Notes to the accounts

1 Segmental analysis

The continuing operations of the Group have three main operating units: Currency, Identity Solutions and Product Authentication and Traceability. The Board, which is the Group's Chief Operating Decision Maker, monitors the performance of the Group at this level and there are therefore three reportable segments. The principal financial information reviewed by the Board is revenue and adjusted operating profit.

The Group's segments are:

- **Currency** – provides printed banknotes, banknote paper and polymer substrates and banknote security components
- **Identity Solutions** – involved in the provision of passport, ePassport, national ID and eID, driving licence and voter registration schemes
- **Product Authentication and Traceability** – produces security documents, including authentication labels, brand licensing products, government documents, cheques and postage stamps

Inter-segmental transactions are eliminated upon consolidation.

On 29 March 2018, the Group disposed of the Portals De La Rue paper business. The results of the paper business are included within the currency segment until the date of disposal.

2018	Currency £m	Identity Solutions £m	Product Authentication and Traceability £m	Unallocated £m	Total of Continuing operations £m
Total revenue	372.0	82.0	40.1	–	494.1
Less: inter-segment revenue	(0.2)	–	–	–	(0.2)
Revenue	371.8	82.0	40.1	–	493.9
Adjusted operating profit	45.1	8.3	9.4	–	62.8
Amortisation of acquired intangible assets	–	(0.6)	(0.1)	–	(0.7)
Exceptional items – operating (note 4 and 2)	(14.4)	(0.2)	(1.6)	77.1	60.9
Operating profit	30.7	7.5	7.7	77.1	123.0
Net interest expense	–	–	–	(3.8)	(3.8)
Retirement benefit obligations net finance expense	–	–	–	(5.6)	(5.6)
Profit before taxation	30.7	7.5	7.7	67.7	113.6
Segment assets	160.8	58.4	25.4	84.0	328.6
Segment liabilities	(89.4)	(41.1)	(7.6)	(211.3)	(349.3)
Capital expenditure on property, plant and equipment	6.2	1.4	7.2	5.1	19.9
Capital expenditure on intangible assets	1.5	0.4	1.0	1.9	4.8
Depreciation of property, plant and equipment	13.7	5.0	1.5	1.7	21.9
Amortisation of intangible assets	2.3	0.6	0.1	0.3	3.3
Impairment of disposal group	9.3	–	–	–	9.3

Unallocated assets principally comprise deferred tax assets of £19.8m (2016/17: £43.7m), cash and cash equivalents of £15.5m (2016/17: £15.4m) which are used as part of the Group's financing offset arrangements and derivative financial instrument assets of £3.6m (2016/17: £15.9m) as well as current tax assets, associates and centrally managed property, plant and equipment.

Unallocated liabilities principally comprise retirement benefit obligations of £89.7m (2016/17: £239.4m), borrowings of £63.9m (2016/17: £136.3m), current tax liabilities of £13.3m (2016/17: £19.6m) and derivative financial instrument liabilities of £4.5m (2016/17: £8.3m) as well as deferred tax liabilities and centrally held accruals and provisions.

1 Segmental analysis continued

2017	Currency £m	Identity Solutions £m	Product Authentication and Traceability £m	Unallocated £m	Total of Continuing operations £m
Total revenue	350.6	80.6	34.6	–	465.8
Less: inter-segment revenue	(1.1)	–	(3.0)	–	(4.1)
Revenue	349.5	80.6	31.6	–	461.7
Adjusted operating profit	50.3	11.4	9.0	–	70.7
Amortisation of acquired intangible assets	–	–	(0.1)	–	(0.1)
Exceptional items – operating (note 4 and 2)	1.9	–	(0.9)	(1.4)	(0.4)
Operating profit/(loss)	52.2	11.4	8.0	(1.4)	70.2
Net interest expense				(4.6)	(4.6)
Retirement benefit obligations net finance expense				(7.4)	(7.4)
Profit before taxation					58.2
Segment assets	243.4	46.3	23.1	137.9	450.7
Segment liabilities	(113.0)	(30.3)	(10.4)	(443.6)	(597.3)
Capital expenditure on property, plant and equipment	13.1	4.5	2.6	3.3	23.5
Capital expenditure on intangible assets	2.1	0.6	0.1	–	2.8
Depreciation of property, plant and equipment	17.6	3.3	1.5	1.9	24.3
Impairment of property, plant and equipment	–	–	–	–	–
Amortisation of intangible assets	1.7	0.6	0.2	–	2.5
Impairment of intangible assets	–	–	–	–	–

Geographic analysis of revenue by destination

	2018 £m	2017 £m
Middle East and Africa	**166.8**	161.0
Asia	**121.7**	93.3
UK	**103.3**	98.4
The Americas	**70.7**	75.4
Rest of Europe	**27.8**	29.6
Rest of World	**3.6**	4.0
	493.9	461.7

Geographic analysis of non-current assets

	2018 £m	2017 £m
UK	**94.3**	139.1
Malta	**19.6**	23.2
USA	**16.4**	18.7
Sri Lanka	**15.7**	14.2
Other countries	**2.9**	3.0
	148.9	198.2

Deferred tax assets and derivative financial instruments are excluded from the analysis shown above.

Major Customers
The Group has a major customer from which it derived revenues of £55.4m in the Currency segment which equates to 11.2% of the Group total revenues (2016/2017: £47.2m and 10.2%).

2 Discontinued operations

The Group completed the sale of the entire issued share capital of Cash Processing Solutions Limited and related subsidiaries (together 'CPS') to CPS Topco Limited, a company owned by Privet Capital on 22 May 2016.

Under the terms of the agreement, De La Rue received £2.1m upon completion of the transaction on 22 May 2016. During the current year a deferred consideration payment £0.8m has been received which was payable on the first anniversary of the transaction in addition to £0.9m relating to a closing working capital adjustment. In addition a further £1.4m has been received in the current year relating to additional consideration received for the sale of CPS for which a receivable was not recorded due to the likelihood of this being paid.

A further deferred consideration amount of £0.8m is payable on the second anniversary of the transaction. The Group is entitled to further contingent consideration following the sale of up to £6m if certain performance related and event driven milestones are achieved by CPS. No value has been assigned to this consideration based on the probability assessment of the associated milestones being reached.

The loss in the period from discontinued operations primarily relates to costs incurred on a loss making contract which relates to the CPS business that was not novated post disposal. These costs were offset by the receipt of £1.4m of contingent consideration received.

No pension liability was transferred as part of the disposal.

Results of the discontinued operations

	2018 £m	(restated) 2017 £m
Revenue	–	4.9
Operating expenses	**(4.4)**	(7.2)
Operating loss	**(4.4)**	(2.3)
Gain/loss on disposal of discontinued operations	**1.4**	(4.1)
Loss before taxation from discontinued operations	**(3.0)**	(6.4)
Taxation	**1.2**	–
Loss from discontinued operations	**(1.8)**	(6.4)

The tax on discontinued operations for 2016/17 has been restated to reflect the release of uncertain tax provisions relating to the CPS business. Prior to restatement the tax charge in 2016/17 was £1.6m.

Loss on disposal of discontinued operations

	2018 £m	2017 £m
Amounts paid/payable by purchaser	**1.4**	4.4
Disposal costs paid/accrued	**–**	(4.2)
Reserves recycled on disposal	**–**	(4.5)
Net assets and liabilities disposed	**–**	0.2
Total loss on disposal	**1.4**	(4.1)

Accumulated foreign currency translation gains and losses within the disposal group held for sale

The Group has accumulated foreign currency translation gains and losses in relation to the entities included within the disposal group. IAS 21 requires recycling of these foreign currency translation gains or losses, which have previously been taken direct to reserves, through the income statement at the point of disposal. This amount was recycled in 2016/17.

3 Expenses by nature

	2018 £m	2017 £m
Cost of inventories recognised as an expense	**244.5**	217.5
Net decrease in impairment of inventories	**(0.8)**	(0.6)
Depreciation of property, plant and equipment	**21.4**	24.3
Impairment of disposal group	**9.3**	–
Amortisation of intangibles	**3.3**	2.5
Operating leases:		
– Hire of plant and equipment	**0.3**	0.3
– Hire of property	**2.2**	2.5
Amounts payable to EY and its associates and KPMG in 2016/2017:		
– Audit of these consolidated financial statements	**0.4**	0.2
– Audit of the financial statements of subsidiaries pursuant to legislation	**0.3**	0.3
– Non-Audit Services	**0.3**	–
– Taxation services	**–**	0.2
Research and non-capitalised development expense	**11.8**	10.4
(Profit)/loss on disposal of property, plant and equipment	**–**	(1.4)
Employee costs (including Directors' emoluments) (note 25)	**151.8**	136.1
Foreign exchange gains	**(7.8)**	(12.4)

4 Exceptional items

Accounting Policies
Exceptional items are disclosed separately in the financial statements where the Directors consider it necessary to do so to provide further understanding of the financial performance of the Group. They are material items of income or expense that have been shown separately due to the significance of their nature or amount.

	2018 £m	2017 £m
Gain on revaluation of measurement of pension scheme deficit	**80.5**	–
Costs associated with the indexation change on the pension scheme	**(1.0)**	–
Site relocation and restructuring	**(4.0)**	(0.2)
Sale of land	**–**	0.2
Warranty provisions	**–**	0.5
Acquisition related	**(0.2)**	(0.9)
Costs associated with disposal of subsidiary	**(5.1)**	–
Impairment of disposal group	**(9.3)**	–
Exceptional items in operating profit	**60.9**	(0.4)
Tax (charge)/credit on exceptional items	**(9.7)**	0.6

Gain on revaluation of pension scheme deficit
A gain of £80.5m has been recorded on the revaluation of the UK defined benefit pension scheme following the change in indexation method from RPI to CPI. This is in relation to a past service cost and not an actuarial gain and as a result has been recognised in the income statement during the period. In addition costs of £1.0m have been incurred relating to professional advisor and other costs directly related to the indexation change. For further details on the indexation change please see note 24 Retirement benefit obligations.

Site relocation and restructuring costs
Site relocation and restructuring costs in 2017/18 included net charges of £1.8m relating to the manufacturing footprint review announced in December 2015. These charges include staff compensation payments and costs incurred training employees on new machinery and technology. In addition 'dual running' costs for the period when the group was running both the new PA&T manufacturing facility in Malta and the old facility in Gateshead whilst the transition was completed have been recorded as exceptional items. The net charges of £1.8m are after deduction of £1.1m of grant income received which as this amount was in relation to restructuring items, it has been recognised in exceptional items.

In addition costs of £2.2m have been incurred relating to the upgrade of our finance systems and processes. These costs included staff compensation payments, consultancy fees in addition to employee to employee salary costs where those employees are working solely on this project and their previous roles have been back filled.

Sale of land
The gain in 2016/17 related to several individually small land sales.

Warranty provisions
Surplus warranty provisions of £0.5m were credited to exceptional items in 2016/17 consistent to where the cost of the original provisions was presented in the Annual Report.

Acquisition related
Costs of £0.2m have been incurred during the year relating to the acquisition of DuPont Authentication Inc in January 2017. Costs in 2016/17 relating to the acquisition were also incurred relating to £0.5m of professional advisor fees. In addition an amount of £0.4m was recorded in exceptional items relating to the 'unwind' of the fair value adjustment to acquired inventory recognised on the opening day balance sheet as the related inventory was fully sold by year end. The Directors' considered that this non-cash item was distortive to underlying profit levels compared to the expected cost of inventories recognised as an expense for this subsidiary going forward.

Costs associated with disposal of subsidiary
Cost of £4.2m have been incurred relating to professional advisor and other transaction related fees. In addition costs of £0.9m were incurred in the early close out of some derivatives prior to disposal.

Tax credits relating to exceptional items
Tax credits relating to continuing exceptional items arising in the period were £10.0m (2016/17: tax credit of £0.6m). In addition, there was an exceptional tax credit of £0.3m in the year in respect of the determination of the tax treatment of prior year exceptional items.

4 Exceptional items continued

Impairment of disposal group

In December 2017 the Group committed to a plan to sell the Group's paper business, and accordingly presented the paper business' assets and liabilities as a disposal group held for sale. Depreciation of property plant and equipment also ceased from the point the assets and liabilities were transferred into the disposal group. In accordance with IFRS 5, prior to sale the disposal group's carrying value was compared to its fair value less costs to sell the resulting Impairment loss of £9.3m has been included in exceptional items. The impairment losses have been applied to reduce the carrying amount of property, plant and equipment within the disposal group (see note 5 below for further details).

5 Disposal of paper business

On 26 March 2018 prior to the external sale, the Group transferred the trade and assets of the paper business into a newly created wholly-owned subsidiary Portals De La Rue Limited. The Group completed the sale of Portals De La Rue Limited to EPIRIS Fund II on 29 March 2018. Under the terms of the agreement De La Rue received £60.3m cash upon completion of the transaction plus £6.6m in loan notes issued by the purchaser. Of the £6.6m of loan notes received, £2.6m was immediately converted to a preference share holding and £0.2m to an ordinary share holding of 10% in Mooreco Limited, a parent company of the purchasers. An additional £3.0m is estimated as being receivable relating to a closing working capital adjustment.

Management believes the transaction provides an opportunity to create greater long term value for shareholders and enables the Group to focus on their strategy of driving growth organically and through partnerships and acquisitions. As part of the transaction Portals De La Rue Limited will supply security paper to meet the Group's anticipated internal requirements with pre agreed volumes and price mechanisms for the next 10 years. Based on the terms of the agreement the Company has a capital commitment of approximately £626m over the next 10 years.

No pension liability transferred as part of the disposal.

The Group's paper business does not meet the IFRS 5 definition of a discontinued operation and as such its results have been included within continuing operations.

The carrying amounts of assets and liabilities as at the date of sale (29 March 2018) post impairment of disposal group were:

	2018 £m
Property, plant and equipment	36.6
Inventories	16.1
Trade and other receivables	29.8
Cash and cash equivalents	4.6
Total assets	**87.1**
Trade and other payables	(19.2)
Total liabilities	**(19.2)**
Net assets	**67.9**

The loss on disposal on the sale of the subsidiary was:

	2018 £m
Total net consideration received/receivable:	
Cash	60.3
Loan notes and shares received	6.6
Estimated recompense contract provision	(2.0)
Estimated working capital adjustment	3.0
Total disposal consideration	**67.9**
Net assets and liabilities disposed	(67.9)
Gain/(loss) on disposal group	**–**

Disposal consideration includes an estimate for total amounts payable under the recompense contract provision of £2.0m. As part of the sale of the paper business the company agreed to compensate the buyer, within certain limits, in the event of certain commercial outcomes arising which were prejudicial to the buyer. An amount of £2.0m has been recorded at the balance sheet date to reflect the risk weighted exposure to the Company from within the overall range of possible outcomes. The provision is included within other provisions in note 19.

6 Interest income and expense

Accounting Policies
Interest income/expense is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash flows through the expected life of the financial asset/liability to the net carrying amount of that asset/liability.

	2018 £m	2017 £m
Recognised in the income statement		
Interest income:		
– Cash and cash equivalents	–	–
Interest expense:		
– Bank loans	(4.2)	(3.7)
– Other, including amortisation of finance arrangement fees	0.4	(0.9)
Total interest expense calculated using the effective interest method	(3.8)	(4.6)
Retirement benefit obligation net finance expense (note 24)	(5.6)	(7.4)

All finance income and expense arises in respect of assets and liabilities not restated to fair value through the income statement.

The gain to the income statement in respect of the ineffective portion of derivative financial instruments was £nil (2016/17: £nil).

7 Taxation

Accounting Policies
The tax expense included in the income statement comprises current and deferred tax. Current tax is the expected tax payable on the taxable income for the year, including adjustments in respect of prior periods, using tax rates enacted or substantively enacted by the balance sheet date. Tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Deferred tax is provided on temporary differences arising between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is measured using tax rates that have been enacted or substantively enacted by the balance sheet date and that are expected to apply when the asset is realised or the liability is settled.

Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from goodwill not deductible for tax purposes, or result from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are only offset to the extent that there is a legally enforceable right to offset current tax assets and current tax liabilities, they relate to taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis or to realise an asset and settle a liability simultaneously.

7 Taxation continued

	2018 £m	(restated)* 2017 £m
Consolidated income statement		
Current tax		
UK corporation tax:		
– Current tax	**6.8**	8.4
– Adjustment in respect of prior years	**(1.7)**	(0.6)
	5.1	7.8
Overseas tax charges:		
– Current year	**2.9**	3.7
– Adjustment in respect of prior years	**(1.4)**	(1.8)
	1.5	(1.9)
Total current income tax charge	**6.6**	9.7
Deferred tax:		
– Origination and reversal of temporary differences, UK	**10.6**	(0.7)
– Origination and reversal of temporary differences, overseas	**(1.6)**	(0.3)
Total deferred tax charge/(credit)	**9.0**	(1.0)
Income tax expense reported in the consolidated income statement in respect of continuing operations	**16.8**	8.7
Income tax expense/(credit) in respect of discontinued operations (note 2)	**(1.2)**	–
Total income tax charge in the consolidated income statement	**15.6**	8.7
Tax on continuing operations attributable to:		
– Ordinary activities	**8.3**	9.3
– Amortisation of acquired intangible assets	**(1.2)**	–
– Exceptional items	**9.7**	(0.6)
Consolidated statement of comprehensive income:		
– On remeasurement of net defined benefit liability	**10.4**	(2.3)
– On cash flow hedges	**(0.5)**	(0.1)
– On foreign exchange on quasi-equity balances	**0.1**	(0.1)
Income tax (credit)/charge reported within other comprehensive income	**10.0**	(2.5)
Consolidated statement of changes in equity:		
– On share options	**0.2**	(1.0)
Income tax charge reported within equity	**0.2**	(1.0)

The tax on the Group's consolidated profit before tax differs from the UK tax rate of 19 per cent as follows:

	2018				2017		
	Before exceptional items £m	**Exceptional items £m**	**Movement on acquired intangibles £m**	**Total £m**	Before exceptional items £m	Exceptional items £m	Total £m
Profit before tax	**53.4**	**60.9**	**(0.7)**	**113.6**	58.7	(0.4)	58.3
Tax calculated at UK tax rate of 19 per cent (2016/17: 20 per cent)	**10.1**	**11.6**	**(0.1)**	**21.6**	11.7	(0.1)	11.6
Effects of overseas taxation	**0.5**			**0.5**	(0.1)	–	(0.1)
(Credits)/charges not allowable for tax purposes	**(0.1)**	**0.7**		**0.6**	(1.8)	(0.5)	(2.3)
(Utilisation)/increase in unrecognised tax losses	**(0.5)**	**(0.8)**		**(1.3)**	(0.1)	–	(0.1)
Adjustments in respect of prior years	**(1.8)**	**(0.3)**		**(2.1)**	(0.1)	–	(0.1)
Change in UK and overseas tax rate	**0.1**	**(1.5)**	**(1.1)**	**(2.5)**	(0.3)	–	(0.3)
Tax charge/(credit)	**8.3**	**9.7**	**(1.2)**	**16.8**	9.3	(0.6)	8.7

The underlying effective tax rate was 15.5 per cent (2016/17: 15.8 per cent).

* Please refer to the accounting policies on page 110 for further details of the restatement of £3.8m credit relating to tax on discontinued operations.

Notes to the accounts continued

8 Earnings per share

Accounting Policies
Basic earnings per share is calculated by dividing the profit attributable to equity shareholders by the weighted average number of ordinary shares outstanding during the year, excluding those held in the employee share trust which are treated as cancelled.

For diluted earnings per share, the weighted average number of ordinary shares in issue is adjusted for the impact of the dilutive effect of share options.

The Directors are of the opinion that the publication of the adjusted earnings per share, before exceptional items, is useful to readers of the accounts as it gives an indication of underlying business performance.

	2018 Continuing operations pence per share	2018 Discontinued operations pence per share	2018 Total pence per share	2017 Continuing operations pence per share	(restated) 2017 Discontinued operations pence per share	(restated) 2017 Total pence per share
Earnings per share						
Basic earnings per share	**93.7**	**(1.8)**	**91.9**	47.2	(6.3)	40.9
Diluted earnings per share	**92.8**	**(1.8)**	**91.0**	46.6	(6.2)	40.4
Adjusted earnings per share						
Basic earnings per share	**42.9**	**n/a**	**n/a**	47.1	n/a	n/a
Diluted earnings per share	**42.5**	**n/a**	**n/a**	46.5	n/a	n/a

Reconciliations of the earnings and weighted average number of shares used in the calculations are set out below:

Earnings

	2018 Continuing operations £m	2018 Discontinued operations £m	2018 Total £m	2017 Continuing operations £m	(restated) 2017 Discontinued operations £m	(restated) 2017 Total £m
Earnings for basic and diluted earnings per share	**95.4**	**(1.8)**	**93.6**	47.9	(4.2)	43.7
Amortisation of acquired intangible assets	**0.7**	**–**	**0.7**	0.1	–	0.1
Exceptional items	**(60.9)**	**–**	**(60.9)**	0.4	–	0.4
Less: tax on amortisation of acquired intangibles	**(1.2)**	**–**	**(1.2)**	–	–	–
Less: tax on exceptional items	**9.7**	**–**	**9.7**	(0.6)	–	(0.6)
Earnings for adjusted earnings per share	**43.7**	**(1.8)**	**41.9**	47.8	(4.2)	43.6

Weighted average number of ordinary shares

	2018 Number m	2017 Number m
For basic earnings per share	**101.9**	101.6
Dilutive effect of share options	**0.9**	1.2
For diluted earnings per share	**102.8**	102.8

9 Equity dividends

Final dividends proposed by the Board of Directors and unpaid at the year end are not recognised in the financial statements until they have been approved by the shareholders at the annual general meeting. Interim dividends are recognised in the period that they are paid.

	2018 £m	2017 £m
Final dividend for the period ended 26 March 2016 of 16.7p paid on 3 August 2016	**–**	16.9
Interim dividend for the period ended 24 September 2016 of 8.3p paid on 11 January 2017	**–**	8.5
Final dividend for the period ended 25 March 2017 of 16.7p paid on 30 June 2017	**17.0**	–
Interim dividend for the period ended 30 September 2017 of 8.3p paid on 3 January 2018	**8.4**	–
	25.4	25.4

A final dividend per equity share of 16.7p has been proposed for the period ended 31 March 2018. If approved by shareholders the dividend will be paid on 3 August 2018 to ordinary shareholders on the register at 6 July 2018.

10 Property, plant and equipment

Accounting Policies
Property, plant and equipment are stated at cost, less accumulated depreciation and any accumulated provision for impairment in value. Assets in the course of construction are included in property, plant and equipment on the basis of expenditure incurred at the balance sheet date.

No depreciation is provided on freehold land. Freehold and long leasehold buildings are depreciated over their estimated useful economic lives of 50 years. Other leasehold interests are depreciated over the lesser of the unexpired period of the lease and 50 years.

The Group's policy is to write off the cost or valuation of all other plant and equipment evenly over their estimated remaining useful life at rates which vary between 4 per cent and 50 per cent per annum. The principal annual rate of depreciation used is 10 per cent on plant and machinery and on fixtures and fittings. No depreciation is provided for assets in the course of construction.

Depreciation methods, residual values and useful lives are reviewed at least at each financial year end, taking into account commercial and technical obsolescence as well as normal wear and tear, provision being made where the carrying value exceeds the recoverable amount.

Where borrowing costs are attributable to the acquisition, construction or production of a qualifying asset, such costs are capitalised as part of the specific asset.

	Land and buildings £m	Plant and machinery £m	Fixtures and fittings and Motor Vehicles £m	In course of construction £m	Total £m
Cost					
At 26 March 2016	61.5	369.4	26.1	10.0	467.0
Exchange differences	0.2	6.8	0.3	0.2	7.5
Additions	0.2	6.2	0.2	16.9	23.5
Transfers from assets in the course of construction	2.3	2.3	1.3	(5.9)	–
Disposals	–	(5.5)	(4.0)	(1.5)	(11.0)
Acquisitions (see note 31)	–	2.1	–	–	2.1
At 25 March 2017	64.2	381.3	23.9	19.7	489.1
Exchange differences	–	(0.1)	–	–	(0.1)
Additions	0.2	1.0	0.1	12.9	14.2
Transfers from assets in the course of construction	1.7	16.4	1.6	(19.7)	–
Reclassification	4.0	(17.9)	4.9	3.1	(5.9)
Disposals	–	(2.5)	(0.1)	(0.9)	(3.5)
Disposal of subsidiary	(21.0)	(135.8)	(3.1)	(3.7)	(163.6)
At 31 March 2018	**49.1**	**242.4**	**27.3**	**11.4**	**330.2**
Accumulated depreciation					
At 26 March 2016	26.9	256.4	16.7	–	300.0
Exchange differences	0.1	5.6	0.2	–	5.9
Depreciation charge for the year	1.7	19.6	3.0	–	24.3
Impairment	–	–	–	–	–
Disposals	–	(4.5)	(3.8)	–	(8.3)
At 25 March 2017	28.7	277.1	16.1	–	321.9
Exchange differences	–	(0.3)	–	–	(0.3)
Depreciation charge for the year	1.9	12.7	7.3	–	21.9
Reclassification	1.6	(5.5)	(2.0)	–	(5.9)
Disposals	–	(2.0)	(0.1)	–	(2.1)
Disposal of subsidiary	(5.7)	(109.5)	(2.9)	–	(118.1)
At 31 March 2018	**26.5**	**172.5**	**18.4**	**–**	**217.4**
Net book value at 31 March 2018	**22.6**	**69.9**	**8.9**	**11.4**	**112.8**
Net book value at 25 March 2017	35.5	104.2	7.8	19.7	167.2
Net book value at 26 March 2016	34.6	113.0	9.4	10.0	167.0

11 Intangible assets

Accounting Policies

All intangible assets, except goodwill, are stated at cost less accumulated amortisation and any impairment losses.

Goodwill

Goodwill arising on consolidation represents the excess of the fair value of consideration transferred over the fair value of net assets acquired.

After initial recognition, goodwill is not amortised and is stated at cost less any accumulated impairment losses. At the date of acquisition, the goodwill is allocated to cash generating units for the purpose of impairment testing and is tested annually for impairment or when there are indications of impairment. Any impairment loss is recognised immediately in the income statement and is not subsequently reversed.

Gains and losses on the disposal of a business include the carrying amount of goodwill relating to the business. Goodwill arising on the acquisition of subsidiaries is presented in goodwill, and goodwill arising on the acquisition of associates is presented in investments in associates. Internally generated goodwill is not recognised as an asset. Goodwill arising on acquisitions before 27 March 2004 (the date of transition to IFRS) has been retained at the previous amounts subject to being tested for impairment at that date.

Other intangible assets

Intangible assets purchased separately, such as software licences that do not form an integral part of related hardware, are capitalised at cost less accumulated amortisation and impairment losses. Software intangibles are amortised on a straight line basis over the shorter of their useful economic life or their licence period at rates which vary between three and five years. Expenditure incurred in the development of products or enhancements to existing product ranges is capitalised as an intangible asset only when the future economic benefits expected to arise are deemed probable and the costs can be reliably measured. Development costs not meeting these criteria are expensed in the income statement as incurred. Capitalised development costs are amortised on a straight line basis over their estimated useful economic lives, which vary between five and ten years, once the product or enhancement is available for use. Product research costs are written off as incurred.

Distribution rights are capitalised at cost less accumulated amortisation and impairment losses and are amortised over their useful economic lives as determined by the life of the products to which they relate.

Intangible assets purchased through a business combination are recognised separately from goodwill and are initially recognised at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial acquisition, intangible assets acquired through a business combination are reported at cost less accumulated amortisation and impairment losses, on the same basis as intangible assets that are acquired separately.

Intellectual property is amortised over its expected life of 15 years.

Customer relationships are amortised over their expected lives of 10 to 15 years.

Trade names are amortised over their expected lives of 15 years.

11 Intangible assets continued

	Goodwill £m	Development costs £m	Software assets £m	Distribution rights £m	Intellectual property	Customer relationships	Trade Names	Total £m
Cost								
At 26 March 2016	–	21.0	9.5	0.1	–	–	–	30.6
Exchange differences	(0.2)	0.1	0.2	–	(0.2)	(0.1)	–	(0.2)
Additions	–	2.1	0.7	–	–	–	–	2.8
Disposals	–	–	(0.4)	–	–	–	–	(0.4)
Acquisitions (see note 32) (restated)	9.0	–	–	–	3.8	4.5	0.2	17.5
At 25 March 2017 (restated)	8.8	23.2	10.0	0.1	3.6	4.4	0.2	50.3
Exchange differences	(0.8)		–	–	(0.5)	(0.7)	–	(1.7)
Reclassification	–	(3.9)	(1.7)	–	–	–	–	(5.6)
Additions	–	3.6	1.2	–	–	–	–	4.8
Disposal of subsidiary	–	(1.3)		–	–	–	–	(1.3)
At 31 March 2018	**8.0**	**21.6**	**9.5**	**0.1**	**3.1**	**3.7**	**0.2**	**47.5**
Accumulated amortisation	–							
At 26 March 2016	–	11.2	5.9	0.1	–	–	–	17.2
Exchange differences	–	–	–	–	–	–	–	–
Amortisation for the year	–	1.6	0.7	–	0.1	–	–	2.4
Disposals	–	–	(0.4)	–	–	–	–	(0.4)
At 25 March 2017	–	12.8	6.0	0.1	0.1	–	–	19.0
Reclassification	–	(3.7)	(1.0)	–	–	–	–	(4.8)
Exchange differences	–	–	–	–	–	–	–	
Amortisation for the year	–	1.8	0.8	–	0.2	0.5	–	3.3
Disposal of subsidiary	–	(0.9)		–	–	–	–	(0.9)
At 31 March 2018	**–**	**10.0**	**5.8**	**0.1**	**0.3**	**0.5**	**–**	**16.7**
Carrying value at 31 March 2018	**8.0**	**11.6**	**3.7**	–	**2.8**	**3.2**	**0.2**	**29.5**
Carrying value at 25 March 2017 (restated)	8.8	10.4	4.0	–	3.5	4.4	0.2	31.3
Carrying value at 26 March 2016	–	9.8	3.6	–	–	–	–	13.4

Amounts as at 25 March 2017 have been restated following the finalisation of the purchase price accounting for the acquisition of De La Rue Authentication during the year.

11 Intangible assets continued

Accounting Policies

Impairment testing

The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets are reviewed at each balance sheet date to determine whether there is any indication of impairment. If any such indication exists then the asset's recoverable amount is estimated. For goodwill and intangible assets that have indefinite useful lives or that are not yet ready for use, the recoverable amount is estimated at each reporting date.

Assets that are subject to amortisation are reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable. In addition, goodwill is tested at least annually for impairment. Impairment tests are performed for all Cash Generating Units (CGUs) to which goodwill has been allocated at the balance sheet date or whenever there is indication of impairment. For all other intangible assets, an impairment test is performed whenever an indicator of impairment exists.

An impairment loss is recognised immediately in the income statement for the amount by which the asset's carrying value exceeds its recoverable amount, the latter being the higher of the asset's fair value less costs to sell and value in use and, in the case of goodwill, is not subsequently reversed. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

For other intangible assets, at each balance sheet date an assessment is made to determine whether there is any indication that an impairment loss recognised in prior periods may no longer exist or has decreased. Where such an indication exists, an impairment loss is reversed to the extent that the asset's carrying value does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Goodwill is allocated to the Group's CGUs identified according to business segment.

Acquisition amounts of £7.5m during 2016/17 (previously disclosed as £9.8m prior to finalisation of the purchase price allocation) relate to the Group's purchase of DuPont Authentication Inc (see note 32 for further details).

12 Inventories

Accounting Policies

Inventories and work in progress are valued at the lower of cost and net realisable value. Cost is determined on a weighted average cost basis and comprises directly attributable purchase and conversion costs, including direct labour and an allocation of production overheads based on normal operating capacity that have been incurred in bringing those inventories to their present location and condition. Net realisable value is the estimated selling price less estimated costs of completion and selling costs.

	2018 £m	2017 £m
Raw materials	**17.4**	26.9
Work in progress	**9.8**	17.4
Finished goods	**9.8**	23.5
	37.0	67.8

The replacement cost of inventories is not materially different from original cost.

An income statement charge in respect of the recognition of inventory provisions of £0.8m was recognised in operating expenses – ordinary in 2017/18 (2016/17: £1.7m).

13 Trade and other receivables

Accounting Policies
Trade and other receivables are measured at cost net of allowances for impairments, which approximates to fair value.

	2018 £m	2017 £m
Trade receivables	**68.8**	92.5
Provision for impairment	**(5.5)**	(3.0)
Net trade receivables	**63.3**	89.5
Other receivables	**22.3**	13.1
Prepayments and accrued income	**13.5**	7.1
	99.1	109.7

There is no other concentration of credit risk with respect to trade receivables as the Group has a large number of customers, internationally dispersed.

The ageing of trade and other receivables (excluding prepayments) at the reporting date was:

	Gross 2018 £m	Impairment 2018 £m	Gross 2017 £m	Impairment 2017 £m
Not past due	**31.0**	**–**	45.9	–
Past due 0-30 days	**32.3**	**–**	29.6	–
Past due 31-120 days	**7.3**	**–**	13.4	(0.2)
Past due more than 120 days	**15.2**	**(5.5)**	16.7	(2.8)
	85.8	**(5.5)**	105.6	(3.0)

The provision for impairment in respect of trade receivables is used to record losses unless the Group is satisfied that no recovery of the amount owing is possible; at that point the amounts considered irrecoverable are written off against the financial asset directly.

The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	2018 £m	2017 £m
Balance at beginning of year	**(3.0)**	(3.5)
Impairment losses recognised	**(2.5)**	(0.6)
Impairment losses reversed	**–**	1.1
Transferred to assets held for resale	**–**	–
Balance at end of year	**(5.5)**	(3.0)

Amounts can go past due before collection in situations where the customer may have raised queries over contractual compliance. Such issues arise in the normal course of business and are routinely addressed to the satisfaction of the customer. The Group believes that the unimpaired amounts that are past due by more than 30 days are still collectible in full, based on historic payment behaviour and analysis of customer credit risk, including underlying customers' credit ratings if they are available.

14 Financial risk

Financial risk management

Overview

The Group's activities expose it to a variety of financial risks, the most significant of which are liquidity risk, market risk and credit risk.

The Group's financial risk management policies are established and reviewed regularly to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. The use of financial derivatives is governed by the Group's risk management policies approved by the Board of Directors, which provide written principles on the use of financial derivatives consistent with the Group's risk management strategy. The Group's treasury department is responsible for the management of these financial risks faced by the Group.

Group treasury identifies, evaluates and in certain cases hedges financial risks in close cooperation with the Group's operating units. Group treasury provides written principles for overall financial risk management as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, use of derivative financial instruments and the investment of excess liquidity.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities where due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group manages this risk by ensuring that it maintains sufficient levels of committed borrowing facilities and cash and cash equivalents. The level of headroom needed is reviewed annually as part of the Group's planning process.

A maturity analysis of the carrying amount of the Group's borrowings is shown below in the reporting of financial risk section together with associated fair values.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Group's income or the value of its holdings of financial instruments. The Group uses a range of derivative instruments, including forward contracts and swaps to hedge its risk to changes in foreign exchange rates and interest rates with the objective of controlling market risk exposures within acceptable parameters, while optimising the return. Derivative financial instruments are only used for hedging purposes.

(a) Currency risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar and the euro. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities, unrecognised firm commitments and investments in foreign operations.

To manage their foreign exchange risk arising from future commercial transactions and recognised assets and liabilities, entities in the Group use forward contracts, transacted with Group treasury. Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the entity's functional currency. Group treasury is responsible for managing the net position in each currency via foreign exchange contracts transacted with financial institutions.

The Group's risk management policy aims to hedge firm commitments in full, and between 60 per cent and 100 per cent of forecast exposures in each major currency for the subsequent 12 months to the extent that forecast transactions are highly probable.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. The Group's policy is to manage the currency exposure arising from the net assets of the Group's foreign operations primarily through borrowings denominated in the relevant foreign currencies and through foreign currency swaps.

The Group's policy is not to hedge net investments in subsidiaries or the translation of profits or losses generated in overseas subsidiaries.

(b) Interest rate risk

All material financial assets and liabilities are maintained at floating rates of interest. Where the Group has forecast average levels of net debt above £50.0m on a continuing basis, the policy is to use floating to fixed interest rate swaps to fix the interest rate on a minimum of 50 per cent of the Group's forecast average levels of net debt for a period of at least 12 months.

14 Financial risk continued

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The demographics of the Group's customer base, including the default risk of the industry and country in which customers operate, has less of an influence on credit risk. Geographically, there is no concentration of credit risk. Where appropriate, letters of credit are used to mitigate the credit risk from customers.

The Group has established a credit policy that ensures that sales of products are made to customers with an appropriate credit history. The Group has a policy to procure advance payments during order negotiation which further reduces credit risk. Derivative counterparties and cash transactions are limited to high credit quality financial institutions and the Group has policies that limit the amount of credit exposure to any one financial institution.

Financial instruments

Derivative financial instruments are recognised at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each balance sheet date. The gain or loss on subsequent fair value measurement is recognised in the income statement unless the derivative qualifies for hedge accounting when recognition of any resultant gain or loss depends on the nature of the item being hedged.

Cash flow hedges

Changes in the fair value of derivative financial instruments that are designated and are effective as hedges of future cash flows are recognised directly in equity and the ineffective portion is recognised immediately in the income statement. Amounts accumulated in equity are recycled to the income statement in the period in which the hedged item also affects the income statement. However, if the hedged item results in the recognition of a non-financial asset or liability, the amounts accumulated in equity on the hedging instrument are transferred from equity and included in the initial measurement of the cost of the asset or liability. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, exercised, or no longer qualifies for hedge accounting. At that time, for forecast transactions, any cumulative gain or loss on the hedging instrument recognised in equity is retained in equity until the forecasted transaction occurs. If a hedged transaction is no longer expected to occur, the net cumulative gain or loss recognised in equity is transferred to the income statement. Changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognised in the income statement as they arise.

Fair value hedges

For an effective hedge of an exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment, the hedged item is adjusted for changes in fair value attributable to the risk being hedged with the corresponding entry in net income. Gains or losses from remeasuring the derivative or, for non-derivatives, the foreign currency component of its carrying value, are recognised in net income.

Embedded derivatives

Derivatives embedded in other financial instruments or other non-financial host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the host contracts are not carried at fair value. Any unrealised gains or losses on such separated derivatives are reported in the income statement within revenue or operating expenses in line with the host contract.

14 Financial risk continued

Fair values

The fair value of financial assets and liabilities, together with the carrying amounts shown in the balance sheet, are as follows:

	Fair value measurement basis	Total fair value 2018 £m	Carrying amount 2018 £m	(restated) total fair value 2017 £m	(restated) carrying amount 2017 £m
Financial assets					
Trade and other receivables[1]		**85.8**	**85.8**	102.6	102.6
Cash and cash equivalents		**15.5**	**15.5**	15.4	15.4
Derivative financial instruments:					
– Forward exchange contracts designated as cash flow hedges	Level 2	**1.8**	**1.8**	4.5	4.5
– Short duration swap contracts designated as fair value hedges	Level 2	**0.1**	**0.1**	0.2	0.2
– Foreign exchange fair value hedges – other economic hedges	Level 2	**1.3**	**1.3**	0.9	0.9
– Embedded derivatives	Level 2	**0.4**	**0.4**	10.3	10.3
– Interest rate swaps	Level 2	**–**	**–**	–	–
Total financial assets		**104.9**	**104.9**	133.9	133.9
Financial liabilities					
Unsecured bank loans and overdrafts[2]		**(65.4)**	**(65.4)**	(136.3)	(136.3)
Trade and other payables[3]		**(151.9)**	**(151.9)**	(172.9)	(172.9)
Derivative financial instruments:					
– Forward exchange contracts designated as cash flow hedges	Level 2	**(3.2)**	**(3.2)**	(1.6)	(1.6)
– Short duration swap contracts designated as fair value hedges	Level 2	**(0.2)**	**(0.2)**	(0.1)	(0.1)
– Foreign exchange fair value hedges – other economic hedges	Level 2	**(0.4)**	**(0.4)**	(5.5)	(5.5)
– Embedded derivatives	Level 2	**(0.6)**	**(0.6)**	(0.7)	(0.7)
– Interest rate swaps	Level 2	**–**	**–**	(0.4)	(0.4)
Total financial liabilities		**(221.7)**	**(221.7)**	(317.5)	(317.5)

1 Excluding prepayments.

2 The unsecured bank loans and overdrafts above is presented excluding unamortised pre-paid borrowing.

3 Excluding deferred income and taxes. The prior period comparatives have been restated to include accrued expenses and payments received on account.

Fair value measurement basis for derivative financial instruments

Fair value is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date. The valuation bases are classified according to the degree of estimation required in arriving at the fair values. Level 1 valuations are derived from unadjusted quoted prices for identical assets or liabilities in active markets, level 2 valuations use observable inputs for the assets or liabilities other than quoted prices, while level 3 valuations are not based on observable market data and are subject to management estimates. There has been no movement between levels during the current or prior periods.

Forward exchange contracts used for hedging

The fair value of forward exchange contracts has been determined using quoted forward exchange rates at the balance sheet date.

Interest rate swaps

Interest rate swaps are measured by reference to third party bank confirmations and discounted cash flows using the yield curves in effect at the balance sheet date.

Embedded derivatives

The fair value of embedded derivatives is calculated based on the present value of forecast future exposures on relevant sales and purchase contracts and using quoted forward foreign exchange rates at the balance sheet date.

14 Financial risk continued

Determination of fair values of non-derivative financial assets and liabilities

Non-derivative financial assets at fair value through profit or loss are measured at fair value and changes therein, including any interest, are recognised in profit or loss. Directly attributable transaction costs are recognised in profit or loss as incurred. Non-derivative financial assets not classified as at fair value through profit or loss are assessed at each reporting date to determine whether there is objective evidence of impairment.

Non-derivative financial liabilities are initially recognised at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest method.

Hedge reserves

The hedge reserve balance on 31 March 2018 was (£0.5m), (25 March 2017: £2.0m). Net movements in the hedge reserve are shown in the Group statement of changes in equity.

Comprehensive income after tax was £2.5m comprising a gain of £1.9m of fair value movements on new and continuing cash flow hedges, a loss of £0.1m on maturing cash flow hedges for capital expenditure and a £1.8m gain to the income statement to match the recognition of the related cash flows in effective cash flow hedge relationships. Deferred tax on the net gain of £3.0m amounted to £0.5m. Hedge reserve movements in the income statement were as follows:

	Revenue £m	Operating expense £m	Interest expense £m	Total £m
31 March 2018				
– Maturing cash flow hedges	**(0.4)**	**2.2**	**–**	**1.8**
– Ineffectiveness on de-recognition of cash flow hedges				
25 March 2017				
– Maturing cash flow hedges	(2.1)	10.1	–	8.0
– Ineffectiveness on de-recognition of cash flow hedges	–	–	–	–
	(2.1)	10.1	–	8.0

The ineffective portion of fair value hedges that was recognised in the income statement amounted to £nil (2016/17: £nil). The ineffective portion of cash flow hedges that was recognised in the income statement within Exceptional items was (£0.9m) (2016/17: £nil).

Liquidity risk

The following are the contractual undiscounted cash flow maturities of financial liabilities, including contractual interest payments and excluding the impact of netting agreements.

31 March 2018	Due within 1 year £m	Due between 1 and 2 years £m	Due between 2 and 5 years £m	Total undiscounted cash flows £m	Impact of discounting and netting £m	Carrying amount £m
Non-derivative financial liabilities						
Unsecured bank loans and overdrafts	65.4	–	–	65.4	–	65.4
Trade and other payables						
Derivative financial liabilities	151.9	–	–	151.9	–	151.9
Gross amount payable from currency derivatives:						
– Forward exchange contracts designated as cash flow hedges	144.9	0.4	–	145.3	(142.1)	3.2
– Short duration swap contracts designated as fair value hedges	40.3	–	–	40.3	(40.1)	0.2
– Fair value hedges – other economic hedges	61.6	–	–	61.6	(61.2)	0.4
Interest rate swaps						
	464.1	0.4	–	464.5	(243.4)	221.1

14 Financial risk continued

Liquidity risk continued

25 March 2017 (restated)	Due within 1 year £m	Due between 1 and 2 years £m	Due between 2 and 5 years £m	Total undiscounted cash flows £m	Impact of discounting and netting £m	Carrying amount £m
Non-derivative financial liabilities						
Unsecured bank loans and overdrafts	136.3	–	–	136.3	–	136.3
Trade and other payables	171.6	1.3	–	172.9	–	172.9
Derivative financial liabilities						
Gross amount payable from currency derivatives:						
– Forward exchange contracts designated as cash flow hedges	101.4	0.9	0.2	102.5	(100.9)	1.6
– Short duration swap contracts designated as fair value hedges	14.4	–	–	14.4	(14.3)	0.1
– Fair value hedges – other economic hedges	99.9	2.4	–	102.3	(96.8)	5.5
Interest rate swaps	0.2	0.2	–	0.4	–	0.4
	523.8	4.8	0.2	528.8	(212.0)	316.8

The following are the contractual undiscounted cash flow maturities of financial assets, including contractual interest receipts and excluding the impact of netting agreements.

31 March 2018	**Due within 1 year £m**	**Due between 1 and 2 years £m**	**Due between 2 and 5 years £m**	**Total undiscounted cash flows £m**	**Impact of discounting and netting £m**	**Carrying amount £m**
Non-derivative financial assets						
Cash and cash equivalents	**15.5**	**–**	**–**	**15.5**	**–**	**15.5**
Trade and other receivables	**85.2**	**–**	**–**	**85.2**	**–**	**85.2**
Derivative financial assets						
Gross amount receivable from currency derivatives:						
– Forward exchange contracts designated as cash flow hedges	**119.2**	**7.3**	**–**	**126.5**	**(124.7)**	**1.8**
– Short duration swap contracts designated as fair value hedges	**37.2**		**–**	**37.2**	**(37.1)**	**0.1**
– Fair value hedges – other economic hedges	**69.3**	**0.7**	**–**	**70.0**	**(68.7)**	**1.3**
Interest rate swaps						
	326.4	**8.0**	**–**	**334.4**	**(230.5)**	**103.9**

25 March 2017 (restated)	Due within 1 year £m	Due between 1 and 2 years £m	Due between 2 and 5 years £m	Total undiscounted cash flows £m	Impact of discounting and netting £m	Carrying amount £m
Non-derivative financial assets						
Cash and cash equivalents	15.4	–	–	15.4	–	15.4
Trade and other receivables	102.6	–	–	102.6	–	102.6
Derivative financial assets						
Gross amount receivable from currency derivatives:						
– Forward exchange contracts designated as cash flow hedges	128.7	1.8	–	130.5	(126.0)	4.5
– Short duration swap contracts designated as fair value hedges	58.5	–	–	58.5	(58.3)	0.2
– Fair value hedges – other economic hedges	69.5	2.5	0.2	72.2	(71.3)	0.9
Interest rate swaps	–	–	–	–	–	–
	374.7	4.3	0.2	379.2	(255.6)	123.6

The fair value of a hedging derivative is classified as a non-current asset or liability if the remaining maturity of the hedged item is more than 12 months and as a current asset or liability if the maturity of the hedged item is less than 12 months.

14 Financial risk continued

Liquidity risk continued

Cash and cash equivalents, trade and other current receivables, bank loans and overdrafts, trade payables and other current liabilities have fair values that approximate to their carrying amounts due to their short-term nature.

As at 31 March 2018, the Group has a total of undrawn committed borrowing facilities, all maturing in more than one year, of £210.0m (25 March 2017: £118.0m in more than one year). The amount of loans drawn on the £275.0m facility is £65.0m (25 March 2017: £132.0m). Guarantees of £nil (25 March 2017: £nil) have been drawn using the facility.

During the year the Group extended the revolving credit facility by two years to a maturity date of December 2021 and also increased the facility size from £250m to £275m. It is subject to the same financial covenants which require that the ratio of EBIT to net interest payable be greater than four times and the net debt to EBITDA ratio be less than three times. At the period end the specific covenant tests were as follows: EBIT/net interest payable of 14.2 times, net debt/EBITDA of 0.66 times.

Forward foreign exchange contracts

The net principal amounts of the outstanding forward foreign exchange contracts at 31 March 2018 are US dollar 34.1m, euro 27.6m, Swiss franc (32.0m), Japanese yen (15.0m), Canadian dollar (0.7m), Hong Kong dollar 10.9m, Singapore dollar 25.2m and Australian dollar 0.2m.

The net principal amounts outstanding under forward contracts with maturities greater than 12 months are euro 3.7m, US dollar 2.4m and Singapore dollar 4.2m. These forward contracts are designated as cash flow hedges or fair value hedges as appropriate.

Gains and losses recognised in the hedging reserve in equity on forward foreign exchange contracts at 31 March 2018 will be released to the income statement at various dates between one month and 18 months from the balance sheet date.

Short duration swap contracts

(i) Cash management swaps

The Group uses short duration currency swaps to manage the level of borrowings in foreign currencies. The fair value of cash management currency swaps at 31 March 2018 was £nil (2016/17: £nil). Gains and losses on cash management swaps are included in the consolidated income statement.

The principal amounts outstanding under cash management currency swaps at 31 March 2018 are US dollar 20.5m, euro (11.6m), Swiss franc (9.8m), South African rand 12.8m, Australian dollar 0.2m, Japanese yen (333.7m), Canadian dollar 0.5m, Hong Kong dollar 2.7m and Mexican peso 2.6m.

(ii) Balance sheet swaps

The Group uses short duration currency swaps to manage the translational exposure of monetary assets and liabilities denominated in foreign currencies. The fair value of balance sheet swaps as at 31 March 2018 was (£0.1m) (2016/17: £0.1m). Gains and losses on balance sheet swaps are included in the consolidated income statement.

The principal amounts outstanding under balance sheet swaps at 31 March 2018 are US dollar 42.4m, euro 12.0m, Swiss franc 0.9m, South African rand 7.0m.

Embedded derivatives

Embedded derivatives relate to sales and purchase contracts denominated in currencies other than the functional currency of the customer/supplier, or a currency that is not deemed to be a commonly used currency of the country in which the customer/supplier is based. The net fair value of embedded derivatives at 31 March 2018 was (£0.2m) (2016/17: £9.6m).

Gains and losses on fair value hedges

The gains and losses recognised in the year on the Group's fair value hedges were (£0.1m) relating to balance sheet hedges (2016/17: £0.2m), (£8.9m) relating to other fair value hedges (2016/17: (£12.5m), and £nil relating to cash management hedges (2016/17: £nil).

Market risk: Currency risk

Exposure to currency risk

The following significant exchange rates applied during the year:

	Average rate		Reporting date spot rate	
	2018	2017	**2018**	2017
US dollar	**1.33**	1.32	**1.41**	1.25
Euro	**1.13**	1.20	**1.14**	1.16

Notes to the accounts continued

14 Financial risk continued

Interest rate risk

At the reporting date the interest rate profile of the Group's interest bearing financial instruments was:

	Carrying amount	
	2018 £m	2017 £m
Variable rate instruments		
Financial assets	**15.5**	15.4
Financial liabilities	**(65.4)**	(136.3)
	(49.9)	(120.9)

At the year ending 31 March 2018 the Group had sterling £65m of floating to fixed interest rate swaps with financial institutions and with maturities of October and November 2018.

Sensitivity analysis

A change of 100 basis points in interest rates at the reporting date would have increased/(decreased) equity and profit and loss by the amounts shown below. The analysis assumes that all other variables, in particular foreign currency rates, remain constant.

	Profit and loss		Equity	
	100bp increase £m	100bp decrease £m	100bp increase £m	100bp decrease £m
Variable rate instruments cash flow sensitivity (net)				
31 March 2018	**(0.8)**	**0.9**		
26 March 2017	(0.5)	0.7		

Credit risk

Exposure to credit risk

The carrying amount of financial assets represents the credit exposure at the reporting date. The exposure to credit risk at the reporting date was:

		Carrying amount	
	Notes	**2018 £m**	2017 £m
Trade and other receivables (excluding prepayments)	13	**100.9**	102.6
Cash and cash equivalents	15	**15.5**	15.4
Forward exchange contracts used for hedging		**3.2**	5.6
Embedded derivatives		**0.4**	10.3
Interest rate swaps		**–**	–
		120.0	133.9

14 Financial risk continued

Credit risk continued

The maximum exposure to credit risk for trade and other receivables (excluding prepayments) by geographic region was:

	Carrying amount 2018 £m	2017 £m
UK	**17.2**	28.9
Rest of Europe	**4.7**	5.1
The Americas	**15.5**	5.0
Rest of world	**48.4**	63.6
	85.8	102.6

The maximum exposure to credit risk for trade and other receivables (excluding prepayments) by type of customer was:

	Carrying amount 2018 £m	2017 £m
Banks and financial institutions	**60.3**	17.1
Government institutions	**22.4**	53.0
Distributors	–	4.3
Retail customers	–	–
End user customers	–	2.0
Other	**3.1**	26.2
	85.8	102.6

Fair value adjustment to credit risk on derivative contracts

The impact of credit related adjustments being made to the carrying amount of derivatives measured at fair value and used for hedging currency and interest rate risk has been assessed and considered to be immaterial. These derivatives are transacted with investment grade financial institutions. Similarly, the impact of the credit risk of the Group on the valuation of its financial liabilities has been assessed and considered to be immaterial.

Capital management

The Board's policy is to maintain a strong capital base in order to maintain investor, creditor and market confidence and to sustain future development of the business.

The Group finances its operations through a mixture of equity funding and debt financing, which represent the Group's definition of capital for this purpose.

	Note	2018 £m	(restated) 2017 £m
Total equity attributable to shareholders of the Company		**(43.9)**	(165.6)
Add back long term pension deficit liability		**89.6**	239.4
Adjusted equity attributable to shareholders of the Company		**45.7**	73.8
Net debt	22	**49.9**	120.9
Group capital		**95.6**	194.7

The long term pension deficit has been removed as a separate agreement is in place regarding the funding for this deficit which is paid out of cash flows from continuing operations. The Group's debt financing is also analysed in notes 18 and 22.

Included within the Group's net debt are certain cash and cash equivalent balances that are not readily available for use by the Group. These balances are not significant, and are not readily available due to restrictions within some of the countries in which we operate.

Earnings per share and dividend payments are the two measures which, in the Board's view, summarise best whether the Group's objectives regarding equity management are being met. The Group's earnings and dividends per share and relative rates of growth illustrate the extent to which equity attributable to shareholders has changed. Both measures are disclosed and discussed within the strategic report and notes 8 and 9.

14 Financial risk continued

Capital management continued

The Group's objective is to maximise sustainable long term growth of the earnings per share.

De La Rue's dividend policy is to provide shareholders with a competitive return on their investment, while assuring sufficient reinvestment of profits to enable the Group to achieve its strategy. During the period, the Group invested £24.8m in ongoing research and development and capital expenditure. The proposed total dividend for the year is covered 1.7 times. The ratio is calculated as total adjusted earning as per note 8 over the dividend for the year.

The decision to pay dividends, and the amount of the dividends, will depend on, among other things the earnings, financial position, capital requirements, general business conditions, cash flows, net debt levels and share buyback plans.

There were no changes to the Group's approach to capital management during the year.

15 Cash and cash equivalents

Accounting Policies

Cash and cash equivalents comprise bank balances and cash held by the Group and short term deposits with an original maturity of three months or less. Bank overdrafts that are repayable on demand and form part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the cash flow statement.

	2018 £m	2017 £m
Cash at bank and in hand	**15.2**	13.2
Short term bank deposits	**0.3**	2.2
	15.5	15.4

An analysis of cash, cash equivalents and bank overdrafts is shown in the Group cash flow statement.

Certain cash and deposits are of a floating rate nature and are recoverable within three months.

The Group's exposure to interest rate risk and a sensitivity analysis for financial assets and liabilities are disclosed in note 14.

16 Deferred taxation

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority. The offset amounts are as follows:

	2018 £m	2017 £m (restated)
Deferred tax assets	**19.8**	43.7
Deferred tax liabilities	**(3.0)**	(5.3)
	16.8	38.4

The gross movement on the deferred income tax account is as follows:

	2018 £m	2017 £m (restated)
Beginning of the year	**38.4**	40.0
Exchange differences	**0.4**	0.4
Income statement credit/(charge)	**(9.0)**	0.8
Acquisitions (see note 31)	**–**	(3.6)
Tax credit/(charge) to equity	**(13.0)**	0.8
End of the year	**16.8**	38.4

The prior year deferred tax liability has been restated following the finalisation in the year of the purchase price accounting for the Group's acquisition of De La Rue Authentication Solutions.

16 Deferred taxation continued

The movement in deferred tax assets and liabilities during the period, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

	Property, plant and equipment £m	Fair value gains (restated) £m	Development costs £m	Other £m	Total £m
Liabilities					
At 26 March 2016	(8.2)	–	(1.7)	(0.5)	(10.4)
Recognised in the income statement	1.1	–	–	–	1.1
Acquisitions (see note 31)	(0.7)	(2.9)	–	–	(3.6)
Recognised in equity	–	–	–	0.1	0.1
At 25 March 2017	(7.8)	(2.9)	(1.7)	(0.4)	(12.8)
Recognised in the income statement	4.2	1.2	0.1	–	5.5
Recognised in equity	–	–	–	0.4	0.4
Exchange differences	–	0.3	–	–	0.3
At 31 March 2018	**(3.6)**	**(1.4)**	**(1.6)**	–	**(6.6)**

	Share options £m	Retirement benefits £m	Tax losses £m	Other £m	Total £m
Assets					
At 26 March 2016	0.5	39.9	0.8	9.2	50.4
Recognised in the income statement	0.1	1.4	(0.4)	(1.4)	(0.3)
Recognised in equity	1.0	(0.3)	–	–	0.7
Exchange differences	–	–	–	0.4	0.4
At 25 March 2017	1.6	41.0	0.4	8.2	51.2
Recognised in the income statement	0.2	(12.8)	(0.2)	(1.7)	(14.5)
Recognised in equity	(0.6)	(12.9)	–	0.1	(13.4)
Exchange differences	–	–	–	0.1	0.1
At 31 March 2018	**1.2**	**15.3**	**0.2**	**6.7**	**23.4**

Other deferred assets and liabilities include tax associated with provisions of £0.9m (2016/17: £1.7m) and in respect of overseas tax credits £5.9m (2016/17: £5.9m).

Deferred tax assets are recognised for tax losses available to carry forward to the extent that the realisation of the related tax benefit through future taxable profits is probable.

The Group has not recognised deferred tax assets of £7.2m (2016/17 restated: £4.7m) in respect of losses amounting to £26.7m (2016/17 restated £26.3m) that can be carried forward against future taxable income. Similarly, the Group has not recognised deferred tax assets of £8.9m (2016/17: £9.4m) in respect of overseas tax credits that are carried forward for utilisation in future periods.

Unremitted foreign earnings totalled £151.3m at 31 March 2018 (2016/17: £134m). Deferred tax liabilities have not been recognised for the withholding tax and other taxes that would be payable on the unremitted earnings of certain subsidiaries where the timing of the reversal can be controlled and it was considered unlikely that dividends would be paid from those subsidiaries.

UK capital losses of £307m are carried forward at 31 March 2018 (2016/17: £320.6m). No deferred tax asset has been recognised in respect of these losses.

US tax rate

A reduction in the US federal tax rate from 35 per cent to 21 per cent (effective from January 2018) was substantively enacted on 22 December 2017. This will reduce the US group's future current tax charge accordingly. The US deferred tax assets and liabilities at 31 March 2018 have been calculated based on the rate of 21 per cent substantively enacted at the balance sheet date.

UK tax rate

A reduction in the main rate of UK corporation tax from 19 per cent to 17 per cent (effective from April 2020) was substantively enacted on 6 September 2016. This will reduce the UK Group's future current tax charge accordingly. The UK deferred tax assets and liabilities at 31 March 2018 have been calculated based on the rate of 17 per cent (25 March 2017: 17 per cent) substantively enacted at the balance sheet date.

17 Trade and other payables

Trade and other payables are measured at carrying value which approximates to fair value.

	2018 £m	2017 £m
Current liabilities		
Payments received on account	**29.7**	27.2
Trade payables	**59.6**	46.5
Amounts owed to associated companies	**–**	–
Social security and other taxation	**1.0**	3.1
Deferred income	**14.1**	0.4
Accrued expenses	**58.2**	85.9
Other payables	**4.5**	12.0
	167.1	175.1
Non-current liabilities		
Other payables	**–**	1.3
	–	1.3

Payments received on account relate to monies received from customers under contract prior to commencement of production of goods or delivery of services.

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in note 14.

18 Borrowings

Accounting Policies
Interest bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest bearing borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in the income statement over the period of the borrowings on an effective interest basis.

For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, see note 13.

	Currency	Nominal interest rate	Year of maturity	Face value 2018 £m	Carrying amount 2018 £m	Face value 2017 £m	Carrying amount 2017 £m
Current liabilities							
Unsecured bank loans and overdrafts	EUR	–	2018	**–**	**–**	–	–
Unsecured bank loans and overdrafts	GBP	2.02%	2018	**65.0**	**65.0**	136.0	136.0
Unsecured bank loans and overdrafts	USD	–	2018	**–**	**–**	–	–
Unsecured bank loans and overdrafts	Other	–	2018	**0.4**	**0.4**	0.3	0.3
Total interest bearing liabilities				**65.4**	**65.4**	136.3	136.3

The total interest bearing liabilities above is presented excluding unamortised pre-paid borrowing fees of £1.5m.

As at 31 March 2018, bank overdrafts of £223.1m (2016/17: £112.5m) were offset for interest purposes against credit balances.

As at 31 March 2018, the Group has committed borrowing facilities, all maturing in more than one year, of £275m. Up to £100m of the £275m facility can be utilised for either loans or guarantees.

As the draw downs on these loans are typically rolled over on terms of between one and three months subject to conditions, the borrowings are disclosed as a current liability. This is notwithstanding the long term nature of this facility which expires in December 2021.

19 Provisions for liabilities and charges

Accounting Policies
Provisions are recognised when the Group has a present obligation in respect of a past event, it is probable that an outflow of resources will be required to settle the obligation, and where the amount can be reliably estimated. Provisions are measured at the Directors' best estimate of the amount required to settle the obligation at the balance sheet date and are discounted where the time value of money is considered material.

19 Provisions for liabilities and charges continued

	Restructuring £m	Warranty £m	Other £m	Total £m
At 25 March 2017	2.5	7.0	2.9	12.4
Exchange differences	–	–	(0.2)	(0.2)
Charge for the year	1.2	4.4	3.6	9.2
Utilised in year	(3.2)	(6.6)	(0.5)	(10.3)
Released in year	–	(3.1)	–	(3.1)
At 31 March 2018	**0.5**	**1.7**	**5.8**	**8.0**
Expected to be utilised within 1 year	0.5	1.7	1.9	4.1
Expected to be utilised after 1 year	–	–	3.9	3.9

Restructuring provisions
Restructuring provisions principally relate to the manufacturing footprint review announced in December 2015 and the upgrade of our finance systems and processes. The fall in the provision reflects the fact that these initiatives are nearing completion. These provisions include amounts for staff compensation and site exit costs, which are expected to be utilised within one year.

Warranty provisions
Warranty provisions relate to present obligations for defective products and include known claims as well as anticipated claims that had not been reported at the balance sheet date. The provisions are management judgements based on information currently available, past history and experience of the products sold. However, it is inherent in the nature of the business that the actual liabilities may differ from the provisions. The precise timing of the utilisation of these provisions is uncertain but is generally expected to fall within one year.

Other provisions
Other provisions comprise a number of liabilities with varying expected utilisation rates. As part of the disposal accounting for the of the sale of Portals De La Rue Limited to EPIRIS Fund II on 29 March 2018, an amount of £2.0m has been recognised for the potential amount payable under the recompense contract clause. Refer to note 5 for further details. The utilisation of this is expected after 1 year.

Other provisions also includes an amount of £1.3m in relation to a onerous contract that was not transferred as part of the sale of Cash Processing Solutions Limited. The expected utilisation of this is after 1 year.

20 Share capital

	2018 £m	2017 £m
Issued and fully paid		
102,389,688 ordinary shares of $44\frac{52}{175}$p each (2016/17: 101,767,263 ordinary shares of $44\frac{152}{175}$p each)	**46.0**	45.7
111,673,300 deferred shares of 1p each (2016/17: 111,673,300 deferred shares of 1p each)	**1.1**	1.1
	47.1	46.8

	2018		2017	
	Ordinary shares '000	**Deferred shares '000**	Ordinary shares '000	Deferred shares '000
Allotments during the year				
Shares in issue at 25 March 2017/26 March 2016	**101,767**	**111,673**	101,359	111,673
Issued under Savings Related Share Option Scheme	**439**	–	253	–
Issued under Annual Bonus Plan	**160**	–	62	–
Issued under Performance Share Plan	**24**	–	93	–
Shares in issue at 31 March 2018/25 March 2017	**102,390**	**111,673**	101,767	111,673

The deferred shares carry limited economic rights and no voting rights. They are unlisted and are not transferable except in accordance with the articles.

21 Share based payments

Accounting Policies
The Group operates various equity settled and cash settled option schemes. For equity settled share options, the services received from employees are measured by reference to the fair value of the share options. The fair value is calculated at grant date and recognised in the consolidated income statement, together with a corresponding increase in shareholders' equity, on a straight line basis over the vesting period, based on the numbers of shares that are actually expected to vest, taking into account non-market vesting conditions (including service conditions). Vesting conditions, other than non-market based conditions, are taken into account when estimating the fair value.

For cash settled share options, the services received from employees are measured at the fair value of the liability for options outstanding and recognised in the consolidated income statement on a straight line basis over the vesting period. The fair value of the liability is remeasured at each reporting date and at the date of settlement with changes in fair value recognised in the consolidated income statement.

At 31 March 2018, the Group has a number of share based payment plans, which are described below. The compensation cost and related liability that have been recognised for the Group's share based plans are set out in the table below:

	Expense recognised for the year	
	2018 £m	2017 £m
Annual Bonus Plan	**0.7**	0.7
Performance Share Plan	**0.3**	(0.3)
Restricted Share Award	**–**	0.1
Savings Related Share Option Scheme	**1.2**	0.4
	2.2	0.9

The fair value of share options is estimated at the date of grant using a lattice based option valuation model. The significant assumptions used in the valuation model are disclosed below:

Arrangement	Performance Share Plan	Performance Share Plan	Annual Bonus Plan	Savings Related Share Option Scheme
Dates of current year grants	27 June 2017	27 June 2017	7 June 2017	18 Dec 2017
Number of options granted	6,763	677,277	71,841	654,352
Exercise price	n/a	n/a	n/a	520.26
Contractual life (years)	9	9	10	3
Settlement	Cash	Shares	Shares	Shares
Vesting period (years)	3 or 4	3 or 4	1	3
Dividend yield	n/a	n/a	n/a	25p pa
Risk free interest rate	n/a	n/a	n/a	0.51% pa
Share price volatility	n/a	n/a	n/a	30% pa
Fair value per option at grant date	6.80	6.80	6.88	1.47

For the Savings Related Share Option Scheme (SAYE) an expected volatility rate of 30 per cent (2016/17: 30 per cent) has been used for grants in the period. This rate is based on historical volatility over the last three years to 18 December 2017. The expected life is the average expected period to exercise. The risk free rate of return is the yield on zero coupon UK government bonds of a term consistent with the assumed option life. The rate applied during the year was 0.51 per cent pa (for a period of 3 years). (2016/17: 0.53 per cent).

21 Share based payments continued

Reconciliations of option movements over the period to 31 March 2018 for each class of share awards are shown below:

Annual Bonus Plan

For details of the Annual Bonus Plan, refer to the Directors' remuneration report on pages 74 to 94.

	2018 Number of options '000	2017 Number of options '000
Options outstanding at start of year	**243**	181
Granted	**72**	123
Forfeited	**(9)**	(3)
Exercised	**(146)**	(58)
Expired	**–**	–
Outstanding at end of year	**160**	243

During the period the weighted average share price on share awards exercised in the period was 616.00p.

Performance Share Plan

For details of the Performance Share Plan, refer to the Directors' remuneration report on pages 74 to 94.

	2018 Number of options '000	2017 Number of options '000
Options outstanding at start of year	**1,722**	1,092
Granted	**684**	799
Forfeited	**(290)**	(78)
Exercised	**(20)**	(79)
Expired	**(150)**	(12)
Outstanding at end of year	**1,946**	1,722

During the period the weighted average share price on share awards exercised in the period was 628.00p.

The awards have been allocated based on a share price of 559.50p for the 26 November 2010 grants, 686.50p for the 31 January 2011 grants, 759.80p for the 23 June 2011 grants, 892.90p for the 4 December 2013 grants, 830.00p for the 27 June 2014 grants, 541.00p for the 29 June 2015 grants, 476.95p for the 23 September 2015 grants, 520.85p for the 27 June 2016 grants and 680.10 for the 27 June 2017 grants.

Restricted Share Award

	Restricted Share Award	
	2018 Number of options '000	2017 Number of options '000
Options outstanding at start of year	**–**	19
Granted	**–**	–
Forfeited	**–**	–
Exercised	**–**	(19)
Expired	**–**	–
Outstanding at end of year	**–**	–
Exercisable at year end	**–**	–

21 Share based payments continued

Savings Related Share Option Scheme

The scheme is open to all UK employees. Options are granted at the prevailing market price at the time of the grant (with a discretionary discount to the market price) to employees who agree to save between £5 and the maximum savings amount offered per month over a period of three or five years.

There are no performance conditions attaching to the options. After the three or five year term has expired, employees normally have six months in which to decide whether or not to exercise their options. A pre-vesting forfeiture rate of 10 per cent has been assumed on new options granted in the year based on historic experience.

	2018		2017	
	Weighted average exercise price pence per share	Number of options '000	Weighted average exercise price pence per share	Number of options '000
Options outstanding at start of year	395.63	2,944	397.36	3,129
Granted	520.26	654	441.06	599
Forfeited	382.74	(86)	384.77	(368)
Exercised	435.60	(464)	438.02	(252)
Expired	513.30	(192)	553.77	(164)
Outstanding at end of year	410.18	2,856	395.63	2,944

The range of exercise prices for the share options outstanding at the end of the year is 344.40p – 775.34p (2017: 344.40p – 775.34p). The weighted average remaining contractual life of the outstanding share options is 1.62 years (2017: 1.91 years).

During the period the weighted average share price on options exercised in the period was 616.00p.

Market share purchase of shares by Trustee De La Rue Employee Share Ownership Trust

The De La Rue Employee Share Ownership Trust (Trust) is a separately administered trust established to administer shares granted to Executive Directors and senior employees under the various discretionary share option plans established by the Company. Liabilities of the Trust are guaranteed by the Company and the assets of the Trust mainly comprise shares in the Company. Equiom (Guernsey) Limited is the Trustee. The own shares held by the Trust are shown as a reduction in shareholders' funds. The shares will be held at historical rates until such time as they are disposed of. Any profit or loss on the disposal of own shares is treated as a movement in reserves rather than as an income statement item.

The Trustee held no shares at 31 March 2018.

22 Analysis of net debt

	2018 £m	2017 £m
Cash at bank and in hand	15.2	13.2
Short term bank deposits	0.3	2.2
Bank overdrafts	(0.3)	(4.2)
Total cash and cash equivalents	15.2	11.2
Borrowings due within one year	(65.1)	(132.1)
Net debt	(49.9)	(120.9)

Net debt above is presented excluding unamortised pre-paid borrowing fees of £1.5m.

23 Operating leases

Accounting Policies
A lease is defined as an agreement whereby the lessor conveys to the lessee the right to use a specific asset for an agreed period of time in return for a payment or a series of payments.

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Rentals payable under operating leases are charged to the income statement on a straight line basis over the lease term. Benefits received and receivable as an incentive to enter into an operating lease are also spread on a straight line basis over the lease term.

	2018 Property £m	2018 Plant and equipment £m	2017 Property £m	2017 Plant and equipment £m
Total commitments due:				
– Within one year	**3.0**	–	2.5	–
– Between one and five years	**7.6**	–	8.9	–
– Over five years	**25.5**	–	28.9	–
	36.1	–	40.3	–

24 Retirement benefit obligations

Accounting Policies
The Group operates retirement benefit schemes, devised in accordance with local conditions and practices in the country concerned, covering the majority of employees. The assets of the Group's schemes are generally held in separately administered trusts or are insured. The major schemes are defined benefit pension schemes with assets held separately from the Group. The cost of providing benefits under each scheme is determined using the projected unit credit actuarial valuation method. The major defined benefit pension scheme is based in the UK and is now largely closed to future accrual. The current service cost and gains and losses on settlements and curtailments are included in operating costs in the Group income statement. The interest income on the plan assets of funded defined benefit pension schemes and the imputed interest on pension scheme liabilities are disclosed as retirement benefit obligation net finance expense respectively in the income statement.

Return on plan assets excluding assumed interest income on the assets, changes in the retirement benefit obligation due to experience and changes in actuarial assumptions are included in the statement of comprehensive income in full in the period in which they arise.

The liability recognised in respect of defined benefit pension schemes is the present value of the defined benefit obligation less the fair value of the scheme assets, as determined by actuarial valuations carried out at the balance sheet date.

The Group's contributions to defined contribution plans are charged to the income statement in the period to which the contributions relate.

A Trustee board has been appointed to operate the UK defined benefit scheme in accordance with its governing documents and pensions law. The scheme meets the legal requirement for member nominated trustees representation on the trustee board and a professional independent trustee has been appointed as chair of the board. The members of the trustee board undertake regular training to ensure they are able to fulfil their function as trustees and have appointed professional advisers to give them specialist expertise where required.

The Group has calculated the value of the minimum funding commitments to its schemes and determined that no additional liability under IFRIC 14 is required at 31 March 2018. No significant judgements were involved in making this determination.

In November 2017 the Trustee of the Defined Benefit Scheme decided to change indexation of future increases to the Defined Benefit Scheme benefits from the Retail Prices Index ('RPI') to the Consumer Prices Index ('CPI'), effective from April 2018. The decision was made following a request from the Company and a detailed legal review upon which the Trustee concluded that CPI is currently a more suitable index for the calculation of annual increases in the Scheme. This change led to a past service credit of £80.5m. The directors continue to assess any residual impact from this change.

24 Retirement benefit obligations continued

(a) Defined benefit pension schemes

Amounts recognised in the consolidated balance sheet:

	2018 UK £m	2018 Overseas £m	2018 Total £m	2017 UK £m	2017 Overseas £m	2017 Total £m
Equities	**199.9**	**–**	**199.9**	222.9	–	222.9
Bonds	**273.9**	**–**	**273.9**	270.0	–	270.0
Gilts	**–**	**–**	**–**	–	–	–
Diversified Growth Fund	**208.6**	**–**	**208.6**	199.4	–	199.4
Liability Driven Investment Fund	**230.1**	**–**	**230.1**	222.2	–	222.2
Multi Asset Credit	**52.2**	**–**	**52.2**	38.1	–	38.1
Other	**15.3**	**–**	**15.3**	21.9	–	21.9
Fair value of scheme assets	**980.0**	**–**	**980.0**	974.5	–	974.5
Present value of funded obligations	**(1,061.1)**	**–**	**(1,061.1)**	(1,204.7)	–	(1,204.7)
Funded defined benefit pension schemes	**(81.1)**	**–**	**(81.1)**	(230.2)	–	(230.2)
Present value of unfunded obligations	**(6.5)**	**(2.0)**	**(8.5)**	(6.8)	(2.4)	(9.2)
Net liability	**(87.6)**	**(2.0)**	**(89.6)**	(237.0)	(2.4)	(239.4)

Amounts recognised in the consolidated income statement:

	2018 UK £m	2018 Overseas £m	2018 Total £m	2017 UK £m	2017 Overseas £m	2017 Total £m
Included in employee benefits expense:						
– Current service cost	**–**	**(0.5)**	**(0.5)**	–	(0.2)	(0.2)
– Administrative expenses and taxes	**(2.3)**	**–**	**(2.3)**	(1.5)	–	(1.5)
Included in interest on retirement benefit obligation net finance expense:						
– Interest income on scheme assets	**26.7**	**–**	**26.7**	29.6	–	29.6
– Interest cost on liabilities	**(32.3)**	**–**	**(32.3)**	(37.0)	–	(37.0)
Retirement benefit obligation net finance expense	**(5.6)**	**–**	**(5.6)**	(7.4)	–	(7.4)
Total recognised in the consolidated income statement	**72.6**	**–**	**72.6**	(8.9)	(0.2)	(9.1)
Return on scheme assets excluding assumed interest income	**21.1**	**–**	**21.1**	114.7	–	114.7
Remeasurement (losses)/gains on defined benefit pension obligations	**40.4**	**0.1**	**40.5**	(140.0)	0.1	(139.9)
Amounts recognised in other comprehensive income	**61.5**	**0.1**	**61.6**	(25.3)	0.1	(25.2)

Major categories of scheme assets as a percentage of total scheme assets:

	2018 UK %	2018 Overseas %	2018 Total %	2017 UK %	2017 Overseas %	2017 Total %
Equities	**20.0**	**–**	**20.0**	22.9	–	22.9
Bonds	**28.0**	**–**	**28.0**	27.7	–	27.7
Gilts	**–**	**–**	**–**	–	–	–
Diversified Growth Fund	**21.0**	**–**	**21.0**	20.5	–	20.5
Liability Driven Investment Fund	**24.0**	**–**	**24.0**	22.8	–	22.8
Multi Asset Credit	**5.0**	**–**	**5.0**	3.9	–	3.9
Other	**2.0**	**–**	**2.0**	2.2	–	2.2

The Diversified Growth Fund is a diversified asset portfolio which includes investments in equities, emerging market bonds, property, high yield credit and structured finance and smaller holdings in other asset classes. The Liability Driven Investment (LDI) fund consists of fixed interest bond holdings (approximately 49 per cent), index linked bond holdings (approximately 37 per cent) and cash (approximately 14 per cent). Interest rate swaps and floating rate notes are employed to complement the role of the LDI fund for liability risk management. Derivatives have been valued on a mark to market basis. The LDI is designed to proportionally counterbalance the effect/impact of a decrease/increase in interest rates/inflation on 50% of the funded obligations. The Multi-Asset Credit Fund invests in a variety of debt instruments.

Multi Asset Credit, Diversified Growth Funds and LDI asset categories include certain assets which are not quoted in an active market and are stated at fair value estimates provided by the manager of the investment fund.

Other UK assets comprise cash, interest rate swaps and floating rate notes.

24 Retirement benefit obligations continued

(a) Defined benefit pension schemes continued

Principal actuarial assumptions:

	2018 UK %	2018 Overseas %	2017 UK %	2017 Overseas %
Future pension increases – past service		–	3.65	–
Discount rate	**2.65**	–	2.75	–
CPI inflation rate	**2.00**	–	2.20	–
RPI inflation rate	**3.10**	–	3.30	–

The financial assumptions adopted as at 31 March 2018 reflect the duration of the scheme liabilities which has been estimated to be 16 years assuming CPI linked benefits.

At 31 March 2018 mortality assumptions were based on tables issued by Club Vita, with future improvements in line with the CMI model, CMI_2017 (2017: CMI_2015) and a long term rate of 1.25 per cent per annum (2016/17: long term rate of 1.25% per annum). The resulting life expectancies within retirement are as follows:

		2018	2017
Aged 65 retiring immediately (current pensioner)	Male	**22.4**	22.7
	Female	**23.8**	24.2
Aged 50 retiring in 17 years (future pensioner)	Male	**22.8**	23.3
	Female	**24.9**	25.5

The defined benefit pension schemes expose the Group to the following main risks:

Mortality risk – an increase in the life expectancy of members will increase the liabilities of the schemes. The mortality assumptions are reviewed regularly, and are considered appropriate.

Interest rate risk – A decrease in bond yields will increase the liabilities of the scheme. Liability driven investment strategies are used to hedge part of this risk.

Investment risk – The value of pension scheme assets vary with changes in interest rates, inflation expectations, credit spreads, exchange rates, and equity and property prices. There is a risk that asset returns are volatile and that the value of pension scheme assets may not move in line with changes in pension scheme liabilities. To mitigate against investment risk the pension scheme invests in derivatives which aim to hedge a proportion of the movements in assets and liabilities. The pension scheme invests in a wide range of assets to provide diversification in order to reduce the risk that a single investment or type of asset class could have a materially adverse impact on total scheme assets. The investment strategy and performance of investment funds are reviewed regularly to ensure the asset strategy of the pension schemes continues to be appropriate.

Inflation risk – The liabilities of the scheme are linked to inflation. An increase in inflation will result in an increase in liabilities. There are caps in place for UK scheme benefits to mitigate the risk of extreme increases in inflation. Liability driven investment strategies are used to hedge part of this risk. Any increase in the retirement benefit obligation could lead to additional funding obligations in future years.

The table below provides the sensitivity of the liability in the scheme to changes in various assumptions:

Assumption change	Approximate impact on liability
0.25% decrease in discount rate	Increase in liability of c£41m
0.25% increase in CPI inflation rate	Increase in liability of c£17m
Increasing life expectancy by one year	Increase in liability of c£45m

The liability sensitivities have been derived using projected cash flows for the Scheme valued using the membership profile as at 5 April 2015 and assumptions chosen for the 2018 year end. The sensitivity analysis does not allow for changes in scheme membership since the 2015 actuarial valuation or the impact of the Scheme or Group's risk management activities in respect of interest rate and inflation risk on the valuation of the Scheme assets.

The largest defined benefit pension scheme operated by the Group is in the UK. The Group's formal triennial funding valuation of the UK defined benefit pension scheme was finalised in June 2016. The underlying funding deficit as at 5 April 2015 was valued at £252m.

Changes in the fair value of UK scheme assets:

	2018 £m	2017 £m
At 25 March 2017/26 March 2016	**974.5**	861.9
Assumed Interest income on scheme assets	**26.7**	29.6
Scheme administration expenses	**(2.3)**	(1.5)
Return on scheme assets less interest income	**18.4**	114.7
Employer contributions and other income	**15.3**	14.8
Benefits paid (including transfers)	**(55.3)**	(45.0)
At 31 March 2018/25 March 2017	**977.3**	974.5

24 Retirement benefit obligations continued

(a) Defined benefit pension schemes continued
Changes in the fair value of UK defined benefit pension obligations:

	2018 £m	2017 £m
At 25 March 2017/26 March 2016	**(1,211.5)**	(1,079.5)
Interest cost on liabilities	**(32.3)**	(37.0)
Past service cost	**80.5**	–
Effect of changes in financial assumptions	**11.9**	(168.9)
Effect of changes in demographic assumptions	**24.1**	12.9
Effect of experience items on liabilities	**4.4**	16.0
Benefits paid (including transfers)	**55.3**	45.0
At 31 March 2018/25 March 2017	**(1,067.6)**	(1,211.5)

During 2015/16, the Group made special funding payments of £19.1m (including scheme administration fees). The Group's formal triennial valuation of the UK defined benefit Scheme was finalised in June 2016. The underlying funding deficit was valued at £252m. The Group agreed a revised funding plan with the Trustee to eliminate the deficit over a period of 12 years from 31 March 2016. The plan will see the existing funding payment schedule extended from 2022 to 2028.

The cash contributions to the Scheme of £13.5m have been made in the current year and £20.5m will be made in 2019 and then rising by 4% per annum to 2022. It will be frozen at £23.0m per year between 2023 and 2028. The Group will continue to pay annual fees of £1.6m for managing the Scheme in addition to the cash contributions.

(b) Defined contribution pension plans
The Group operates a number of defined contribution plans for which the charge in the consolidated income statement for the year was £8.9m (2016/17: £8.8m).

25 Employee information

	2018 number	2017 number
Average number of employees		
United Kingdom and Ireland	**2,041**	2,041
Rest of Europe	**450**	447
The Americas	**59**	30
Rest of world	**638**	633
	3,188	3,151

	2018 £m	2017 £m
Employee costs (including Directors' emoluments)		
Wages and salaries	**128.3**	116.1
Social security costs	**12.4**	10.3
Share incentive schemes	**1.0**	0.5
Sharesave schemes	**1.2**	0.4
Pension costs	**8.9**	8.8
	151.8	136.1

More detailed information regarding the Directors' remuneration, shareholdings, pension entitlement, share options and other long-term incentive plans is shown in the directors' remuneration report on pages 74 to 94.

26 Capital commitments

	2018 £m	2017 £m
The following commitments existed at the balance sheet date:		
– Contracted but not provided for in the accounts	**630.4**	6.5

Included in the table above is an amount in relation to the sale of Portals De La Rue Limited to EPIRIS Fund II on 29 March 2018.

As part of the transaction Portals De La Rue Limited will supply security paper to meet the Group's anticipated internal requirements with pre agreed volumes and price mechanisms for the next 10 years. Based on the terms of the agreement the Group has a capital commitment of approximately £626m over the next 10 years. Refer to note 5 for further details.

27 Contingent liabilities

De La Rue has extensive international operations and is subject to various legal and regulatory regimes, including those covering taxation matters from which, in the ordinary course of business, contingent liabilities can arise.

As part of the sale of the CPS business the company gave certain warranties which were usual for a transaction of this nature. The buyer has indicated that it intends to claim under certain of these warranties but as insufficient evidence has been received to establish whether the claim has any merit no amount has been provided for at this stage.

During 2017 an employee at the Paper Mill in Bathford suffered a serious injury. The investigation by the enforcing authorities is ongoing. At the date of the statement of financial position no amounts have been provided in respect of this matter. It is not practicable to provide an estimate of the financial effect and there is uncertainty relating to the amount or timing of any outflow.

The group also provides guarantees and performance bonds which are issued in the ordinary course of business. In the event that a guarantee bond is called, provision may be required subject to the particular circumstances including an assessment of its recoverability.

28 Related party transactions

During the year the Group traded on an arms length basis with the associated company Fidink S.A. (33.3 per cent owned). The Group's trading activities with this company included £24.6m (2016/17: £20.8m) for the purchase of security ink and other consumables. At the balance sheet date there were creditor balances of £0.7m (2016/17: £6.4m) with Fidink S.A.

Intra-Group transactions between the parent and the fully consolidated subsidiaries or between fully consolidated subsidiaries are eliminated on consolidation.

Key management compensation

	2018 £m	2017 £m
Salaries and other short term employee benefits	**3.0**	3.0
Termination benefits	**–**	–
Retirement benefits:		
– Defined contribution	**0.1**	0.1
Share based payments	**0.1**	0.2
	3.2	3.3

Key management comprises members of the Board (including the fees of Non-executive Directors) and the Executive Leadership Team. Termination benefits include compensation for loss of office, ex gratia payments, redundancy payments, enhanced retirement benefits and any related benefits in kind connected with a person leaving office or employment.

29 Post balance sheet events

Since the year end there are no material events that have occurred.

Notes to the accounts continued

30 Subsidiaries and associated companies as at 31 March 2018

A full list of subsidiary and associated undertakings is below. Unless otherwise stated all Group owned shares are ordinary.

Country of incorporation and operation		Activities	De La Rue interest %
Europe			
United Kingdom	DLR (No.1) Limited	Holding company	100
	DLR (No.2) Limited*	Holding company	100
	De La Rue Holdings Limited	Holding and general commercial activities	100
	De La Rue International Limited	Trading	100
	De La Rue Overseas Limited	Holding company	100
	De La Rue Finance Limited	Internal financing	100
	De La Rue Investments Limited	Holding company	100
	Portals Group Limited	Holding company	100
	Bradbury Wilkinson Holdings Limited (in liquidation)	(in liquidation)	100
	De La Rue Consulting Services Limited	Trading	100
	De La Rue Healthcare Trustee Limited	Dormant	100
	De La Rue Pension Trustee Limited	Dormant	100
	De La Rue Scandinavia Limited	Holding company	100
	Harrison & Sons Limited[a]	Non-trading	100
	Portals Holdings Limited	Dormant	100
	Portals Property Limited	Trading	100
	De La Rue House Jays Close Viables Basingstoke Hampshire RG22 4BS, United Kingdom		
Channel Islands	The Burnhill Insurance Company Limited	Insurance	100
	Level 5, Mill Court, La Charroterie, St Peter Port, GY1 1EJ, Guernsey		
	De La Rue (Guernsey) Limited	Non-trading	100
	PO Box 142, The Beehive, Rohais, St Peter Port, GY1 3HT, Guernsey		
Ireland	Thomas De La Rue and Company (Ireland) Limited	Dormant	100
	Suite 3, One Earlsfort Centre, Lower Hatch Street, Dublin 2, Ireland		
Malta	De La Rue Currency and Security Print Limited	Trading	100
	De La Rue Services Limited	Trading	100
	B40/43 Industrial Estate, Bulebel, Zejtun, Malta		
The Netherlands	De La Rue BV	Trading	100
	Hoogoorddreef 15, 1101 BA, Amsterdam, Netherlands		
Poland	Harrison & Sons Sp. Z o.o	Dormant	100
	Mokotowska 24, 00-561, Warsaw, Poland		
Sweden	De La Rue (Sverige) AB	Non-trading	100
	Box 14055, 104 40, Stockholm, Sweden		
Switzerland	Thomas De La Rue A.G.	Holding company	100
	Rue de Morat 11, 1700 Fribourg, Switzerland		
North America			
USA	De La Rue North America Holdings Inc.[b]	Holding company	100
	8333 N.W. 53rd Street, Suite 502, Doral, Florida 33166, United States		
	De La Rue Authentication Solutions Inc.	Trading	100
	1750 North 800 West, Logan, Utah 84321, USA		
Canada	De La Rue Canada One Limited	Trading	100
	1400-340 Albert Street, Ottawa, ON KIR 0AS, Canada		

30 Subsidiaries and associated companies as at 31 March 2018 continued

Country of incorporation and operation		Activities	De La Rue interest %
South America			
Brazil	De La Rue Cash Systems Industrias Limitada[c]	Non-trading	100
	De La Rue Cash Systems Limitada[c]	Trading	100
	Rua Boa Vista, 254, 13th Floor, Suite 41, Centro, Sao Paulo, 01014-907, Brazil		
Saint Lucia	De La Rue Caribbean Limited	Trading	100
	Meridan Place, Choc Estate, Castries, Saint Lucia		
Africa			
Kenya	De La Rue Currency and Security Print Limited	Trading	100
	De La Rue Kenya EPZ Limited	Dormant	100
	De La Rue Kenya Limited	Trading	100
	ABC Towers, 6th Floor, ABC Place, Waiyaki Way, Nairobi, Kenya		
Angola	De La Rue Angola Limitada	Trading	100
	Rua Engrácia Fragoso 60, Edifcio Kalunga Atrium, Escritòrio 104, Letra D, Distrito Urbano da Ingombota, Luanda, Angola		
Nigeria	De La Rue Commercial Services Limited	Trading	100
	7th Floor, Marble House, 1 Kingsway Road, Ikoyi, Lagos, Nigeria		
Senegal	De La Rue West Africa SARL	Trading	100
	VDN Keur Gorgui Imm Hermes 1, 2e Etage No 16 Dakar-Liberte, BP 10700, Senegal		
South Africa	De La Rue Global Services (SA) (Pty) Limited	Non-trading	100
	3rd Floor, 54 Melrose Boulevard, Melrose Arch, Gauteng, 2196, South Africa		
Australia and Oceania			
Australia	De La Rue Australia Pty Limited	Trading	100
	Level 22, MLC Centre, 19 Martin Place, Sydney, NSW 2000, Australia		
Far East and Asia			
China	De La Rue Security Technology (Beijing) Co. Ltd	Trading	100
	1011, 10F Office Building No.1 Guanghua Road Chaoyang District, Beijing, China		
Hong Kong	Thomas De La Rue (Hong Kong) Limited	Trading	100
	Suite 1106-8, 11/F Tai Yau Building, No 181 Johnson Road, Wanchai, Hong Kong		
Sri Lanka	De La Rue Lanka Currency and Security Print (Private) Limited	Trading	60
	No 9/5 Thambiah Avenue, Colombo 7, Sri Lanka		
India	De La Rue India Private Limited	Trading	100
	1404, 14 Floor, Tower B, Signature Towers, South City 1, Gurgaon, Haryana, India		
Singapore	De La Rue Currency and Security Print Pte Ltd	Non-trading	100
	80 Raffles Place, #32-01, UOB Plaza, 048624, Singapore		
United Arab Emirates	De La Rue FZCO	Trading	100
	Dubai Airport Free Zone Authority, Building 6 West Wing A, Office #820, PO Box 371683, Dubai		
Associates			
Switzerland	Fidink S.A.	Trading	33

* Ordinary shares held directly by De La Rue plc.

a Ordinary shares, cumulative preference shares and deferred shares.

b Common stock.

c Quotas.

31 Non-controlling interest

The Group's only subsidiary with a material non-controlling interest is De La Rue Lanka Currency and Security Print (Private) Limited, whose country of incorporation and operation is Sri Lanka. The accumulated non-controlling interest of the subsidiary at the end of the reporting period is shown on the Group balance sheet. The following table summarises key information relating to this subsidiary, before intra-group eliminations:

	2018 £m	2017 £m
Non-current assets	**15.7**	14.2
Current assets	**16.2**	18.5
Non-current liabilities	**(0.4)**	(1.8)
Current liabilities	**(8.9)**	(10.7)
Net assets (100%)	**22.6**	20.2
Revenue	**37.5**	41.8
Profit for the year	**3.5**	4.0
Non-controlling interest percentage	**40%**	40%
Profit allocated to non-controlling interest	**1.4**	1.6
Dividends paid to non-controlling interest	**0.3**	0.3
Cash flows from operating activities	**1.7**	2.0
Cash flows from investment activities	**(1.9)**	(1.1)
Cash flows from financing activities	**0.3**	(10.7)
Net increase in cash and cash equivalents	**0.1**	(9.8)

32 Business Combinations

On 12 December 2016, De La Rue entered into a Share Purchase Agreement ('SPA') to acquire 100% of the outstanding capital stock of DuPont Authentication Inc (subsequently renamed to De La Rue Authentication Solutions ('DAS'). The acquisition completed on 6 January 2017, for a total consideration of $26.2m (£21.3m). This included the initial cash payment of $24.8m (equivalent to £20.2m) and a closing working capital adjustment of $1.4m (£1.1m) as per the terms of the SPA.

DAS is a leading global producer of photopolymer holographic films and 3D holograms and associated software. Its technology is used to authenticate products ranging from consumer electronics to spirits and also to secure identity documents. Its products are based on the highly specialised and secure Lippmann holography technology. Based in Utah, USA and with operations in Delaware, DAS has a well established global customer base in brand protection and identity authentication. This acquisition is in line with De La Rue's five year strategic plan to transform the Group into a technology led Security product and service provider. It will strengthen De La Rue's Security Features, Product Authentication & Traceability, and Identity Solutions product lines. DuPont Authentication's proprietary technology will also provide a solid platform for De La Rue to create new applications for the Currency market.

In 2016/17 net assets recognised in the financial statements were based on provisional values utilising the forecasts available at that time. During 2017/18 the purchase price accounting has been finalised utilising more detailed financial forecasts which provide greater visibility into the respective split of intangibles assets on the date of acquisition between the Izom and Omnidex intangible assets. This split is considered important as from 2017/18 management are reporting the Izom product within the PA&T segment and Omnidex within the IDS segment. During the year the purchase price accounting for the Group's acquisition of DuPont Authentication (subsequently renamed to De La Rue Solutions Inc) has been completed. This has resulted in a change to net assets recognised on acquisition. Goodwill recognised on acquisition has decreased by £0.8m, intellectual property intangibles have decreased by £0.9m, Customer relationship intangibles recognised on acquisition have increased by £2.3m and Trade name intangibles have decreased by £0.1m. Deferred tax liabilities that had been recognised on acquisition have increased by £0.4m.

Valuation techniques and key valuation assumptions and estimates

The principle intangible assets recognised were intellectual property £3.8m and customer relationships £4.6m. The key assumptions used in valuing these were:

Intellectual property

Valued on a 'relief from royalty basis'. Key valuation assumptions were the appropriate third party royalty rate used to calculate the royalties saved from owning this intellectual property and estimations of future forecast sales levels. Management has also made judgements on the useful economic life of this asset and consequently the period of time over which forecasted cash flows should be estimated. Discount rate has been determined using the 'internal rate of return' for the transaction with an incremental risk premium added based on the perceived additional risk for this asset as compared to the acquired business as a whole.

32 Business Combinations continued

Customer relationships

Valued using the 'multi-excess earnings method'. Key valuation assumptions were the future attrition rate for customers existing at the acquisition date and the expected growth in sales from the remaining customers in the future. Judgements have also been made with regards to estimated future forecast sales and cost levels. Management has also made judgements on the useful economic life of this asset and consequently the period of time over which forecasted cash flows should be estimated. Discount rate has been determined using the 'internal rate of return' for the transaction with an incremental risk premium added based on the perceived additional risk for this asset as compared to the acquired business as a whole.

Goodwill

The goodwill recognised represents the expected synergies to be derived from the acquisition, the value of the assembled workforce on acquisition and assets that do not qualify for separate recognition at the acquisition date.

Consideration was fully satisfied in cash. The closing working capital adjustment of $1.4m (£1.1m) was paid in April 2017.

Acquisition related costs of £0.2m were recognised in the Income Statement (See Note 4 'exceptional items').

DAS contributed £10.9m of revenue and an operating profit of £1.2m to the Group in the year which was in line with expectations.