**1,170**	**231**	**205**	**440**	**294**
Net financial debt I+II+III	**(15,554)**					

(*) Of which €8.1 billion at less than three months, consisting mainly of €3.6 billion of cash equivalents and €4.4 billion of cash (see Note J.24.1 "Net cash managed").

At 31 December 2018, the average maturity of the Group's long-term financial debt was 6.4 years (5.7 years at 31 December 2017). The average maturity was 6.5 years in Concession subsidiaries, 2.3 years for the Contracting business and 6.1 years for holding companies and VINCI Immobilier.

23.3 Credit ratings and financial covenants

Credit ratings

On 27 March 2018, credit rating agency Standard & Poor's raised its outlook on the Group from stable to positive.
At 31 December 2018, the Group's credit ratings were:

		Rating		
	Agency	**Long term**	**Outlook**	**Short term**
VINCI SA	Standard & Poor's	A-	Positive	A2
	Moody's	A3	Stable	P1
ASF	Standard & Poor's	A-	Positive	A2
	Moody's	A3	Stable	P1
Cofiroute	Standard & Poor's	A-	Positive	A2

Financial covenants

Some financing agreements include early repayment clauses applicable in the event of non-compliance with financial ratios; all ratios were met at 31 December 2018. The CNA loan that included clauses of this kind was repaid by ASF in March 2018.

Other financing agreements entered into by Group entities provide that a change in control of the borrower may constitute a case for mandatory early redemption or trigger a demand for early repayment.

24. Net cash managed and available resources

Accounting policies

Cash and cash equivalents comprise current accounts at banks and short-term liquid investments subject to negligible risks of fluctuations of value. Cash equivalents include money market UCITS and certificates of deposit with maturities not exceeding three months at the origin. Bank overdrafts are not included in cash and are reported under current financial liabilities. Changes in the fair value of these instruments are recognised directly in profit or loss.

"Cash management financial assets" comprises investments in money market securities and bonds, and units in UCITS, made with a short-term management objective, that do not satisfy the IAS 7 criteria for recognition as cash. They are measured and recognised at their fair value. Changes in value are recognised in profit or loss.

Purchases and sales of cash management financial assets are recognised at their transaction date.

At 31 December 2018, the Group's available resources amounted to €13.6 billion, including €5.6 billion net cash managed and €8 billion of available, confirmed medium-term bank credit facilities expiring in November 2023.

These available resources help the Group to manage its liquidity risk (see Note J.23.2 "Net financial debt maturity schedule").

24.1 Net cash managed

Net cash managed, which includes in particular cash management financial assets and commercial paper issued, breaks down as follows:

	31/12/2018			
(in € millions)	Concessions	Contracting	Holding companies and VINCI Immobilier	Total
Cash equivalents	**64**	**248**	**3,283**	**3,595**
Marketable securities and mutual funds (UCITS)	-	1	1,407	1,409
Negotiable debt securities with an original maturity of less than 3 months (*)	64	247	1,876	2,187
Cash	**684**	**2,316**	**1,364**	**4,364**
Bank overdrafts	**-**	**(992)**	**(186)**	**(1,178)**
Net cash and cash equivalents	**748**	**1,573**	**4,461**	**6,782**
Cash management financial assets	**119**	**96**	**1**	**216**
Marketable securities and mutual funds (UCITS) (**)	-	34	-	34
Negotiable debt securities and bonds with an original maturity of less than 3 months	8	45	1	54
Negotiable debt securities and bonds with an original maturity of more than 3 months	111	17	-	128
Commercial paper issued	**-**	**-**	**(1,281)**	**(1,281)**
Other current financial liabilities	**(17)**	**(23)**	**-**	**(41)**
Balance of cash management current accounts	**585**	**1,761**	**(2,394)**	**(49)**
Net cash managed	**1,435**	**3,407**	**786**	**5,628**

(*) Including term deposits, interest earning accounts and certificates of deposit.
(**) Short-term investments in UCITS units that do not meet the criteria to be designated as cash equivalents as defined by IAS 7.

(in € millions)	31/12/2017 Concessions	Contracting	Holding companies and VINCI Immobilier	Total
Cash equivalents	**80**	**287**	**2,291**	**2,658**
Marketable securities and mutual funds (UCITS)	27	1	1,070	1,098
Negotiable debt securities with an original maturity of less than 3 months (*)	53	286	1,220	1,560
Cash	**728**	**2,235**	**1,186**	**4,150**
Bank overdrafts	**(1)**	**(1,011)**	**(93)**	**(1,105)**
Net cash and cash equivalents	**808**	**1,511**	**3,384**	**5,703**
Cash management financial assets	**67**	**75**	**-**	**142**
Marketable securities and mutual funds (UCITS) (**)	-	8	-	8
Negotiable debt securities and bonds with an original maturity of less than 3 months	5	50	-	55
Negotiable debt securities and bonds with an original maturity of more than 3 months	62	18	-	80
Commercial paper issued	**-**	**-**	**(998)**	**(998)**
Other current financial liabilities	**(9)**	**(20)**	**-**	**(30)**
Balance of cash management current accounts	**(96)**	**2,206**	**(2,126)**	**(17)**
Net cash managed	**770**	**3,772**	**260**	**4,801**

(*) Including term deposits, interest earning accounts and certificates of deposit.
(**) Short-term investments in UCITS units that do not meet the criteria to be designated as cash equivalents as defined by IAS 7.

The investment vehicles used by the Group are money market UCITS, interest earning accounts, term deposits and negotiable debt securities (certificates of deposit generally with a maturity of less than three months). They are measured and recognised at their fair value.

Net cash is managed with limited risk to capital. The performance and the risks associated with these investments of net cash are monitored regularly through a report detailing the yield of the various assets on the basis of their fair value and analysing the associated level of risk.

At 31 December 2018, net cash managed by VINCI SA amounted to €2.2 billion, arising mainly from the cash surpluses transferred upwards from French subsidiaries through a cash pooling system. VINCI Finance International, a wholly owned subsidiary of VINCI that centralises the cash surpluses of foreign subsidiaries, managed investments and cash of almost €1 billion at 31 December 2018. This centralisation enables the management of financial resources to be optimised at Group level and the risks relating to the counterparties and investment vehicles used to be better managed.

Other subsidiaries' cash investments are managed in a decentralised manner while complying with the guidelines and instructions issued by VINCI, which define the investment vehicles and the counterparties authorised. The investments amounted to €2.5 billion at 31 December 2018, including €0.8 billion for the Concessions business and €1.6 billion for the Contracting business.

24.2 Other available resources

Revolving credit facilities

On 7 November 2018, VINCI increased and extended its revolving credit facility, which now has a limit of €8 billion and a five-year term, with two one-year extension options at the lenders' discretion. It does not contain any default clause relating to non-compliance with financial ratios. At 31 December 2018, VINCI's credit facility was not being used.

The ASF and Cofiroute credit facilities due to expire in May 2021 were terminated and all fees yet to be amortised were taken to profit and loss.

Commercial paper

At 31 December 2018, VINCI had a €5 billion commercial paper programme rated A2 by Standard & Poor's and P1 by Moody's.
At 31 December 2018, €1.3 billion had been issued under that programme.

25. Financial risk management

Management rules

VINCI has implemented a system to manage and monitor the financial risks to which it is exposed, principally interest rate risk.

In accordance with the rules laid down by the Group's Finance Department, the responsibility for identifying, measuring and hedging financial risks lies with the operational entity in question. On the other hand, derivative financial instruments are managed by the Group Finance Department on behalf of the subsidiaries in question.

For the entities that have the most material exposure to financial risks (VINCI SA, ASF, Cofiroute, VINCI Finance International), treasury committees, in which the Finance departments of both VINCI SA and the concerned companies take part, regularly analyse the main exposures and decide on management strategies.
In order to manage its exposure to market risks, the Group uses derivative financial instruments, which are recognised in the balance sheet at their fair value.

Accounting policies

The Group uses derivative financial instruments to hedge its exposure to market risks (mainly interest rates and foreign currency exchange rates). Most interest rate and foreign currency exchange rate derivatives used by VINCI are designated as hedging instruments. Hedge accounting is applicable in particular if the conditions provided for in IFRS 9 are satisfied:

- at the time of setting up the hedge, there is a formal designation and documentation of the hedging relationship;
- the economic relationship between the hedged item and the hedging instrument must be documented, as must potential sources of ineffectiveness;
- retrospective ineffectiveness must be measured at each closing date.

Changes in fair value from one period to the next are recognised differently depending on whether the instrument is designated for accounting purposes as:

- a fair value hedge of an asset or a liability or of an unrecognised firm commitment;
- a cash flow hedge; or
- a hedge of a net investment in a foreign entity.

The Group applies the provisions allowed or required by IFRS 9 for the treatment of hedging costs of all instruments designated as hedges for accounting purposes.

A fair value hedge enables the exposure to the risk of a change in the fair value of a financial asset, a financial liability or unrecognised firm commitment to be hedged.
Changes in the fair value of the hedging instrument are recognised in the income statement for the period. The change in value of the hedged item attributable to the hedged risk is recognised symmetrically in profit or loss for the period (and adjusts the carrying amount of the hedged item). Except for the ineffective portion of the hedge, these two revaluations offset each other within the same line items in the income statement.

A cash flow hedge allows exposure to variability in future cash flow associated with an existing asset or liability, or a highly probable forecast transaction, to be hedged.
Changes in the fair value of the hedging instrument are recognised as other comprehensive income (OCI) for the effective portion and in the income statement for the period for the ineffective portion. Cumulative gains or losses in equity (OCI) are reclassified to profit or loss under the same line item as the hedged item – i.e. under operating income and expenses for cash flow from operations and under cost of net financial debt otherwise – when the hedged cash flow materialises.
If the hedging relationship is disqualified because it is no longer considered effective, the cumulative gains or losses in respect of the hedging instrument are retained in equity (OCI) and reclassified to profit or loss as the hedged cash flows materialise. Subsequent changes in fair value are taken directly to the income statement. If the future cash flow is no longer expected, the gains and losses previously recognised in equity (OCI) are recorded in the income statement.

Hedging a net investment consists of hedging the exchange rate risk relating to the equity of an investment in a consolidated foreign subsidiary outside of the eurozone. Changes in the value of the derivative instrument are recorded in equity under currency translation differences for the effective portion. The portion of changes in value of the hedging instrument considered as ineffective is recognised in the cost of net financial debt. Currency translation differences related to changes in the value of the hedging instrument are recognised in the income statement when the foreign entity in which the initial investment was made leaves the consolidation scope.

Derivative financial instruments that are not designated as hedging instruments are reported in the balance sheet at fair value and changes in their fair value are recognised in the income statement.

Cross-currency swaps are either regarded as interest-rate instruments where they are designated as fair-value or cash-flow hedges for accounting purposes, or regarded as exchange-rate instruments in other cases.

Derivative instruments

At the balance sheet date, the fair value of derivative financial instruments breaks down as follows:

(in € millions)	Balance sheet line	Note	31/12/2018 Asset	31/12/2018 Liability	31/12/2018 Fair value (*)	31/12/2017 Asset	31/12/2017 Liability	31/12/2017 Fair value (*)
Derivatives related to net financial debt								
Interest rate derivatives: fair value hedges		25.1.2	620	83	537	635	88	547
Interest rate derivatives: cash flow hedges		25.1.2	-	81	(81)	-	63	(63)
Interest rate derivatives not designated as hedges		25.1.3	85	62	23	145	106	39
Interest rate derivatives	Net financial debt		**705**	**226**	**479**	**780**	**258**	**522**
Foreign currency exchange rate derivatives: fair value hedges		25.2	-	-	-	3	43	(40)
Foreign currency exchange rate derivatives: cash flow hedges		25.2	-	-	-	-	-	-
Foreign currency exchange rate derivatives: hedges of net foreign investments		25.2	5	8	(2)	9	7	2
Foreign currency exchange rate derivatives not designated as hedges		25.2	23	11	13	1	4	(4)
Foreign currency exchange rate derivatives	Net financial debt		**29**	**18**	**11**	**13**	**54**	**(42)**
Other derivatives	Net financial debt		**35**	**37**	**(2)**	**89**	**90**	**-**
Derivatives related to WCR								
Foreign currency exchange rate derivatives: fair value hedges		25.2	6	3	3	18	14	4
Foreign currency exchange rate derivatives: cash flow hedges		25.2	1	4	(2)	5	1	4
Foreign currency exchange rate derivatives not designated as hedges		25.2	-	-	-	-	-	-
Foreign currency exchange rate derivatives	Working capital requirement		**7**	**7**	**1**	**23**	**16**	**7**
Other derivatives	Working capital requirement		**-**	**2**	**(1)**	**1**	**-**	**1**
Total derivative financial instruments			**776**	**290**	**487**	**906**	**418**	**488**

(*) Fair value includes interest accrued but not matured of €134 million at 31 December 2018 and €123 million at 31 December 2017.

Other hedging instruments

Currency translation risk relating to the ownership of assets in foreign currencies is in general, and where possible, hedged by financial debts denominated in the same currency.

25.1 Interest rate risk

Interest rate risk is managed within the Group, making a distinction between the Concessions business, the Contracting business and holding companies as their respective financial profiles are not the same.

For concession operating subsidiaries, interest rate risk is managed with two timescales: the long term, aiming to ensure and maintain the concession's economic equilibrium, and the short term, with an objective of limiting the impact of the cost of debt on earnings for the year.
Over the long term, the objective is to ensure that the breakdown between fixed and floating rate debt is adjusted depending on the debt level, with a greater proportion at fixed rate when the level of debt is high.
As regards Contracting business lines and holding companies, they have a structural operational net cash surplus. For these activities, the objective is to ensure that financial assets and financial liabilities are well matched.

To hedge its interest rate risk, the Group uses derivative financial instruments in the form of options or swaps of which the start may be deferred. These derivatives may be designated as hedges for accounting purposes or not, in accordance with the IFRSs. The Group seeks to ensure that the ineffective portion of hedges is not material.

25.1.1 Long-term financial debt before and after interest rate hedging and sensitivity to interest rate risk

Long-term financial debt before and after interest rate hedging

The table below shows the breakdown at 31 December 2018 of long-term debt between fixed rate, capped floating rate or inflation-linked debt, and the part at floating rate before and after taking account of hedging derivative financial instruments:

Breakdown between fixed and floating rate before hedging

	Fixed rate			Inflation-linked			Floating rate			Total	
(in € millions)	Debt	*Proportion*	Rate	Debt	*Proportion*	Rate	Debt	*Proportion*	Rate	Debt	Rate
Concessions	14,284	*86%*	3.25%	431	*3%*	8.10%	1,954	*12%*	1.60%	16,669	3.18%
Contracting	209	*93%*	2.78%	-	-	-	16	*7%*	1.80%	225	2.71%
Holding companies	3,620	*88%*	2.19%	-	-	-	511	*12%*	1.81%	4,131	2.14%
Total at 31/12/2018	**18,113**	***86%***	**3.03%**	**431**	***2%***	**8.10%**	**2,481**	***12%***	**1.65%**	**21,025**	**2.97%**
Total at 31/12/2017	**16,202**	***87%***	**3.50%**	**425**	***2%***	**7.56%**	**2,038**	***11%***	**1.32%**	**18,665**	**3.35%**

Breakdown between fixed and floating rate after hedging

	Fixed rate			Inflation-linked			Floating rate			Total	
(in € millions)	Debt	*Proportion*	Rate	Debt	*Proportion*	Rate	Debt	*Proportion*	Rate	Debt	Rate
Concessions	6,586	*40%*	4.05%	262	*2%*	5.99%	9,821	*59%*	0.77%	16,669	2.05%
Contracting	210	*93%*	2.78%	-	-	-	16	*7%*	1.81%	225	2.71%
Holding companies	932	*23%*	2.84%	-	-	-	3,199	*77%*	0.70%	4,131	1.18%
Total at 31/12/2018	**7,728**	***37%***	**3.87%**	**262**	***1%***	**5.99%**	**13,035**	***62%***	**0.76%**	**21,025**	**1.88%**
Total at 31/12/2017	**8,799**	***47%***	**3.86%**	**225**	***1%***	**10.21%**	**9,641**	***52%***	**0.93%**	**18,665**	**2.65%**

Sensitivity to interest rate risk

VINCI is exposed to the risk of fluctuations in interest rates, given:

- the cash flow connected with net floating rate financial debt;
- fixed rate financial instruments, recognised on the balance sheet at fair value through profit and loss;
- derivative financial instruments that are not designated as hedges. These mainly comprise net call option positions of which the maximum loss over the life of the transaction does not exceed the premium paid.

On the other hand, fluctuations in the value of derivatives designated as cash flow hedges are recognised directly in equity and have no effect on profit or loss (for the effective portion).

The analysis below has been prepared assuming that the amount of the financial debt and derivatives at 31 December 2018 remains constant over one year. The consequence of a variation in interest rates of 25 basis points at the balance sheet date would be an increase or decrease of equity and pre-tax income for the amounts shown below. For the purpose of this analysis, the other variables are assumed to remain constant.

	31/12/2018			
	Income		Equity	
(in € millions)	Impact of sensitivity calculation +25 bp	Impact of sensitivity calculation -25 bp	Impact of sensitivity calculation +25 bp	Impact of sensitivity calculation -25 bp
Floating rate debt after hedging (accounting basis)	(33)	33	-	-
Floating rate assets after hedging (accounting basis)	14	(14)	-	-
Derivatives not designated as hedges for accounting purposes	(2)	2	-	-
Derivatives designated as cash flow hedges	-	-	164	(164)
Total	**(21)**	**21**	**164**	**(164)**

25.1.2 Description of hedging transactions

Fair value hedges

At the balance sheet date, details of the instruments designated as fair value hedges, which included receive fixed/pay floating interest rate swaps and cross-currency swaps, were as follows:

	Receive fixed/pay floating interest rate swap					
(in € millions)	Fair value	Notional amount	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
31/12/2018	537	12,769	1,301	1,163	2,556	7,749
31/12/2017	547	9,036	444	1,352	2,605	4,636

These transactions relate mainly to the fixed rate bond issues by ASF, VINCI SA and Cofiroute.

Cash flow hedges

The Group is exposed to fluctuations in interest rates on its floating rate debt and may set up receive floating/pay fixed interest rate swaps designated as cash flow hedges to hedge this risk.

The Group has thus set up interest rate swaps that serve to render interest payments on floating rate debt fixed. Contractual cash flow relating to swaps is paid symmetrically with the hedged interest payment flows. The amount deferred in equity is recognised in profit or loss in the period in which the interest payment cash flow affects profit or loss.

In April 2018, Arcos arranged swaps with a delayed start in 2020 to hedge its debts, which have maturities of up to 2037. These swaps, which have a notional amount of €293 million, serve to fix the interest payments on future issues of debt considered as highly probable. At 31 December 2018, the portfolio of these swaps had a negative fair value of €16 million.

At 31 December 2018, details of the instruments designated as cash flow hedges were as follows:

	31/12/2018					
(in € millions)	Fair value	Notional amount	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Receive floating/pay fixed interest rate swaps (incl. cross currency swaps)	(78)	3,340	(17)	2,242	456	659
Interest rate options (caps, floors and collars)	(3)	32	4	4	13	11
Total interest rate derivatives designated for accounting purposes as cash flow hedges	**(81)**	**3,371**	**(14)**	**2,246**	**469**	**670**
Of which hedging of contractual cash flows	*(80)*	*1,371*	*(7)*	*255*	*483*	*641*
Of which hedging of highly probable cash flows	*(1)*	*2,000*	*(6)*	*1,991*	*(14)*	*30*

	31/12/2017					
(in € millions)	Fair value	Notional amount	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Receive floating/pay fixed interest rate swaps	(63)	854	10	11	372	460
Total interest rate derivatives designated for accounting purposes as cash flow hedges	**(63)**	**854**	**10**	**11**	**372**	**460**
Of which hedging of contractual cash flows	*(62)*	*561*	*10*	*11*	*370*	*169*
Of which hedging of highly probable cash flows	*(1)*	*293*	*-*	*-*	*2*	*291*

The following table shows the periods in which the Group expects the amounts recorded in equity at 31 December 2018 for the instruments designated as cash flow hedges to have an impact on profit or loss:

	31/12/2018				
		Amount recycled in profit or loss			
(in € millions)	Amount recorded in equity of controlled companies	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Total interest rate derivatives designated for accounting purposes as cash flow hedges	**(76)**	**(21)**	**(10)**	**(7)**	**(38)**
Of which hedging of contractual cash flows	*(74)*	*(15)*	*(14)*	*(11)*	*(34)*
Of which hedging of highly probable forecast cash flows	*(2)*	*(6)*	*4*	*4*	*(4)*

25.1.3 Description of non-hedging transactions

	31/12/2018					
(in € millions)	Fair value	Notional amount	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Interest rate swaps	23	1,000	1,000	-	-	-
Total	**23**	**1,000**	**1,000**	**-**	**-**	**-**

	31/12/2017					
(in € millions)	Fair value	Notional amount	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Interest rate swaps	39	1,000	-	1,000	-	-
Total	**39**	**1,000**	**-**	**1,000**	**-**	**-**

These transactions include swaps with short maturities.

25.2 Management of foreign currency exchange rate risk

Nature of the Group's risk exposure

VINCI's foreign currency risk management policy consists of hedging the transactional risk connected with operations.
Almost 71% of VINCI's revenue is generated in the eurozone. Contracts outside the eurozone are generally carried out in the local currency in respect of local subsidiaries' activities, and usually in euros and dollars in the case of major export projects. The Group's exposure to currency risk is therefore limited.
VINCI's foreign currency risk management policy consists of hedging the transactional risk connected with subsidiaries' commercial flows denominated in currencies other than their functional currency.
In some cases, the Group also hedges its asset-related exchange rate risk in respect of its foreign currency investments by arranging financing in the currency of the cash flows that they generate.

Detail of foreign currency exchange rate derivatives related to net financial debt

Transactions in exchange rate derivatives carried out by the Group, intended in particular to hedge its financial transactions, break down as follows:

	31/12/2018					
(in € millions)	Fair value	Notional amount	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Forward foreign exchange transactions	-	17	17	-	-	-
Cash flow hedges	**-**	**17**	**17**	**-**	**-**	**-**
Currency swaps (incl. cross currency swaps)	(1)	195	-	-	195	-
Forward foreign exchange transactions	(1)	680	680	-	-	-
Hedges of net foreign investments	**(2)**	**875**	**680**	**-**	**195**	**-**
Currency swaps (incl. cross currency swaps)	15	636	56	20	560	-
Forward foreign exchange transactions	(2)	801	801	-	-	-
Foreign currency exchange rate derivatives not designated as hedges for accounting purposes	**13**	**1,437**	**857**	**20**	**560**	**-**
Total foreign currency exchange rate derivatives	**11**	**2,330**	**1,555**	**20**	**755**	**-**

	31/12/2017					
(in € millions)	Fair value	Notional amount	Within 1 year	Between 1 and 2 years	Between 3 and 5 years	After 5 years
Currency swaps (incl. cross currency swaps)	(40)	335	-	-	191	144
Fair value hedges	**(40)**	**335**	**-**	**-**	**191**	**144**
Currency swaps (incl. cross currency swaps)	-	14	14	-	-	-
Cash flow hedges	**-**	**14**	**14**	**-**	**-**	**-**
Currency swaps (incl. cross currency swaps)	2	684	293	57	296	37
Forward foreign exchange transactions	-	3	3	-	-	-
Hedges of net foreign investments	**2**	**687**	**297**	**57**	**296**	**37**
Currency swaps (incl. cross currency swaps)	(4)	365	365	-	-	-
Forward foreign exchange transactions	-	3	3	-	-	-
Foreign currency exchange rate derivatives not designated as hedges for accounting purposes	**(4)**	**368**	**368**	**-**	**-**	**-**
Total foreign currency exchange rate derivatives	**(42)**	**1,403**	**679**	**57**	**487**	**181**

Detail of hedges qualifying for hedge accounting as part of a net foreign investment hedging relationship

The Group's principal hedges of net foreign investments were as follows at 31 December 2018:

(in € millions)	31/12/2018				
Currency	**USD (US dollar)**	**GBP (Pound sterling)**	**SGD (Singapore dollar)**	**SEK (Swedish krona)**	**JPY (Yen)**
NIH derivatives notional (*)	382	298	116	98	-
NIH debts amount (*)	647	-	-	-	149

(*) NIH: Net investment hedge

The Group hedges the net assets of its main subsidiaries in foreign currencies, particularly subsidiaries whose functional currency is the US dollar, pound sterling, Scandinavian currencies, the Japanese yen or the Australian or New Zealand dollar.

Analysis of exposure to operational foreign currency exchange rate risk

The principal foreign exchange risk exposures were as follows at 31 December 2018:

(in € millions)	31/12/2018				
Currency	**USD (US dollar)**	**GBP (Pound sterling)**	**PEN (Peruvian sol)**	**COP (Colombian peso)**	**CLP (Chilean peso)**
Closing rate	1.145	0.89453	3.863	3721.81	794.37
Exposure	36	33	20	26	(14)
Hedging	9	(25)	(5)	(26)	(3)
Net position	**45**	**8**	**15**	**-**	**(17)**

Given residual exposure on some assets that have not been hedged, 10% appreciation of foreign currencies against the euro would have a positive impact on pre-tax earnings of €5 million.

Detail of foreign currency exchange rate derivatives related to operational flows

Transactions in exchange rate derivatives carried out by the Group, intended in particular to hedge its operational flows, break down as follows:

(in € millions)	31/12/2018	
Currency	**BRL/EUR**	**PLe q.39 77.51 -8.39 re f8(r)-6.7(6H.8(e)4R)-20.BT 0 g /F2 6.96 Tf 1 0 0 1 346.67 571.28 Tm7**

Netting agreements relating to derivative financial instruments

At 31 December 2018 and in accordance with IAS 32, the Group's financial assets and liabilities (including derivative financial instruments) are not netted on the balance sheet, except where the Group has netting agreements. In the event of default by the Group or the financial institutions with which it has contracted, these agreements provide for netting between the fair values of assets and liabilities arising from derivative financial instruments presented in the consolidated balance sheet.

The table below sets out the Group's net exposure arising from these netting agreements:

	31/12/2018			31/12/2017		
(in € millions)	**Fair value of derivatives recognised on the balance sheet (*)**	**Impact of netting agreements**	**Total**	**Fair value of derivatives recognised on the balance sheet (*)**	**Impact of netting agreements**	**Total**
Derivative financial instruments – assets	769	(174)	594	882	(277)	605
Derivative financial instruments – liabilities	(282)	174	(107)	(402)	277	(125)
Net derivative instruments	**487**		**487**	**480**		**480**

(*) Gross amounts as stated on the Group's consolidated balance sheet.

25.4 Management of other risks

Equity risk

At 31 December 2018, the Group held 42,749,600 VINCI shares (representing 7.15% of the share capital) acquired at an average price of €54.34. Increases or decreases of the stock market price of these treasury shares have no impact on the Group's consolidated profit or loss or equity.

Regarding assets to cover retirement benefit obligations, a breakdown by asset type is given in Note K.27.1 "Provisions for retirement benefit obligations".

After issues of non-dilutive convertible bonds, VINCI is exposed to the risk of changes in their redemption value, which depends on VINCI's share price. To protect against an increase in the redemption value caused by a rise in the share price, the Group has taken out options with the same maturity. Together, all of these transactions mean that VINCI is not exposed to any risks in relation to treasury shares.

Commodity risks

Most of the Group's revenue arises either from contracts that include price revision clauses or under short-term contracts. The risks associated with an increase in commodity prices are therefore generally limited.
For major contracts with no price revision clauses, the commodity risks are analysed on a case-by-case basis and managed by negotiating firm price agreements with suppliers, through cash-and-carry deals or hedging derivatives based on commodity indexes.
Eurovia has set up a policy to manage bitumen price risks through short-maturity hedging derivatives (swaps of less than three months on average). This policy applies to small contracts in France with an average length of less than three months and which do not include price revision clauses.
VINCI uses little unprocessed raw material, other than the aggregates produced and used by Eurovia. In 2018, approximately 34% of Eurovia's aggregates came from Group quarries.

26. Book and fair value of financial instruments by accounting category

The method of measuring the fair value of financial assets and liabilities has not changed since the 31 December 2017 accounts closing.
The following table shows the carrying amount and fair value of financial assets and liabilities in the balance sheet by accounting category as defined in IFRS 9:

31/12/2018	Accounting categories							Fair value			
Balance sheet headings and classes of instrument	Derivatives at fair value through profit and loss	Derivatives designated as hedges	Financial assets measured at fair value through profit or loss	Financial assets measured at fair value through other comprehen sive income	Financial assets at amortised cost	Financial liabilities at amortised cost	**Total net book value**	Level 1: quoted prices and cash	Level 2: internal model using observable factors	Level 3: internal model using non-observable factors	**Fair value**
Equity instruments	-	-	95	7	-	-	101	1	-	101	101
Financial assets at amortised cost and PPP financial receivables	-	-	-	-	1,231	-	1,231	-	1,231	-	1,231
I - Non-current financial assets (*)	**-**	**-**	**95**	**7**	**1,231**	**-**	**1,332**	**1**	**1,231**	**101**	**1,332**
II - Derivative financial instruments – assets	**143**	**633**	**-**	**-**	**-**	**-**	**776**	**-**	**776**	**-**	**776**
Cash management financial assets	-	-	216	-	-	-	216	34	182	-	216
Financial current accounts, assets	-	-	-	-	29	-	29	29	-	-	29
Cash equivalents	-	-	3,595	-	-	-	3,595	1,409	2,187 (**)	-	3,595
Cash	-	-	4,364	-	-	-	4,364	4,364	-	-	4,364
III - Current financial assets	**-**	**-**	**8,176**	**-**	**29**	**-**	**8,204**	**5,836**	**2,369**	**-**	**8,204**
Total assets	**143**	**633**	**8,270**	**7**	**1,260**	**-**	**10,313**	**5,836**	**4,376**	**101**	**10,313**
Bonds						(18,164)	(18,164)	(17,152)	(1,466)	-	(18,617)
Other bank loans and other financial debt						(3,339)	(3,339)	-	(3,410)	-	(3,410)
Finance lease debt						(166)	(166)	-	(166)	-	(166)
IV - Long-term financial debt	**-**	**-**	**-**	**-**	**-**	**(21,669)**	**(21,669)**	**(17,152)**	**(5,042)**	**-**	**(22,194)**
V - Derivative financial instruments – liabilities	**(110)**	**(180)**	**-**	**-**	**-**	**-**	**(290)**	**-**	**(290)**	**-**	**(290)**
Other current financial liabilities						(1,322)	(1,322)	-	(1,322)	-	(1,322)
Financial current accounts - liabilities						(77)	(77)	(77)	-	-	(77)
Bank overdrafts						(1,178)	(1,178)	(1,178)	-	-	(1,178)
VI - Current financial liabilities	**-**	**-**	**-**	**-**	**-**	**(2,577)**	**(2,577)**	**(1,255)**	**(1,322)**	**-**	**(2,577)**
Total liabilities	**(110)**	**(180)**	**-**	**-**	**-**	**(24,246)**	**(24,535)**	**(18,407)**	**(6,653)**	**-**	**(25,060)**
Total	33	454	8,270	7	1,260	(24,246)	(14,223)	(12,571)	(2,277)	101	(14,747)

(*) See Notes E.11 and F.13.
(**) Mainly comprising certificates of deposit, term deposits and interest bearing accounts.

As part of the adoption of IFRS 9, "Loans and financial receivables including PPP" have been reclassified under "Financial assets at amortised cost and financial receivables (PPP)". "Available-for-sale assets" have been reclassified under "Equity instruments". Equity instruments are presented under "Financial assets measured at fair value through profit and loss" or "Financial assets measured at fair value through equity" depending on the recognition method used on the transition date.

The table below shows the carrying amount and fair value of financial assets and liabilities as reported at 31 December 2017 by accounting category as defined by IAS 39:

31/12/2017	Accounting categories (1)							Fair value			
Balance sheet headings and classes of instrument	Financial instruments at fair value through profit and loss	Derivatives designated as hedges	Financial assets measured at fair value	Available-for-sale financial assets	Loans and receivables	Financial liabilities at amortised cost	**Total net book value**	Level 1: quoted prices and cash	Level 2: internal model using observable factors	Level 3: internal model using non-observable factors	**Fair value**
Available-for-sale financial assets	-	-	-	95	-	-	95	1	-	94	95
Loans and financial receivables incl. PPP	-	-	-	-	1,007	-	1,007	-	1,007	-	1,007
I - Non-current financial assets (2)	**-**	**-**	**-**	**95**	**1,007**	**-**	**1,102**	**1**	**1,007**	**94**	**1,102**
II - Derivative financial instruments – assets	**235**	**647**	**-**	**-**	**-**	**-**	**882**	**-**	**882**	**-**	**882**
Cash management financial assets	-	-	142	-	-	-	142	8	135	-	142
Financial current accounts, assets	-	-	41	-	-	-	41	41	-	-	41
Cash equivalents			2,658				2,658	1,098	1,560 (3)	-	2,658
Cash			4,150				4,150	4,150	-	-	4,150
III - Current financial assets	**-**	**-**	**6,991**	**-**	**-**	**-**	**6,991**	**5,296**	**1,695**	**-**	**6,991**
Total assets	**235**	**647**	**6,991**	**95**	**1,007**	**-**	**8,975**	**5,297**	**3,584**	**94**	**8,975**
Bonds	-	-	-	-	-	(15,558)	(15,558)	(15,147)	(1,339)	-	(16,486)
Other bank loans and other financial debt	-	-	-	-	-	(3,595)	(3,595)	(785) (4)	(2,892)	-	(3,676)
Finance lease debt	-	-	-	-	-	(130)	(130)	-	(130)	-	(130)
IV - Long-term financial debt	**-**	**-**	**-**	**-**	**-**	**(19,282)**					

K. Employee benefits and share-based payments

27. Provisions for employee benefits

At 31 December 2018, the part at more than one year of provisions for employee benefits broke down as follows:

(in € millions)	Note	31/12/2018	31/12/2017
Provisions for retirement benefit obligations	27.1	1,422	1,391
Long-term employee benefits	27.2	97	91
Total provisions for employee benefits		**1,519**	**1,481**

27.1 Provisions for retirement benefit obligations

Accounting policies

Provisions are taken on the liabilities side of the consolidated balance sheet for obligations connected with defined benefit retirement plans for both current and former employees (people who have retired and those with deferred rights). These provisions are determined using the projected unit credit method on the basis of actuarial valuations made at each annual balance sheet date. The actuarial assumptions used to determine the obligations vary depending on the economic conditions of the country or monetary zone in which the plan is operated. Each plan's obligations are recognised separately.

Under IAS 19, for defined benefit plans financed under external management arrangements (i.e. pension funds or insurance policies), the surplus or shortfall of the fair value of the assets compared with the present value of the obligations is recognised as an asset or liability in the consolidated balance sheet. That recognition is subject to asset ceiling rules and minimum funding requirements set out in IFRIC 14.

The expense recognised under operating income or loss in each period comprises the current service cost and the effects of any change, reduction or winding up of the plan. The accretion impact recognised on actuarial debt and interest income on plan assets are recognised under other financial income and expenses. Interest income from plan assets is calculated using the discount rate used to calculate obligations with respect to defined benefit plans.

The impacts of remeasuring net liabilities relating to defined benefit pension plans are recorded under other comprehensive income. They comprise:

- actuarial gains and losses on obligations resulting from changes in actuarial assumptions and from experience adjustments (the effects of differences between the actuarial assumptions adopted and that which has actually occurred);
- plan asset outperformance/underperformance (i.e. the difference between the effective return on plan assets and the return calculated using the discount rate applied to the actuarial liability); and
- changes in the asset ceiling effect.

At 31 December 2018, provisions for retirement benefit obligations comprised provisions for lump sums on retirement and provisions with respect to obligations for supplementary retirement benefits.

(in € millions)	31/12/2018	31/12/2017
At more than one year	1,422	1,391
At less than one year (*)	50	48
Total provisions for retirement benefit obligations	**1,472**	**1,439**

(*) The part of provisions for retirement benefit obligations that matures within less than one year is shown under "Other current non-operating liabilities".

The VINCI Group's main supplementary retirement benefit obligations relate to defined benefit plans, which have the following characteristics:

- For French subsidiaries, these are contractual lump sums paid on retirement (generally based on a percentage of final salary, depending on the employee's length of service and applicable collective agreements), supplementary defined benefit retirement plans of which some of the Group's employees, retired employees and officers are members, and a specific obligation in respect of the Vice-Chairman of VINCI SA's Board of Directors. Some plans, of which several Group executives are members, are pre-financed through two insurance policies taken out with Cardif and one policy taken out with Allianz. These policies involve active management with reference to composite indexes, and aim to achieve a good balance between the expected return on investments and the associated risks. Sufficient liquidity, in view of the timescale of plan liabilities, is maintained so that pensions and other one-off payments can be met.
- To cover the liabilities of VINCI's UK subsidiaries and those of Etavis in Switzerland, plans are funded through independent pension funds.

In the UK, defined benefit plans for certain Group employees and former employees give rise to benefits that are mainly based on final salaries. They also provide benefits in the event of death and disability. Most of these plans are now closed to new members.

At 31 December 2018, 4,520 people, including 2,335 retired people, were covered by the plans. The average duration of the plans is 17 years.
The investment strategy for plan assets is defined by the trustees representing the pension funds. Contribution schedules and the plan's level of funding are determined by the employer and the trustee, based on three-yearly actuarial valuations. Contribution schedules are intended to cover future service costs and any deficit arising from vested rights.
In Switzerland, plans for the Group's employees and former employees (2,338 people at 31 December 2018, of which over 90% are active) are "cash balance" pension plans that guarantee their members a minimum return on their contributions. They provide benefits in the event of death or disability, along with a pension when members stop working. Plans are open to new members. Their duration is around 16 years.

- For German subsidiaries, there are several internal plans within the Group, including so-called "direct promises" plans. These plans provide members with pensions along with death and disability benefits. At 31 December 2018, 9,634 individuals were covered by the plans, including 5,765 retired people, 2,259 people working for Group subsidiaries and 1,610 people who were generally still working but no longer working for the Group. Most of the plans were closed at 31 December 2018. Their average duration is 13 years.

Commitments relating to lump-sum payments on retirement for manual construction workers in France, which are met by contributions to an outside multi-employer insurance fund (CNPO), are considered as being under defined contribution plans and are therefore recognised as an expense as and when contributions are payable.

The main retirement benefit obligations covered by provisions recognised in the balance sheet are calculated using the following assumptions:

	Eurozone		United Kingdom		Switzerland	
Assumptions	**31/12/2018**	**31/12/2017**	**31/12/2018**	**31/12/2017**	**31/12/2018**	**31/12/2017**
Discount rate	1.70%	1.75%	2.70%	2.60%	1.05%	0.75%
Inflation rate	1.60%	1.60%	2,25% - 3,25%(*)	2,25% - 3,25%	1.20%	1.30%
Rate of salary increases	1.60% - 4.00%	1.60% - 4.00%	2.00% - 4.25%	2.00% - 4.50%	1.70%	1.80%
Rate of pension increases	0.80% - 1.60%	0.80% - 1.60%	2.25% - 5.00%	2.50% - 5.00%	N/A	N/A

(*) Inflation rates: CPI 2.25%; RPI 3.25%.

Discount rates have been determined by geographical area on the basis of the yields on private-sector bonds with a rating of AA and whose maturities correspond to the plans' expected cash flow.
The other local actuarial assumptions (economic and demographic assumptions) are set on the basis of the specific features of each of the countries in question.
Plan assets are valued at their fair value at 31 December 2018. The book value at 31 December 2018 is used for assets invested with insurance companies.
On the basis of the actuarial assumptions referred to above, details of the retirement benefit obligations, provisions recognised in the balance sheet, and the retirement benefit expenses recognised in 2018 are provided below.

Result of actuarial valuations in the period

Breakdown by type of obligation

		31/12/2018			31/12/2017		
(in € millions)		Lump sums paid on retirement in France	Pensions, supplementary pensions and other	Total	Lump sums paid on retirement in France	Pensions, supplementary pensions and other	Total
Actuarial liability from retirement benefit obligations		800	2,003	2,803	775	1,937	2,712
Plan assets at fair value		45	1,317	1,362	48	1,263	1,311
Deficit (or surplus)		**755**	**687**	**1,441**	**727**	**674**	**1,401**
Provision recognised under liabilities on the balance sheet	**I**	**755**	**718**	**1,472**	**727**	**712**	**1,439**
Overfunded plans recognised under assets on the balance sheet	II	-	5	5	-	14	14
Asset ceiling effect (IFRIC 14) (*)	III	-	26	26	-	24	24
Total	**I-II-III**	**755**	**687**	**1,441**	**727**	**674**	**1,401**

(*) Effect of asset ceiling rules and minimum funding requirements.

Overall, the proportion of obligations relating to retired beneficiaries was around 30% at 31 December 2018.

Breakdown by country

		31/12/2018					
(in € millions)		France	Germany	United Kingdom	Switzerland	Other countries	Total
Actuarial liability from retirement benefit obligations		1,044	435	736	361	227	2,803
Plan assets at fair value		163	7	608	384	199	1,362
Deficit (or surplus)		**881**	**427**	**128**	**(23)**	**28**	**1,441**
Provision recognised under liabilities on the balance sheet	**I**	**881**	**427**	**128**	**2**	**34**	**1,472**
Overfunded plans recognised under assets on the balance sheet	II	-	-	-	2	3	5
Asset ceiling effect (IFRIC 14) (*)	III	-	-	-	23	3	26
Total	**I-II-III**	**881**	**427**	**128**	**(23)**	**28**	**1,441**

(*) Effect of asset ceiling rules and minimum funding requirements.

		31/12/2017					
(in € millions)		France	Germany	United Kingdom	Switzerland	Other countries	Total
Actuarial liability from retirement benefit obligations		1,014	442	764	336	155	2,712
Plan assets at fair value		165	7	640	360	140	1,311
Deficit (or surplus)		**850**	**435**	**124**	**(23)**	**16**	**1,401**
Provision recognised under liabilities on the balance sheet	**I**	**853**	**435**	**124**	**2**	**26**	**1,439**
Overfunded plans recognised under assets on the balance sheet	II	3	-	-	1	10	14
Asset ceiling effect (IFRIC 14) (*)	III	-	-	-	23	1	24
Total	**I-II-III**	**850**	**435**	**124**	**(23)**	**16**	**1,401**

(*) Effect of asset ceiling rules and minimum funding requirements.

Change in actuarial liability and plan assets

(in € millions)		2018	2017
Actuarial liability from retirement benefit obligations			
At beginning of period		**2,712**	**2,799**
of which obligations covered by plan assets		*1,649*	*1,648*
Current service cost		66	77
Actuarial liability discount cost		52	44
Past service cost (plan changes and curtailments)		(2)	(27)
Plan settlements		(18)	(2)
Actuarial gains and losses recognised in other comprehensive income		19	(106)
of which impact of changes in demographic assumptions		*6*	*(19)*
of which impact of changes in financial assumptions		*(18)*	*(95)*
of which experience gains and losses		*31*	*9*
Benefits paid to beneficiaries		(123)	(111)
Employee contributions		12	11
Business combinations		74	85
Disposals of companies and other assets		6	2
Currency translation differences		4	(60)
At end of period	**I**	**2,803**	**2,712**
of which obligations covered by plan assets		*1,724*	*1,649*
Plan assets			
At beginning of period		**1,311**	**1,192**
Interest income during period		26	22
Actuarial gains and losses recognised in other comprehensive income (*)		(26)	57
Plan settlements		(16)	(1)
Benefits paid to beneficiaries		(59)	(43)
Contributions paid to funds by the employer		32	40
Contributions paid to funds by employees		11	11
Business combinations		69	87
Disposals of companies and other assets		8	(1)
Currency translation differences		6	(54)
At end of period	**II**	**1,362**	**1,311**
Deficit (or surplus)	**I-II**	**1,441**	**1,401**

(*) Experience gains and losses corresponding to the observed difference between the actual return on plan assets and a nominal return based on the discount rate for the actuarial liability.

Actuarial losses recorded during the period on hedging assets relate mainly to the actual return on plan assets being lower than the return calculated on the basis of discount rates, particularly in the United Kingdom and Switzerland. The increase in discount rates in Switzerland and the United Kingdom led to actuarial gains being recognised because of the change in financial assumptions.

The amounts in the "Business combinations" line relate in particular to VINCI Airports' acquisition of Airports Worldwide.

VINCI estimates the payments to be made in 2019 in respect of retirement benefit obligations at €79 million, comprising €52 million of benefits to be paid to retired employees or beneficiaries (benefits not covered by plan assets), and €27 million of contributions to be paid to fund managing bodies.
Pension funds are also likely to pay

Change in provisions for retirement benefit obligations during the period

(in € millions)	2018	2017
Provisions for retirement benefit obligations recognised under liabilities on the balance sheet		
At beginning of period	**1,439**	**1,608**
Total charge recognised with respect to retirement benefit obligations	90	72
Actuarial gains and losses recognised in other comprehensive income	45	(163)
Benefits paid to beneficiaries by the employer	(64)	(68)
Contributions paid to funds by the employer	(32)	(40)
Business combinations & disposals of companies	3	(2)
Plan assets and asset ceiling effect (IFRIC 14)	(7)	38
Currency translation differences	(2)	(6)
At end of period	**1,472**	**1,439**

Breakdown of expenses recognised in respect of defined benefit plans

(in € millions)	2018	2017
Current service cost	(66)	(77)
Actuarial liability discount cost	(52)	(44)
Interest income on plan assets	26	22
Past service cost (plan changes and curtailments)	2	27
Impact of plan settlements and other	1	(1)
Total	**(90)**	**(72)**

Breakdown of plan assets by country and type of investment

The breakdown of plan assets by type of investment is as follows:

	31/12/2018				
	United Kingdom	Switzerland	France	Other countries	Weighted average
Breakdown of plan assets					
Equities	31%	30%	15%	32%	29%
Bonds	37%	45%	28%	34%	38%
Property	15%	20%	4%	8%	14%
Money-market securities	3%	5%	1%	9%	4%
Other	15%	0%	53%	18%	16%
Total	100%	100%	100%	100%	100%
Plan assets *(in € millions)*	**608**	**384**	**163**	**206**	**1,362**
Plan assets by country *(% of total)*	**45%**	**28%**	**12%**	**15%**	**100%**

	31/12/2017				
	United Kingdom	Switzerland	France	Other countries	Weighted average
Breakdown of plan assets					
Equities	34%	33%	23%	38%	32%
Bonds	35%	41%	33%	38%	37%
Property	6%	18%	2%	1%	9%
Money-market securities	2%	8%	1%	0%	4%
Other	23%	0%	40%	23%	19%
Total	100%	100%	100%	100%	100%
Plan assets *(in € millions)*	**640**	**360**	**165**	**147**	**1,311**
Plan assets by country *(% of total)*	**49%**	**27%**	**13%**	**11%**	**100%**

At 31 December 2018, the amount of plan assets listed on active markets (fair value level 1 as defined by IFRS 13) was €1,001 million (€998 million at 31 December 2017). During the period, the actual rate of return on plan assets was -0.8% in the UK, -0.9% in Switzerland and +2.6% in France.

Sensitivity analysis

For all post-employment benefit plans for Group employees (lump sums paid on retirement, pensions and supplementary pensions), a 0.5 point

28. Share-based payments

Accounting policies

The measurement and recognition methods for share subscription plans, the Plans d'Epargne Groupe (Group savings plans) and performance share plans, are defined by IFRS 2 "Share-based Payment". The granting of share options, performance shares and offers to subscribe to Group savings plans in France and abroad represent a benefit granted to their beneficiaries and therefore constitute supplementary remuneration borne by VINCI. Because such transactions do not give rise to monetary transactions, the benefits granted in this way are recognised as expenses in the period in which the rights are acquired, with a corresponding increase in equity. Benefits are measured by an external actuary on the basis of the fair value, at the grant date, of the equity instruments granted.

Benefits granted under share subscription option plans, performance share plans and Group savings plans are implemented as decided by VINCI's Board of Directors after approval by the Shareholders' General Meeting. As their measurement is not directly linked to the business lines' operations, VINCI has considered it appropriate not to include the corresponding expense in operating income from ordinary activities, which is an indicator of business lines' performance, but to report it on a separate line, labelled "Share-based payment expense (IFRS 2)", in recurring operating income.

Information on the features of the performance share plans currently in force

	Plan 17/04/2018	Plan 20/04/2017	Plan 19/04/2016	Plan 14/04/2015
Original number of beneficiaries	2,947	2,537	2,051	1,846
Vesting date of the shares granted	17/04/2021	20/04/2020	19/04/2019	14/04/2018
Number of shares granted subject to performance conditions	**2,349,324**	**2,325,383**	**2,249,676**	**1,036,658**
Shares cancelled	(5,150)	(59,649)	(119,490)	(98,795)
Shares acquired by beneficiaries	-	(1,500)	(4,600)	(937,863)
Number of shares granted subject to performance conditions at end of period	**2,344,174**	**2,264,234**	**2,125,586**	**-**

On 7 February 2018, VINCI's Board of Directors decided that 100% of the performance shares originally granted under the 14 April 2015 long-term incentive plan had vested for their beneficiaries, i.e. a total of 937,863 shares, given that the performance and presence conditions had been met (1,641 employees).

On 17 April 2018, VINCI's Board of Directors decided to set up a new long-term performance share plan involving conditionally allotting performance shares (2,349,324 shares) to 2,947 employees. The shares granted will only vest after a period of three years. Vesting is subject to beneficiaries being employed by the Group until the end of the vesting period and to performance conditions.

The performance conditions are as follows:

- an internal criterion (80% weighting) consisting of the ratio at 31 December 2020 of return on capital employed (ROCE) to the average weighted average cost of capital (WACC), with each of those indicators calculated as an average over the previous three years (2018, 2019 and 2020).
This ratio must be equal to or greater than 1.1 for all performance shares granted to vest. If the ratio is between 1 and 1.1, the number of performance shares that vest will be reduced in proportion and no shares will vest if the ratio is equal to or less than 1.
- an external criterion (20% weighting) consisting of the difference, at 31 December 2020, between:
  - the average total return on VINCI shares over a three-year period (2018, 2019 and 2020), and
  - the average total return for a shareholder investing in the CAC 40 index over a three-year period (2018, 2019 and 2020).

Total shareholder returns include dividends.
The difference must be equal to or greater than +10% for all performance shares granted to vest. If the difference is between +10% and -10%, the number of performance shares that vest will be reduced in proportion and no shares will vest if the difference is equal to or less than -10%.

Fair value of the performance share plans

The fair value of the performance shares has been calculated by an external actuary at the respective grant dates of the shares on the basis of the following characteristics and assumptions:

	2018 plan	2017 plan	2016 plan	2015 plan
Price of VINCI share on date plan was announced *(in €)*	81.23	73.99	66.18	56.45
Fair value of performance share at grant date *(in €)*	64.12	61.20	56.17	47.22
Fair value compared with share price at grant date	78.94%	82.71%	84.87%	83.65%
Original maturity (in years) – vesting period	3 years	3 years	3 years	3 years
Risk-free interest rate (*)	-0.32%	-0.29%	-0.41%	-0.15%

(*) Three-year government bond yield in the eurozone.

An expense of €120 million was recognised in 2018 in respect of performance share and long-term incentive plans for which vesting is in progress (April 2018, April 2017 and April 2016 plans), compared with €90 million in 2017 (April 2017, April 2016 and April 2015 plans).

28.3 Group savings plans

VINCI's Board of Directors defines the conditions for subscribing to Group savings plans in accordance with the authorisations granted to it by the Shareholders' General Meeting.

Group savings plan – France

In France, VINCI issues new shares reserved for employees three times a year at a subscription price that includes a 5% discount against the average stock market price over 20 trading days before the Board of Directors meeting that set the subscription price. Subscribers also benefit from an employer contribution with an annual maximum of €3,500 per person since 1 January 2018, as opposed to a maximum of €2,500 previously. The benefits granted in this way to Group employees are recognised in profit or loss and are valued in accordance with IFRS 2 on the basis of the following assumptions:

- length of subscription period: four months;
- length of period during which funds are frozen: five years.

The estimated number of shares subscribed to at the end of the subscription period is calculated based on a linear regression method applied to historical observations of the plans between 2007 and 2017, taking account of the cost of restrictions on the availability of units in the savings fund. As certain restrictions apply to the sale or transfer of shares acquired by employees under these plans, the fair value of the benefit to the employee takes account of the fact that the shares acquired cannot be freely disposed of for five years. The opportunity cost of the frozen shares subscribed to is estimated from the point of view of a third party holding a diversified portfolio and prepared to acquire the frozen shares in return for a discount, which should correspond to the return demanded by a purchaser on own funds allocated to hedge against market risk over the period in which the shares are frozen (five years). The market risk is assessed on an annual basis applying a value-at-risk approach.

	2018		
Group savings plan – France	**First four-month period of 2019 (1 January – 30 April 2019)**	**Third four-month period of 2018 (1 September – 31 December 2018)**	**Second four-month period of 2018 (1 May – 31 August 2018)**
Anticipated return from VINCI shares	4.70%	4.60%	4.72%
Subscription price *(in €)*	76.62	80.90	82.22
Share price at date of Board of Directors' meeting *(in €)*	78.44	84.50	83.62
Historical volatility of the VINCI share price	19.30%	19.50%	19.51%
Estimated number of shares subscribed	1,745,341	439,383	383,806
Estimated number of shares issued (subscriptions plus employer contribution)	2,468,001	616,542	538,556

	2017		
Group savings plan – France	**First four-month period of 2018 (1 January – 30 April 2018)**	**Third four-month period of 2017 (1 September – 31 December 2017)**	**Second four-month period of 2017 (1 May – 31 August 2017)**
Anticipated return from VINCI shares	4.44%	4.27%	4.90%
Subscription price *(in €)*	76.42	73.34	62.46
Share price at date of Board of Directors' meeting *(in €)*	80.61	78.01	65.22
Historical volatility of the VINCI share price	19.87%	20.14%	22.24%
Estimated number of shares subscribed	1,433,895	387,665	408,186
Estimated number of shares issued (subscriptions plus employer contribution)	2,003,215	517,924	532,480

Group savings plan – international

In 2018, in accordance with authorisations given to the Board of Directors by the Shareholders' General Meeting, VINCI initiated a new savings plan for the employees of certain foreign subsidiaries. Known as Castor International, the plan covered 31 countries in 2018: Australia, Austria, Bahrain, Belgium, Brazil, Cambodia, Canada, Chile, Czech Republic, Dominican Republic, Germany, Hong Kong, Indonesia, Luxembourg, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Peru, Poland, Portugal, Romania, Singapore, Slovakia, Spain, Sweden, Switzerland, United Arab Emirates, United Kingdom and United States.

The main characteristics of this plan are as follows:

- subscription period: from 21 May to 8 June 2018 for all countries except the United Kingdom (seven successive periods between March and September 2018 in the United Kingdom);
- employer contribution consisting of bonus shares, with delivery deferred for three years– as a general rule – or with immediate delivery but a three-year vesting period;
- no lock-up period beyond the three-year vesting period for bonus shares.

Castor International plan (excluding the UK)	2018	2017	2016	2015
Subscription price *(in €)*	84.50	77.67	64.90	55.65
Closing share price on the last day of the subscription period *(in €)*	84.32	78.01	64.67	55.47
Anticipated dividend pay-out rate	2.34%	2.32%	2.55%	3.35%
Fair value of bonus shares on the last day of the subscription period *(in €)*	78.66	72.83	59.97	50.24

The expense recognised in 2018 for all Group employee savings plans amounted to €85 million versus €72 million in 2017.

L. Other notes

29. Related party transactions

The Group's transactions with related parties mainly concern:

- remuneration and similar benefits paid to members of the governing and management bodies;
- transactions with companies over which VINCI exercises significant influence or joint ventures over which VINCI has joint control.

Transactions with related parties are undertaken at market prices.

29.1 Remuneration and similar benefits paid to members of the governing and management bodies

The remuneration of the Group's company officers is determined by the Board of Directors following proposals from the Remuneration Committee.

The table below shows the remuneration and similar benefits, on a full-year basis, granted by VINCI SA and the companies that it controls to persons who, at the balance sheet date are (or, during the period, have been), members of the Group's governing bodies and Executive Committee. The corresponding amounts have been recognised and expensed in 2018 and 2017 as follows:

	Members of governing bodies and the Executive Committee	
(in € thousands)	2018	2017
Remuneration	13,348	12,189
Employer social contributions	7,785	8,885
Post-employment benefits	1,973	2,114
Termination benefits	-	688
Share-based payments (*)	10,807	9,763
Directors' fees	1,421	1,250

(*) This amount is determined in accordance with IFRS 2 and as described in Note K.28 "Share-based payments".

The variable portion of remuneration and similar benefits relating to 2018 is an estimate, for which a provision has been taken in the period.

The aggregate amount of retirement benefit obligations (contractual lump sums payable on retirement and supplementary defined benefit plans) in favour of members of the Group's governing bodies and Executive Committee amounted to €86.6 million at 31 December 2018 (€79.0 million at 31 December 2017).

29.2 Other related parties

Qatar Holding LLC owned 3.7% of VINCI at 31 December 2018. VINCI Construction Grands Projets (49%) and Qatari Diar Real Estate Investment Company (QD, 51%) jointly own Qatari Diar VINCI Construction (QDVC), which is accounted for under the equity method. This company's corporate object is the development of construction activities in Qatar and international markets. It generated revenue of €658 million in 2018.
Group companies can also carry out work for principals in which QD may have a shareholding.
Lastly, the Group has normal but non-material business relations with companies in which members of the VINCI Board of Directors are senior executives or directors.
Financial information on companies accounted for under the equity method is given in Note E.10.2 "Aggregated financial information".

30. Statutory Auditors' fees

As recommended by the AMF, this table includes only fully consolidated companies.

	DELOITTE 2018				KPMG 2018			
(in € millions)	Statutory auditor (Deloitte & Associés)	Network	Total Deloitte	%	Statutory auditor (KPMG Audit IS)	Network	Total KPMG	%
Certification, half-year limited review of statutory and consolidated financial information								
VINCI SA	0.4	-	0.4	4%	0.4	-	0.4	4%
Fully consolidated subsidiaries	4.8	3.9	8.7	84%	4.7	3.7	8.4	82%
Subtotal	**5.2**	**3.9**	**9.1**	**88%**	**5.1**	**3.7**	**8.8**	**86%**
Services other than certification of accounts (*)								
VINCI SA	-	-	-	-	0.4	-	0.4	4%
Fully consolidated subsidiaries	0.2	1.1	1.3	12%	0.2	0.8	1.0	10%
Subtotal	**0.2**	**1.1**	**1.3**	**12%**	**0.6**	**0.8**	**1.4**	**14%**
Total	**5.4**	**5.0**	**10.4**	**100%**	**5.7**	**4.5**	**10.2**	**100%**

(*) Services other than certification of accounts include services required by regulations and those provided at the request of controlled entities (contractual audits, comfort letters, audit certificates, agreed procedures, consulting and assignments relating to changes in accounting standards, due diligence procedures for acquisitions, audits of procedures and information systems, and tax services that do not impair auditor independence).

M. Note on litigation

The companies comprising the VINCI Group are sometimes involved in litigation arising from their activities. The related risks are assessed by VINCI and the subsidiaries involved on the basis of their knowledge of the cases, and provisions are taken in consequence as appropriate.

The main legal, administrative or arbitration proceedings that were in progress on 31 December 2018 were as follows:

- In relation to the compensation claim commenced by SNCF in March 2011 following the decision handed down on 21 March 2006 by the Conseil de la Concurrence (*) (French competition authority), which penalised several companies for collusion in relation to civil engineering works at the Magenta and Saint Lazare Condorcet stations in Paris (EOLE project), the VINCI Group companies reached a settlement with SNCF in March 2016 for the purpose of ending SNCF's claim against them. On 8 March 2016, the Paris Administrative Court noted the reciprocal discontinuance of proceedings and waiver of rights of action between SNCF Mobilités and all VINCI group companies involved in these proceedings, and dismissed SNCF's claim in respect of the other companies concerned. After SNCF appealed against that decision, the proceedings continued between SNCF and the companies outside the Group, which had nevertheless had recourse to the Group companies concerned as guarantors. In a decision on 29 December 2017, the Paris Administrative Appeal Court dismissed SNCF's claim and SNCF appealed against that decision to the Conseil d'Etat. In view of the current situation, the VINCI group considers that this dispute will not have a material effect on its financial situation.

- In a judgment handed down on 17 December 2013, the Paris Regional Court declared time-barred and inadmissible a claim by Région Île de France for compensation for the harm it purportedly suffered because of the anti-competitive practices penalised by the Conseil de la Concurrence (*) (French competition authority) on 9 May 2007 in relation to the programme to refurbish schools in the Paris region between 1989 and 1996. After that judgment, on 16 November 2015, the *tribunal des conflits* (jurisdiction court) declared the ordinary courts not competent to decide the dispute between the region and various construction companies. More than two years after the jurisdiction court's decision, the region made 88 applications to the Paris Administrative Court relating to 88 school refurbishment contracts, claiming €293 million of damages from 14 companies – including several Group companies – and 11 individuals. The Group takes the view that these proceedings, whose origin dates back more than 20 years and which concerns a claim that was already found to be time-barred in 2013, represent a contingent liability whose impact it is unable to measure.

- The Czech Republic's roads and motorways department (RMD) has made several claims against Eurovia CS, a Eurovia subsidiary based in the Czech Republic, as well as other non-Group companies. These claims concern works carried out between 2003 and 2007 in building the D47 motorway. In late 2012, the RMD commenced arbitration and legal proceedings challenging (i) the inflation coefficients used in revising the price of works and (ii) the payment of various sums for what RMD alleges was defective work affecting the roads and engineering structures that were built. As regards the claims relating to inflation coefficients, all awards made under arbitration decisions have been much smaller than those sought by RMD.

(*) Now known as the Autorité de la Concurrence.

Regarding the other claims, relating mainly to defective work, the RMD is currently claiming CZK3.1 billion, of which Eurovia CS's share would be around 75%. Repairs have been carried out since the start of 2014, costing substantially less than that amount, and technical assessments are under way on the worksite. In view of the current situation, the Group considers that this dispute will not have a material effect on its financial situation.

• Soletanche Bachy France had submitted a request for arbitration to the International Chamber of Commerce after ACT (Aqaba Container Terminal) terminated a contract for the construction of an extension to a container terminal in the port of Aqaba in Jordan. The company was disputing the grounds for terminating the contract, and was claiming $10 million in damages. ACT contended that it had valid grounds for terminating the contract and that it had incurred additional costs in completing the works, and was counter-claiming $44 million in damages. The arbitration tribunal, in an arbitration award dated 30 August 2017, corrected by two awards dated 28 September 2017 and 1 May 2018, dismissed the company's claim and ordered it to pay ACT $38.3 million plus $9.1 million of legal expenses. The company has appealed against that decision. Other proceedings are on foot before courts in France and Jordan following enforcement action against the joint contractors. Given the provisions it has set aside, the Group considers, in view of the current situation, that this dispute will not have any material effect on its financial situation.

• In 2011, Freyssinet Canada undertook to make prefabricated beams for PIC under a contract worth C$23 million. Prefabrication work started in 2012 but was suspended in 2013 because the project owner took the view that the beams were defective. PIC terminated the supply contract, resulting in legal proceedings before the Superior Court of Ontario. In those proceedings, Freyssinet Canada is claiming C$11 million for wrongful termination and PIC is claiming C$189 million from Freyssinet Canada and several Soletanche Freyssinet group companies for the replacement of the beams and losses arising from the alleged defects. In view of the current situation, the Group considers that this dispute is unlikely to have a material effect on its financial situation.

• There were previously two disputes between Consortium Stade de France (CSDF), which operates the Stade de France, and the French Rugby Federation (Fédération Française de Rugby or FFR), which uses the stadium.
On 13 June 2013, the FFR commenced proceedings against CSDF before the Paris regional court (Tribunal de Grande Instance de Paris) on the grounds of "significant contractual imbalance" in the rights and obligations arising from the 15-year stadium provision agreement formed on 26 April 1995. The FFR claimed that the purported imbalance caused it harm, which it quantified at €183 million in its main claim, corresponding to the amount it claims was wrongly received by CSDF. The FFR's claim was dismissed by a judgment on 8 February 2018.
The FFR also claimed, in separate proceedings before the Bobigny regional court, €2.3 million in damages for various types of purported commercial harm arising in particular from the cancellation of a match. On 27 March 2018, the court found the FFR's claim inadmissible and ordered it to pay €2.1 million to the CSDF. The FFR did not appeal against those judgments, so the dispute is now at an end.

• On 10 August 2018, the Colombian competition authority sent a statement of objections to several companies including VINCI Concessions Colombia SAS, Via 40 SAS and Constructora Conconcreto SAS, and to several natural persons, relating to alleged anticompetitive practices in the competitive tender procedure held in 2015 and 2016 by Colombia's national infrastructure agency ANI with a view to awarding a concessions contract for the widening and operation of a road between the cities of Bogotá and Girardot. The concession contract was formed between the ANI and Via 40 SAS in October 2016. Via its VINCI Concessions Colombia SAS subsidiary, the Group acquired a 50% stake in Via 40 S.S on 19 December 2016, and it owns a non-controlling 20% stake in Constructora Conconcreto SAS. The companies involved in the procedure dispute the authority's allegations.

There are no other judicial, administrative or arbitration proceedings, including any proceedings known to the Company, pending or with which it is threatened, that are likely to have, or have had in the last 12 months, a material effect on the financial situation or profitability of the Company and/or Group.

N. Post-balance sheet events

31. Appropriation of 2018 net income

The Board of Directors finalised the consolidated financial statements for the year ended 31 December 2018 on 5 February 2019. These financial statements will only become definitive when approved by the Shareholders' General Meeting of 17 April 2019. A resolution will be put to that meeting for the payment of a dividend of €2.67 per share in respect of 2018. Taking account of the interim dividend already paid on 8 November 2018 (€0.75 per share), this would result in a final dividend of €1.92 per share to be paid on 25 April 2019 (ex-date: 23 April 2019).

32. Other post-balance sheet events

32.1 VINCI bond issue as part of its EMTN programme

On 14 January 2019, as part of its EMTN programme, VINCI issued €950 million of bonds due to mature in January 2029, with an annual coupon of 1.625%.

O. Other consolidation rules and methods

Intragroup transactions

Reciprocal operations and transactions relating to assets, liabilities, income and expenses between companies that are fully consolidated are eliminated in the consolidated financial statements.
Where a fully consolidated Group entity carries out a transaction with a joint venture or associate that is accounted for under the equity method, income and losses resulting from the transaction are only recognised in the Group's consolidated financial statements to the extent of the interest owned by third parties in the joint venture or associate.

Translation of the financial statements of foreign companies and establishments

In most cases, the functional currency of companies and establishments is their local currency.
The financial statements of foreign companies of which the functional currency is different from that used in preparing the Group's consolidated financial statements are translated at the closing rate for balance sheet items and at the average rate for the period for income statement items. Any resulting translation differences are recognised under other comprehensive income. Goodwill relating to foreign entities forms part of the assets acquired and is therefore denominated in the company's functional currency and translated at the exchange rate in force at the balance sheet date.

Foreign currency transactions

Transactions in foreign currency are translated into euros at the exchange rate at the transaction date. Assets and monetary liabilities denominated in foreign currencies are translated at the closing rate. Foreign exchange gains and losses are recognised in income.
Foreign exchange gains and losses arising on loans denominated in foreign currency or on foreign currency exchange rate derivatives qualifying as hedges of net investments in foreign subsidiaries are recorded under currency translation differences in equity.

Business combinations

Under IFRS 3 Amended, the cost of a business combination is the fair value, at the date of exchange, of the assets given, liabilities assumed, and/or equity instruments issued by the acquirer in exchange for control of the acquiree. Contingent price adjustments are included in the cost of the business combination and are measured at fair value at each balance sheet date. From the acquisition date, any subsequent changes to this fair value resulting from events after control was acquired are recognised in profit or loss.
Expenses that are directly attributable to the acquisition, such as professional fees for due diligence and other related fees, are expensed as they are incurred. They are presented in the "Impact of changes in scope and gain/(loss) on disposals of shares" item on the income statement.
Non-controlling interests in the acquiree, where they give their holders present ownership interests in the entity (voting rights, a share of earnings, etc.) and entitle them to a proportionate share of net assets in the event of liquidation, are measured either at their share of the acquiree's net identifiable assets, or at their fair value. This option is applied on a case-by-case basis for each acquisition.
On the date control is acquired, the cost of acquisition is allocated by recognising the identifiable assets acquired and liabilities assumed from the acquiree at their fair value at that date, except for tax assets and liabilities and employee benefits, which are measured according to their reference standard (IAS 12 and IAS 19 respectively) and asset groups classified as held for sale, which are recognised under IFRS 5 at their fair value less costs to sell. The positive difference between the cost of acquisition and the fair value of the identifiable assets and liabilities acquired constitute goodwill. Where applicable, goodwill can include a portion of the fair value of non-controlling interests if the full goodwill method has been selected.
The Group has 12 months from the date of acquisition to finalise the accounting for business combinations.
In the case of a business combination achieved in stages, previously acquired shareholdings in the acquiree are measured at fair value at the date of acquisition of control. Any resulting gain or loss is recognised in profit or loss.

Transactions between shareholders, acquisitions and disposals of non-controlling interests after acquisition of control

In accordance with IFRS 10, acquisitions or disposals of non-controlling interests, with no impact on control, are considered as transactions with the Group's shareholders. The difference between the consideration paid to increase the percentage shareholding in an already-controlled entity and the supplementary share of equity thus acquired is recorded under equity attributable to owners of the parent. Similarly, a decrease in the Group's percentage interest in an entity that continues to be controlled is booked in the accounts as a transaction between shareholders, with no impact on profit or loss. Professional fees and other costs relating to acquisitions and disposals of non-controlling interests that have no impact on control, and any associated tax effects, are recorded under equity. Cash flow related to transactions between shareholders is presented under cash flow (used in)/from financing activities in the consolidated cash flow statement.

Put options granted to non-controlling shareholders

Put options (options to sell) granted to the non-controlling shareholders of certain Group subsidiaries are recognised under other non-current liabilities for the present value of the exercise price of the option and as a corresponding reduction of consolidated equity (non-controlling interest and equity attributable to equity holders of the parent for the surplus, if any).

Report of the Statutory Auditors on the consolidated financial statements

Year ended 31 December 2018

To VINCI's Shareholders' General Meeting,

1. Opinion

In accordance with our appointment as Statutory Auditors by the Shareholders' General Meeting, we have audited the accompanying consolidated financial statements of VINCI for the year ended 31 December 2018.

In our opinion, the consolidated financial statements for the year give a true and fair view of the financial position, the assets and liabilities, and the results of the Group formed by the persons and entities included in the consolidation, in accordance with the International Financial Reporting Standards as endorsed by the European Union.

The opinion formulated above is consistent with the content of our report to the Audit Committee.

2. Basis of our opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the information that we collected provides a sufficient and appropriate basis for our opinion.

Our responsibilities under those standards are stated in the "Responsibilities of the Statutory Auditors in relation to auditing the consolidated financial statements" section of this report.

Independence

We conducted our audit in accordance with the independence rules applicable to us between 1 January 2018 and the date on which we issued our report, and in particular we did not provide any services forbidden by Article 5, paragraph 1 of Regulation (EU) No. 537/2014 or by the code of conduct of the Statutory Auditors' profession in France.

3. Emphasis of Matter

We draw attention to the Note A.4. to the consolidated financial statements which sets out changes in accounting methods relating to the adoption of IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" from 1 January 2018. Our opinion is not modified in respect of this matter.

4. Justification of our assessments – Key audit matters

As required by Articles L.823-9 and R.823-7 of the French Commercial Code relating to the justification of our assessments, we inform you of the key audit matters, relating to what were, in our professional judgment, the main risks of material misstatement in relation to our audit of the year's consolidated financial statements, and our responses to those risks.

Those assessments were made in the context of our audit of the consolidated financial statements taken as a whole and in the formation of our opinion stated above. We express no opinion on items of the consolidated financial statements taken in isolation.

Long-term construction contracts and measurement of losses on completion and provisions for project risks

Notes A.3, G.15 and H.18.3 to the consolidated financial statements

Description of the risk

VINCI's Contracting business accounts for more than 80% of VINCI's consolidated revenue, and most of the revenue in that business comes from long-term construction contracts.

Construction contract income and expenses are recognised using the stage-of-completion method defined by the appropriate accounting standard.

If the estimate of the final outcome of a contract indicates a loss, a provision is made for the loss on completion regardless of the stage of completion, based on the best estimates of income, including, if need be, any rights to additional revenue or claims if these are highly probable and can be reliably estimated. Provisions for losses on completion and project risks are shown under liabilities in an amount of €1,346 million at 31 December 2018.

The stage of completion and the revenue to be recognised are calculated on the basis of a large number of completion estimates made by monitoring the work performed and taking into account unforeseen circumstances. Adjustments may therefore be made to initial estimates throughout the life of the contracts and may materially affect results.

Determining these completion estimates and any adjustments that may become necessary during the performance of projects and operations is a key audit matter, given the amounts involved and the high level of judgment required on the part of the entities' operational departments.

Audit work performed

We selected projects on the basis of their size, technical complexity and geographical location, and for each selected project, we:

- checked that the estimated revenue on completion was consistent with contracts and supplementary agreements signed;
- checked that the risks of delays and cost overruns related to the performance of works were properly taken into account, along with estimates of completion costs, and reviewed the contingencies included in the budget and the extent to which disputes were covered;
- checked that, if a project is expected to be loss-making on completion, a provision is set aside for the loss on completion including, if need be, any rights to additional revenue or claims if these are highly probable and can be reliably estimated.

Measurement of goodwill and concession intangible assets, along with interests in concession companies accounted for under the equity method

Notes A.3, E.9, E.10 and H.16.3 to the consolidated financial statements

Description of the risk

Goodwill and concession intangible assets had material net carrying amounts at 31 December 2018, i.e. €9,792 million and €27,118 million respectively, together equal to 49% of total assets. Those assets may present a risk of impairment losses arising from internal or external factors, such as a deterioration in performance, changes in the economic environment, adverse market conditions, movements in traffic levels and changes in legislation or regulations.

The Group is also exposed to a risk of impairment losses in respect of infrastructure operated by concession companies over which the Group has joint control or significant influence. Interests in those concession companies amounted to €1,143 million at 31 December 2018.

The Group carries out impairment tests on goodwill, concession intangible assets and interests in concession companies accounted for under the equity method where there is an indication that an impairment loss has arisen. The recoverable amount is based on a value in use calculation, which is itself based on discounted future cash flow forecasts.

Determining the recoverable amount of these assets and any impairment losses to be recognised is a key audit matter, given the importance of estimates and the level of judgment required by Management regarding the operational performance and future traffic assumptions, long-term growth rates and discount rates used, and the sensitivity of the measurement to certain assumptions.

Audit work performed

For cash-generating units and concession intangible assets that are material or present what we regard as a substantial specific risk of impairment losses, we:

- checked the relevance of the approach used to determine the cash-generating units on which the asset impairment tests were carried out;
- familiarised ourselves with the way in which those impairment tests were carried out;
- assessed whether the main assumptions were reasonable, particularly regarding changes in operational performance and traffic levels, long-term growth rates and discount rates used, including by comparing those rates with our internal databases.

As regards goodwill, we examined the appropriateness of information provided in the notes to the consolidated financial statements on the determination of underlying assumptions and sensitivity analyses in view of the appropriate accounting standard.

Provisions for liabilities and litigation

Notes H.18.3, H.19 and M to the consolidated financial statements.

Description of the risk

The Group's companies are sometimes involved in litigation arising from their activities.

Provisions may, as the case may be, be set aside for these liabilities and litigation in accordance with the appropriate accounting standard, and the liabilities and litigation are assessed by VINCI and the subsidiaries concerned based on their knowledge of the matters.

Provisions for litigation (€513 million at 31 December 2018), other current liabilities (€1,035 million at 31 December 2018) and other non-current liabilities (€544 million at 31 December 2018) represented a total amount of €2,092 million at 31 December 2018.

Determining and measuring the recognised provisions for liabilities and litigation is a key audit matter given the amounts involved, the importance of estimates and the level of judgment required by management in determining those provisions, as regards the likely outcome of the corresponding liabilities and litigation.

Audit work performed

To obtain an understanding of existing liabilities and litigation and the related matters of judgment, we held discussions with the Group's departments, business lines and main subsidiaries. For each of the main liabilities and items of litigation identified, we:

- familiarised ourselves with the procedures used by the Group when measuring the corresponding provisions;
- corroborated the amount of provisions recognised with the lawyers' replies to our requests for information;

• carried out a critical examination of internal analyses relating to the probability and possible impact of each liability and item of litigation, examining the available information relating to the proceedings (correspondence, claims, judgments, notifications etc.). In particular, we used our professional judgment to assess the positions adopted by Management, to see where they fell within risk assessment ranges, and the consistency of those positions over time.

We examined the appropriateness of information provided in the notes to the consolidated financial statements regarding the main items of litigation identified.

5. Specific verifications

We also verified, in accordance with the professional standards applicable in France and as required by laws and regulations, the information concerning the Group presented in the management report by the Board of Directors.

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

We attest that the consolidated declaration of extra-financial performance, required under Article L. 225-102-1 of the French Commercial Code (Code de commerce), is included in the information relating to the Group provided in the management report, being specified that, in accordance with the provisions of Article L. 823-10 of this Code, we have not verified the fair presentation and the consistency with the consolidated financial statements of the information provided in this declaration and this information must be subject to a report by an independent third party.

6. Information resulting from other statutory and regulatory obligations

Appointment of the Statutory Auditors

We were appointed as Statutory Auditors of VINCI by shareholders in the Shareholders' General Meeting of 23 June 1989, taking into account mergers and acquisitions of firms since that date.

At 31 December 2018, KPMG Audit IS and Deloitte & Associés were in their 30th consecutive year as the Company's Statutory Auditors.

7. Responsibilities of management and persons involved in corporate Governance in relation to the consolidated financial statements

Management is responsible for preparing consolidated financial statements that present a true and fair view, in accordance with IFRSs as endorsed by the European Union, and for setting up the internal controls it deems necessary for preparing consolidated financial statements that do not contain any material misstatements, whether due to fraud or error.

When preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, for presenting in those statements any necessary information relating to its status as a going concern, and for applying the accounting concept of going concern, except where there is a plan to liquidate the Company or discontinue its operations.

The Audit Committee is responsible for monitoring the process of preparing the financial information and for monitoring the effectiveness of internal control and risk management systems, and internal audit systems as the case may be, as regards procedures relating to the preparation and treatment of accounting and financial information.

The consolidated financial statements have been approved by the Board of Directors.

8. Responsibilities of the Statutory Auditors as regards auditing the consolidated financial statements

Audit objective and procedure

Our responsibility is to prepare a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements, taken as a whole, are free of material misstatement. Reasonable assurance means a high level of assurance, although there is no guarantee that an audit conducted in accordance with professional standards will systematically detect all material misstatements. Misstatements may arise from fraud or error, and are regarded as material when they can reasonably be expected, individually or together, to influence the economic decisions that users of the financial statements take on the basis of those statements.

As stated by Article L.823-10-1 of the French Commercial Code, our audit assignment does not involve guaranteeing the viability of your Company or the quality of its management.

When conducting an audit in accordance with professional standards in France, Statutory Auditors use their professional judgment throughout the audit. In addition:

• they identify and assess the risks that the consolidated financial statements contain material misstatements, whether through fraud or error, define and implement audit procedures to address those risks, and collect information that they regard as sufficient and appropriate as the basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, because fraud may involve collusion, falsification, voluntary omissions, false statements or the circumvention of internal controls;

• they familiarise themselves with the internal controls relevant to the audit, in order to define audit procedures appropriate to the situation in hand, and not in order to express an opinion on the effectiveness of internal control;

• they assess the appropriateness of accounting policies adopted and the reasonableness of accounting estimates made by management, along with information about those estimates provided in the consolidated financial statements;

- they assess whether management has applied appropriately the going concern convention and, based on information collected, whether or not there is a material uncertainty arising from events or circumstances likely to call into question the Company's ability to continue as a going concern. That assessment is based on information collected until the date of the auditors' report, although it should be borne in mind that subsequent circumstances or events may call into question the Company's status as a going concern. If the auditors conclude that there is a material uncertainty, they draw the attention of those reading their report to information provided in the consolidated financial statements in relation to that uncertainty or, if that information is not provided or is not relevant, they certify the financial statements with reservations or refuse to certify them;
- they assess the overall presentation of the consolidated financial statements and assess whether the consolidated financial statements reflect the underlying operations and events so that they give a true and fair view;
- regarding financial information relating to persons or entities included in the scope of consolidation, they collect the information that they regard as sufficient and appropriate to express an opinion on the consolidated financial statements. The statutory auditors are responsible for managing, supervising and conducting the audit of the consolidated financial statements and for the opinion expressed on those financial statements.

Report to the Audit Committee

We submit a report to the Audit Committee that includes the extent of audit work and the schedule of work performed, along with the conclusions arising from our work. We also make it aware, as the case may be, of any material internal control weaknesses that we have identified regarding procedures for preparing and treating accounting and financial information.

The information in the report to the Audit Committee includes what we regard as the main risks of material misstatements with respect to the audit of the year's consolidated financial statements, and which are therefore the key audit matters. It is our role to describe those points in the present report.

We also provide the Audit Committee with the declaration provided for by Article 6 of Regulation (EU) No. 537/2014 confirming our independence, within the meaning of the rules applicable in France, as determined in particular by Articles L.822-10 to L.822-14 of the French Commercial Code and in the code of conduct of the statutory audit profession in France. As the case may be, we discuss with the Audit Committee any risks to our independence and the safeguard measures applied.

Paris La Défense, 8 February 2019

The Statutory Auditors

French original signed by

KPMG Audit IS

Jay Nirsimloo

Philippe Bourhis

Deloitte & Associés

Sami Rahal

Marc de Villartay

This is a free translation into English of the Statutory Auditors' report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English- speaking users.

The statutory auditors' report includes information specifically required by European regulations and French law, such as information about the appointment of the Statutory Auditors or verification of the information concerning the Group presented in the management report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

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