Annual accounts

Annual accounts

Consolidated Statement of Comprehensive Net Expenditure
for the year ended 31 March 2019

	note	**2019 £m**	2018 £m
Expenditure			
Authority administration expenditure	5	**51**	44
Programme expenditure	6	**3,505**	3,670
Adjustments to provisions	7	**(102,208)**	69,461
Depreciation and impairment	8	**58**	100
		(98,594)	73,275
Income	9	**(900)**	(1,064)
Net expenditure before interest and taxation		**(99,494)**	72,211
Interest receivable		**(18)**	(9)
Interest payable		**4**	4
Net interest payable on defined benefit pension schemes	26	**18**	18
Net expenditure before taxation		**(99,490)**	72,224
Taxation	10	**-**	-
Net expenditure after taxation for the year		**(99,490)**	72,224
Other comprehensive expenditure / (income):			
Deficit arising on revaluation of Property, Plant and Equipment	11	**22**	25
Net recognised (gain)/loss on defined benefit pension schemes	26	**(8)**	(81)
Total comprehensive net expenditure for the year		**(99,476)**	72,168

The related notes numbered 1 to 31 form part of these financial statements. Authority refers to the balances within the NDA itself, with NDA Group balances incorporating the Authority and its subsidiaries. Details of subsidiaries are given in note 13.

Authority Statement of Comprehensive Net Expenditure
for the year ended 31 March 2019

	note	2019 £m	2018 £m
Expenditure			
Authority administration expenditure	5	**51**	44
Programme expenditure	6	**3,409**	3,575
Adjustments to provisions	7	**(102,114)**	69,489
Depreciation and impairment	8	**42**	79
		(98,612)	73,187
Income	9	**(850)**	(1,022)
Net expenditure before interest and taxation		**(99,462)**	72,165
Interest receivable		**(1)**	(1)
Interest payable		**–**	–
Net expenditure before taxation		**(99,463)**	72,164
Taxation	10	**–**	-
Net expenditure after taxation for the year		**(99,463)**	72,164
Other comprehensive expenditure / (income):			
Deficit arising on revaluation of Property, Plant and Equipment	11	**22**	25
Actuarial (gain) / loss on defined benefit pension schemes	26	**(2)**	5
Total comprehensive net expenditure for the year		**(99,443)**	72,194

The related notes numbered 1 to 31 form part of these financial statements. Authority refers to the balances within the NDA itself, with NDA Group balances incorporating the Authority and its subsidiaries. Details of subsidiaries are given in note 13.

Consolidated Statement of Financial Position
as at 31 March 2019

	note	2019 £m	2018 restated £m
Non-current assets			
Property, plant and equipment	11	**652**	830
Recoverable contract costs	14	**1,620**	3,346
Finance lease receivables	20	**43**	43
Trade and other receivables	21	**39**	40
Total non-current assets		**2,354**	4,259
Current assets			
Inventories	16	**82**	68
Other investments	19	**450**	374
Finance lease receivables	20	**2**	2
Trade and other receivables	21	**171**	222
Cash and cash equivalents	22	**113**	214
Total current assets		**818**	880
Total assets		**3,172**	5,139
Current liabilities			
Trade and other payables	23	**(1,093)**	(1,463)
Nuclear provisions	24	**(2,735)**	(2,860)
Other provisions	25	**(10)**	(143)
Total current liabilities		**(3,838)**	(4,466)
Total assets less current liabilities		**(666)**	673
Non-current liabilities			
Trade and other payables	23	**(1,696)**	(1,620)
Nuclear provisions	24	**(127,223)**	(230,709)
Other provisions	25	**(127)**	(360)
Defined benefit pension scheme deficits	26	**(798)**	(706)
Total non-current liabilities		**(129,844)**	(233,395)
Net liabilities		**(130,510)**	(232,722)
Taxpayers' equity			
Revaluation reserve		**29**	51
General reserve		**(130,541)**	(232,775)
Total taxpayers' equity		**(130,512)**	(232,724)
Non-controlling interests	27	**2**	2
Total equity		**(130,510)**	(232,722)

The financial statements on pages 90 to 136 were approved by the Board and authorised for issue by the Accounting Officer on 18 June 2019:

David Peattie
Chief Executive and Accounting Officer
18 June 2019

The related notes numbered 1 to 31 form part of these financial statements. Authority refers to the balances within the NDA itself, with the NDA Group balances incorporating the Authority and its subsidiaries. Details of subsidiaries are given in note 13.

Authority Statement of Financial Position
as at 31 March 2019

	note	2019 £m	2018 restated £m
Non-current assets			
Property, plant and equipment	11	**380**	435
Investments in subsidiaries	13	**259**	259
Recoverable contract costs	14	**1,620**	3,346
Finance lease receivables	20	**43**	43
Trade and other receivables	21	**39**	40
Total non-current assets		**2,341**	4,123
Current assets			
Inventories	16	**34**	29
Finance lease receivables	20	**2**	2
Trade and other receivables	21	**370**	413
Cash and cash equivalents	22	**28**	82
Total assets		**434**	526
Total assets		**2,775**	4,649
Current liabilities			
Trade and other payables	23	**(1,038)**	(1,391)
Nuclear provisions	24	**(2,735)**	(2,855)
Other provisions	25	**(9)**	(141)
Total current liabilities		**(3,782)**	(4,387)
Total assets less current liabilities		**(1,007)**	262
Non-current liabilities			
Trade and other payables	23	**(1,696)**	(1,620)
Nuclear provisions	24	**(127,923)**	(231,211)
Other provisions	25	**(100)**	(334)
Defined benefit pension scheme deficits	26	**(18)**	(20)
Total non-current liabilities		**(129,737)**	(233,185)
Net liabilities		**(130,744)**	(232,923)
Taxpayers' equity			
Revaluation reserve		**4**	26
General reserve		**(130,748)**	(232,949)
Total taxpayers' equity		**(130,744)**	(232,923)

The financial statements on pages 90 to 136 were approved by the Board and authorised for issue by the Accounting Officer on 18 June 2019:

David Peattie
Chief Executive and Accounting Officer
18 June 2019

The related notes numbered 1 to 31 form part of these financial statements. Authority refers to the balances within the NDA itself, with the NDA Group balances incorporating the Authority and its subsidiaries. Details of subsidiaries are given in note 13.

Statement of Cash Flows
for the year ended 31 March 2019

		NDA Group		Authority	
		2019	2018	**2019**	2018
		£m	£m	**£m**	£m
Cash flows from operating activities					
Net expenditure after taxation for the year	SoCNE	**99,490**	(72,224)	**99,463**	(72,164)
Adjustments for:					
Interest receivable	4	**(18)**	(9)	**(1)**	(1)
Interest payable		**4**	4	**–**	–
Net interest payable on defined benefit pension schemes	26	**18**	18	**–**	–
Excess of pension service costs over cash contributions paid		**77**	95	**–**	–
Depreciation of property, plant and equipment	11	**56**	64	**40**	43
Impairment of property, plant and equipment	11	**-**	36	**-**	36
Revalorisation of advance payments	23	**123**	181	**123**	181
Amortisation of recoverable contract costs	14	**166**	228	**166**	228
Decrease/(Increase) in inventories	16	**(14)**	8	**(5)**	4
Decrease/(Increase) in receivables		**53**	3	**43**	14
Decrease in payables		**(516)**	(370)	**(502)**	(374)
Increase in nuclear provisions impacting net expenditure	7	**(101,633)**	69,618	**(101,539)**	69,644
Decrease in other provisions impacting net expenditure	7	**(575)**	(157)	**(575)**	(155)
Net cash outflow from operating activities		**(2,769)**	(2,505)	**(2,787)**	(2,544)
Cash flows from investing activities					
Interest received	4	**18**	9	**1**	1
Interest paid		**(4)**	(4)	**–**	–
Purchases of property, plant and equipment	11	**(9)**	(28)	**(7)**	(39)
Purchase of investments	19	**(76)**	(18)	**–**	–
Acquisition of shares in subsidiary	13	**-**	–	**-**	(30)
Net cash outflow from investing activities		**(71)**	(41)	**(6)**	(68)
Cash flow from financing activities					
Grants from parent department	SoCTE	**3,391**	3,488	**3,391**	3,488
Surrender of receipts to Consolidated Fund	SoCTE	**(652)**	(863)	**(652)**	(863)
Net cash inflow from financing activities		**2,739**	2,625	**2,739**	2,625
Net increase / (decrease) in cash and cash equivalents		**(101)**	79	**(54)**	13
Cash and cash equivalents at beginning of period	22	**214**	135	**82**	69
Cash and cash equivalents at end of period		**113**	214	**28**	82

Statement of Changes in Taxpayers' Equity
for the year ended 31 March 2019

NDA Group	General £m	Revaluation £m	Total £m
Balance at 31 March 2017	(163,266)	76	(163,190)
Impact of applying IFRS 9	(3)	-	(3)
Restated balance at 1 April 2017	(163,269)	76	(163,193)
Deficit arising on revaluation of PPE	–	(25)	(25)
Gross grants from parent department	3,488	–	3,488
Amounts surrenderable to Consolidated Fund (a)	(851)	–	(851)
Actuarial gain on defined benefit pension schemes	81	–	81
Net expenditure	(72,224)	–	(72,224)
Balance at 31 March 2018	(232,775)	51	(232,724)
Deficit arising on revaluation of PPE	–	(22)	(22)
Gross grants from parent department	3,391	–	3,391
Amounts surrenderable to Consolidated Fund (a)	(655)	–	(655)
Actuarial gain on defined benefit pension schemes	8	–	8
Net expenditure	99,490	–	99,490
Balance at 31 March 2019	(130,541)	29	(130,512)

Authority	General £m	Revaluation £m	Total £m
Balance at 31 March 2017	(163,414)	51	(163,363)
Impact of applying IFRS 9	(3)	-	(3)
Restated balance at 1 April 2017	(163,417)	51	(163,366)
Deficit arising on revaluation of PPE	–	(25)	(25)
Gross grants from parent department	3,488	–	3,488
Amounts surrenderable to Consolidated Fund (a)	(851)	–	(851)
Actuarial loss on defined benefit pension schemes	(5)	–	(5)
Net expenditure	(72,164)	–	(72,164)
Balance at 31 March 2018	(232,949)	26	(232,923)
Deficit arising on revaluation of PPE	–	(22)	(22)
Gross grants from parent department	3,391	–	3,391
Amounts surrenderable to Consolidated Fund (a)	(655)	–	(655)
Actuarial gain on defined benefit pension schemes	2	–	2
Net expenditure	99,463	–	99,463
Balance at 31 March 2019	(130,748)	4	(130,744)

The revaluation reserve is used to record the increases in the fair value of property, plant and equipment carried at valuation and decreases to the extent that such decrease relates to an increase on the same asset previously recognised in taxpayers' equity.

The general reserve is used to record the deficit or surplus arising from the Statement of Comprehensive Net Expenditure, and the deficit or surplus arising on the transfer of assets and liabilities to the NDA from other parts of the public sector.

(a) Surrender of receipts to Consolidated Fund of £655 million (2018: £851 million) included £2 million payable as at 31 March 2019 (2018: £1 million receivable at 31 March 2018). This amount was included within current trade and other payables in the Statement of Financial Position of Group and Authority at 31 March 2019. The amount paid in cash in the year was £652 million (2018: £863 million).

Notes to the financial statements

for the year ended 31 March 2019

1. General information

The NDA is an executive NDPB that was established on 22 July 2004 under the Energy Act 2004 and is currently sponsored by BEIS. The NDA was created with the primary objective of overseeing and monitoring the decommissioning and clean-up of the UK's civil nuclear legacy. The Financial Overview on pages 14 and 15 provide further information on the
NDA's operations.

These financial statements are presented in pounds sterling and all values are rounded to the nearest million (£m) except when otherwise indicated.

2. Statement of significant accounting policies

2.1 Basis of preparation

These financial statements have been prepared under the accounts direction issued by the Secretary of State for Energy and Climate Change in accordance with section 26 of the Energy Act 2004. The accounts direction requires compliance with the Government Financial Reporting Manual (FReM) and any other guidance issued by HM Treasury. The NDA has a specific direction in respect of the accounting for waste management assets on an historical cost basis. The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. Where the FReM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the NDA for the purpose of giving a true and fair view has been selected. The significant accounting policies adopted by the NDA are described below. They have been applied consistently in dealing with items that are considered material to the financial statements, unless otherwise stated.

These financial statements have been prepared on the historical cost basis, except for the revaluation of property, plant and equipment (other than waste management assets). Investments, financial assets and financial liabilities are measured at amortised cost.

The consolidated statement of financial position at 31 March 2019 shows net liabilities of £131 billion (2018: £233 billion). This reflects the inclusion of liabilities falling due in future years which, to the extent that they are not to be met from the NDA's other sources of income, may only be met by future grants in aid from the NDA's sponsoring department, BEIS. Under the normal conventions applying to parliamentary control over income and expenditure, such grants in aid may not be issued in advance of need. Grants in aid for 2019/20, taking into account the amounts required to meet the NDA's liabilities falling due in this year, have already been included in BEIS's estimates, and these have been approved by Parliament. There is no reason to believe that future BEIS sponsorship and future parliamentary approval will not be forthcoming. It has accordingly been considered appropriate to adopt a going concern basis for the preparation of these financial statements.

2.2 Adoption of new and revised Standards

The following new or revised standards were adopted during the year:
IFRS 9 Financial Instruments (see notes 17, 20 and 21)
IFRS 15 Revenue from Contracts with Customers (see notes 2.5, 3 and 9)

The following Standards have been issued but are not yet effective.
IFRS 16 Leases
IFRS 17 Insurance Contracts

The Authority expects that the introduction of IFRS 16 is likely to result in a material increase to non-current assets and current / non-current liabilities for both Authority and NDA Group, resulting from bringing into the Statement of Financial Position the Authority's / Group's operating lease commitments as lessee (see note 28 a).

The Authority has reviewed relevant financial instruments for the purposes of IFRS 9. This has resulted in the reclassification of certain financial instruments as follows:

Financial instrument	Classification pre IFRS 9	Classification post IFRS 9
Financial assets		
Other investments	Fair value through profit or loss (FVTPL)	Fair value through profit or loss (FVTPL)
Non-current finance lease receivable	Loans and receivables	Amortised cost
Non-current other receivables		
Current trade and other receivables		
Current finance lease receivables		
Cash and cash equivalents		
Financial liabilities		
Current trade and other payables	Fair value through profit or loss (FVTPL)	Amortised cost

The revised classification is shown in Note 17.
The Authority has reviewed the carrying value of financial instruments for the expected credit loss on each, for the purposes of IFRS 9. The expected credit loss for the prior reporting period has resulted in a restatement of the trade receivables and finance lease receivables balances in the prior reporting period. The resulting impairment is shown in the Statement of Changes in Taxpayers' Equity for the prior reporting period. The subsequent impairment for the 2018/19 reporting period is shown as a charge to the Statement of Comprehensive Net Expenditure and in note 8. The expected credit losses at the reporting date are shown in notes 20 and 21.

The Authority applied IFRS 15 on a prospective basis from 1 April 2018. The Authority's contracts for the reprocessing of spent fuel and management of spent fuels, wastes and products are very long term by nature and have already been in place for several decades. The extent to which the Authority is able to retrospectively restate the revenue arising from the contracts (as ordinarily required by IFRS 15) is severely limited due to the availability of consistent historical data relating to the contracts and the extent to which the contracts and associated assumptions have changed over time.

The Authority therefore sought and received a derogation from HM Treasury to set aside the requirement to apply IFRS 15 retrospectively. This means that there is no requirement to present restatement adjustments in the first year of application (2018/19) as otherwise required by the transitional disclosure requirements of IFRS 15. No impact on the valuation of contract assets and liabilities arose as a result of the prospective application.

Under the new standard revenue from contracts will be recognised directly on the fulfilment of contractual performance obligations, which in turn will be measured either on the achievement of measurable outputs or over time. The table below summarises the main categories of performance obligations and the previous and new bases of revenue recognition for each:

<table>
<tr><th>Contract type</th><th>Categories of performance obligation</th><th>Significant payment terms</th><th>Previous basis of recognition (pre IFRS 15)</th><th>Basis of recognition (IFRS 15)</th></tr>
<tr><td rowspan="7">Spent fuel reprocessing and associated waste management</td><td>Receipt of spent fuel (performance obligation completed in 2018/19)</td><td rowspan="7">For some contracts, payments have been made in full and are accounted for as payments on account.

For the contract with UK energy producers, the overall underlying contract value is fixed (the only variation in price arise from standard indexation terms) and payments are made according to a contractual payment schedule continuing to 2028. Payments already made by the customer are accounted for as payments on account.</td><td rowspan="7">Proportion of overall cost, incurred in each reporting period; some revenue recognised on units of throughput (including reprocessing and waste treatment)</td><td>Units of throughput - point of receipt of spent fuel</td></tr>
<tr><td>Reprocessing of spent fuel (performance obligation completed in 2018/19)</td><td>Units of throughput - point of fuel shearing</td></tr>
<tr><td>Spent fuel storage (to 2086)</td><td rowspan="5">Evenly over remaining time period of service</td></tr>
<tr><td>Interim storage of wastes (expected to continue to 2025)</td></tr>
<tr><td>Treatment of wastes (expected to continue to 2025)</td></tr>
<tr><td>Storage of treated wastes (to 2038 or 2086 depending on type of waste)</td></tr>
<tr><td>Storage of products (to 2086)</td></tr>
<tr><td>Spent fuel receipt (of spent fuel not for reprocessing)</td><td>Receipt of spent fuel</td><td>Payments are made by the customer when fuel is first utilised, on a volume related basis, and accounted for by the Authority as payments on account until spent fuel is received (and revenue recognised)</td><td>Units of throughput - point of receipt of spent fuel</td><td>Units of throughput - point of receipt of spent fuel</td></tr>
<tr><td>Other contracts for waste and product storage</td><td>Waste and product storage</td><td>For one major contract type, payments have been made in full and are accounted for as payments on account. Others are invoiced and paid annually</td><td>Proportion of overall cost, incurred in each reporting period</td><td>Evenly over remaining time period of service</td></tr>
<tr><td rowspan="2">Storage and destorage of residues</td><td>Storage</td><td rowspan="2">Overall contract values are fixed and payments made according to contractual payment schedules</td><td rowspan="2">Proportion of overall cost, incurred in each reporting period</td><td>Evenly over remaining time period of service</td></tr>
<tr><td>Destorage</td><td>At point of destorage</td></tr>
</table>

Contract type	Categories of performance obligation	Significant payment terms	Previous basis of recognition (pre IFRS 15)	Basis of recognition (IFRS 15)
Legacy waste management	Legacy waste management	Overall contract value fixed and payments have been made in full	Proportion of overall cost, incurred in each reporting period	Revenue recognised in full reflecting that all performance obligations have been deemed to have been met according to the definitions in IFRS 15
	Ongoing legacy waste management	Contract values relate directly to cost of performance, and invoiced annually	Value invoiced in each reporting period	Revenue recognised as invoiced during 2018/19 reporting period. Contractual changes in 2019/20 expected to change this basis
	Waste management	For one major contract type, payments have been made in full	Proportion of overall cost, incurred in each reporting period	Evenly over remaining time
Waste substitution	Initial substitution of waste	Values are determined for each agreement individually, and payment made in full at the point of agreement	In full at point of agreement	In full at point of agreement
	Destorage and return of substituted waste	Payments have been made in full and are accounted for as payments on account	At point of destorage and return of waste	At point of destorage and return of waste
Transfer of ownership of nuclear materials	Transfer of ownership	Values are determined for each agreement individually, and payment made in full at the point of agreement	In full at the point of agreement	In full at the point of agreement
Transportation of nuclear fuel, waste and materials	Transportation of nuclear fuel, waste and materials	Values are determined for each agreement individually, and payment made according to pre-determined payment schedules	Values are determined for each agreement individually, and payment made according to pre-determined payment schedules	At point of service provision
Energy trading	Production of electricity and sales of gas	Values are determined by market demands and rates	At point of sale	At point of sale
Sundry	Various including provision of rechargeable services to third parties	Values determined by cost of providing service	At point of service provision	At point of service provision
Admin and non-programme	Various	Values determined by cost of providing service	At point of service provision	At point of service provision

Therefore under the new standard the Income figure is subject to increased uncertainty as a higher proportion of revenue recognition will be dependent on the performance of key plants at Sellafield in the remainder of their commercial operations (see notes 2.5 and 9 for more details).

In particular the Income figure 2018/19 was highly reliant on the performance of the THORP reprocessing plant in its final year of operations. The Impact of Volatility in THORP output was more significant under IFRS 15 than under previous standards. THORP concluded reprocessing operations during 2018/19 thereby removing this uncertainty from future years.

In order to produce a consistent measurement of fulfilment of the remaining performance obligations under the waste treatment elements of the respective spent fuel reprocessing contracts the Authority has determined that the remaining revenue on overseas reprocessing contracts will be recognised over the remainder of the period in which waste treatment services for all wastes produced by THORP plant will be completed (currently expected to conclude in 2025). This means that the completion of the programme will be treated as a single performance obligation under a single contract and as a result there is a non-recurring impact on the contract loss provision on the Authority's and Group's respective Statements of Financial Position.

If the authority had not applied the portfolio approach to these contracts, the revenue recognised in the period would have been approximately £440 million higher than that reported. The revenue will instead be recognised over the contract term, to the end of 2024/25.

The Authority deems this treatment to be appropriate and necessary given that the Authority is not retrospectively restating revenues under the contracts in question on the basis that:

- a literal interpretation of the Standard may have resulted in the immediate recognition in full, at the point of application and therefore within the reporting period, of the revenue remaining on the overseas reprocessing contracts.
- had the Authority applied retrospective restatement of revenues, this would have been offset by an adjustment to revenues still to be recognised on other reprocessing contracts, as at the point of application
- the offsetting adjustment is not available, and therefore an otherwise literal application of the Standard would produce a result which is not reflective of the overall progress of the waste treatment programme

The Authority has therefore deemed it appropriate and necessary to account for the waste treatment performance obligations within the reprocessing contracts on a portfolio basis (and therefore in practice a single performance obligation) which, while deviating from a literal interpretation of the Standard, is deemed consistent with its intent. In practice this is similar to how income from waste treatment services has been accounted for in the previous periods.

Further information on the application of IFRS 15 is contained in notes 2.5, 3 and 9.

Notes to the financial statements - continued

2.3 Basis of consolidation

The consolidated financial statements incorporate the financial statements of the NDA and entities controlled by the NDA (its subsidiary undertakings) made up to 31 March each year. Control is achieved where the NDA has the power to govern the financial and operating policies of an investee entity so as to obtain benefits from its activities.

All intra-group transactions, balances, income and expenses are eliminated on consolidation.

2.4 Income recognition

Where not otherwise measured and recognised in accordance with IFRS 15 and the NDA's accounting policy on contracts (below), income is measured at the fair value of the consideration received or receivable and represents amounts receivable for goods and services provided in the normal course of business, net of discounts, VAT and other sales related taxes, and electricity purchases relating to short-term balancing of output volume and hedging activities.

2.5 Contracts

Income recognition

Contract income is recognised by reference to the stage of completion of the contract activity at the reporting date. Prior to the implementation of IFRS 15 the Authority's accounting policy for most spent fuel reprocessing and/or waste management contracts was to measure the stage of completion according to the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs.

In accordance with IFRS 15 the Authority has:

- Identified contracts with customers and the contract price still to be recognised at the reporting date (in accordance with the derogation that allows the Authority to set aside the requirement to retrospective restate revenues) under each contract
- Determined the performance obligations under each contract
- Determined the relative value of each performance obligation
- Identified the appropriate basis for measuring the fulfilment of each performance obligation and therefore the recognition of revenue arising from each

Note 3 to the financial statements provides information on significant judgements performed by the Authority in applying IFRS 15, as required in order to determine:

- The expected value of each of the contracts with customers (the transaction price)
- The amounts of the transaction price of each contract to be allocated to each of the performance obligations in the contract
- The timing of satisfaction of performance obligations

Note 9 to the financial statements provides the following information:

- The extent of revenue recognised from contracts with customers
- Disaggregation of said revenue into categories that depict how the nature, timing and uncertainty of cash flows are affected by economic factors
- The aggregate amount of the transaction price allocated to the performance obligations that are wholly or partially unsatisfied
- Explanation of when the Authority expects to recognise the above transaction price as revenue

Note 14 to the financial statements provides information on recoverable contract costs, which comprise two elements:

- historic costs incurred prior to the recognition of revenue on each relevant contract, which constitute financial assets for the purposes of IFRS 15 and are charged to the accounts (amortised) in proportion to revenue recognised in each reporting period
- an estimate of the future costs which will be incurred in fulfilling the performance obligations under each contract which are accounted for under IAS 37 and constitute a subset of the costs included in the nuclear provision (and are presented as equal and opposite asset balances).

Note 23 to the financial statements provides information on payments on account, which are payments made by customers under long term contracts, in advance of the fulfilment of performance obligations. These balances are contract liabilities under IFRS 15.

The Authority will allocate any changes in the transaction price of each contract (including but not limited to the future revalorisation of payments on account balances) to the performance obligations as defined in the initial allocation of the transaction price to performance obligations at 1 April 2018, and in proportion to the allocations made at that time. Where this results in allocation of changes in transaction price to performance obligations already satisfied at the respective reporting date, the resulting allocation to satisfied performance obligations will be recognised as revenue in that reporting period.

Variations in contract work are included to the extent that they have been agreed with the customer.

Treatment of costs

Contract costs are recognised as expenses in the period in which they are incurred.

When it is probable that total contract costs will exceed total contract income, the expected loss is recognised as an expense immediately, being an adjustment to the contract loss provision in notes 7 and 25.

For contracts in progress at the reporting date, where costs still to be incurred exceed amounts received to date the balance is shown under non-current assets as recoverable contract costs. Where amounts received to date exceed costs still to be incurred the balance is shown under trade and other payables as payments received on account.

2.6 Leasing
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.

2.6 (a) The NDA Group as lessor
Amounts due from lessees under finance leases are recognised as receivables at the amount of the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term. The aggregate costs of any incentive to enter into an operating lease are also spread on a straight-line basis over the lease term.

2.6 (b) The NDA Group as lessee
Rentals payable under operating leases are charged to the statement of net expenditure on a straight-line basis over the term of the relevant lease. 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.

2.7 Foreign currencies
The individual financial statements of each Group entity are presented in the currency of the primary economic environment in which it operates (its functional currency). For the purpose of the consolidated financial statements, the results and financial position of each Group entity are expressed in pounds sterling, which is the functional currency of the NDA, and the presentation currency for the consolidated financial statements.

In preparing the financial statements of the individual reporting entities, transactions in currencies other than the entity's functional currency (foreign currencies) are recorded at the rates of exchange prevailing on the dates of the transactions or at the contracted rate if the transaction is covered by a forward foreign exchange contract. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at the rates prevailing on the reporting date. Non-monetary items carried at fair value that are denominated in foreign currencies are translated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated. Exchange differences are recognised in the statement of net expenditure in the period in which they arise.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated at exchange rates prevailing on the reporting date. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the date of transactions are used. Exchange differences arising, if any, are classified as equity and recognised in the Group's general reserve. Such translation differences are recognised as income or as expenses in the period in which the operation is disposed of.

The turnover, assets and liabilities of the foreign operations included within these consolidated financial statements are minor in the context of the Group as a whole and therefore the potential impact of any foreign currency movements are deemed to be negligible

2.8 Retirement benefit costs
The Group participates in various pension schemes, both defined contribution and defined benefit schemes.

For defined contribution schemes the amount charged to operating costs is the contributions payable in the year.
For defined benefit schemes, the liability recognised in the statement of financial position is the present value of the defined benefit obligation at the reporting date less the fair value of scheme assets, together with any adjustments for unrecognised past service costs. Any amounts recoverable from third parties are recognised as separate assets.

The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high quality corporate bonds that have terms to maturity approximating to the terms of the related pension liability.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited in other comprehensive income in the period in which they arise. Past service costs are recognised immediately in operating costs to the extent that the benefits are already vested, and otherwise are amortised on a straight-line basis over the average period until the benefits become vested. The interest cost and the expected return on assets are shown as a net amount of interest costs.

Pension scheme assets are recognised to the extent that they are recoverable and pension scheme liabilities are recognised to the extent that they reflect a constructive or legal obligation.

The Authority also makes contributions to multi-employer defined benefit schemes, for which it is ultimately responsible, but where it is not possible to identify its share of underlying assets and liabilities. Consequently, the Authority's participation in these schemes is accounted for as if they were defined contribution schemes, as permitted under IAS 19.

Further information on the PCSPS and alpha pension schemes can be found within the Remuneration and People Report on pages 67 to 77.

Notes to the financial statements - continued

2.9 Research and development expenditure
Expenditure on research activities is recognised as an expense in the period in which it is incurred.

2.10 Taxation
Deferred tax assets are currently not recognised as the NDA does not anticipate a taxable surplus arising in the foreseeable future. Deferred tax liabilities are currently not recognised as they are offset by deferred tax assets.

VAT is accounted for in that amounts are shown net of VAT except:
(i) Irrecoverable VAT is charged to profit or loss, and included under the heading relevant to the type of expenditure
(ii) Irrecoverable VAT on the purchase of an asset is included in the capitalised purchase cost of the asset

The net amount due to, or from, HM Revenue & Customs in respect of VAT is included within payables or receivables respectively within the statement of financial position.

2.11 Property, plant and equipment
Property, plant and equipment includes assets purchased directly by the Group and assets for which the legal title transferred to the Group under Transfer Scheme arrangements pursuant to the Energy Act 2004.

Assets on designated nuclear sites are only recognised where two criteria are met. Firstly the economic element of the asset's value at the reporting date must exceed £100,000, and secondly the proportion of the asset relating to commercial activity should exceed 10%.

Assets on non-designated sites are only recognised where there value exceeds £10,000.

In line with the accounts direction issued by the Secretary of State for Energy and Climate Change, waste management assets are excluded from the FReM requirement to carry PPE at fair value due to lack of reliable and cost effective revaluation methodology. Such waste management assets are therefore carried at cost less accumulated depreciation and any impairment charges.

For property, plant and equipment carried at valuation, revaluations are currently performed on an annual basis to ensure that the carrying amount does not differ materially from that which would be determined using fair values at the reporting date. This includes assets used to support commercial activities, property located outside nuclear licensed site boundaries, and property located inside nuclear licensed site boundaries where a reliable and cost effective revaluation methodology exists. The categories of property, plant and equipment subject to revaluation are Land and Buildings.

Any accumulated depreciation at the date of revaluation is eliminated and the resulting net amount restated to equal the revalued amount. Any revaluation increase arising is credited to the revaluation reserve, except to the extent that it reverses a revaluation decrease for the same asset previously recognised as an expense, in which case the increase is credited to profit or loss to the extent of the decrease previously charged. A decrease in carrying amount arising on revaluation is charged as an expense to the extent that it exceeds the balance, if any, held in the revaluation reserve relating to a previous revaluation of that asset. On the subsequent de-recognition of a revalued asset, the attributable revaluation surplus remaining in the revaluation reserve is transferred directly to the general reserve.

Where economic facilities have been commissioned, the estimated cost of decommissioning the facilities is recognised, to the extent that it is recognised as a provision under IAS 37 'Provisions, Contingent Liabilities and Contingent Assets', as part of the carrying value of the asset and depreciated over the useful life of the asset. All other decommissioning costs are expensed as incurred.

Depreciation is charged so as to write off the cost or valuation of assets, other than assets under construction, to their residual values over their useful lives, using the straight-line method, on the following bases:

Land	Not depreciated
Buildings	10 to 60 years
IT equipment	3 years
Fixtures and fittings	3 to 10 years
Plant and equipment	10 to 30 years
Transport equipment	4 to 14 years

The exceptions to the above are:

- in the depreciation of certain shipping assets which is calculated on a usage, rather than straight-line, basis; and
- in the depreciation of Plant and equipment for which the remaining useful commercial life of the assets is less than 10 years (such assets are depreciated over the remaining useful commercial life)

Assets under construction are not depreciated until brought in to use.

Residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date.

2.12 Investments in subsidiaries
Investments in subsidiaries are stated at cost less, where appropriate, provision for impairment.

2.13 Impairment of non-financial assets
At each reporting date, the Group reviews the carrying amounts of its non-financial assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs to sell and value in use. 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.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised as income immediately, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

2.14 Inventories

Inventories are stated at the lower of cost and net realisable value. Cost comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Cost is calculated using the weighted average method. Net realisable value represents the estimated selling price less all estimated costs of completion and all costs to be incurred in marketing, selling and distribution.

Reprocessed uranic material is held at nil value, pending development of long term options and cost estimates for disposition of this material, and is disclosed as a contingent liability in note 29.

2.15 Financial instruments

Financial assets and financial liabilities are recognised in the statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

2.15 (a) Financial Assets

All financial assets are recognised and derecognised on a trade date where the purchase or sale of a financial asset is under a contract whose terms require delivery of the investment within the timeframe established by the market concerned, and are initially measured at fair value.

Finance lease receivables, trade and other receivables, and cash and cash equivalents, that have fixed or determinable payments that are not quoted in an active market are subsequently measured at amortised cost using the effective interest rate method, less any impairment. Interest income is recognised by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial.

Other investments are measured at fair value through profit or loss.

The effective interest rate method is a method of calculating the amortised cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset or, where appropriate, a shorter period, to the net carrying value of the financial asset.

Impairment of financial assets

Financial assets are assessed for indicators of impairment at each reporting date. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the asset have been impacted.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables and finance lease receivables, where the carrying amount is reduced through the use of an expected credit loss provision. When a financial instrument is considered uncollectible, it is written off against the expected credit loss provision.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through the statement of net expenditure to the extent that the carrying amount of the financial asset at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value.

De-recognition of financial assets

Financial assets are derecognised only when the rights to receive cash flows from the assets have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership.

2.15 (b) Financial Liabilities

Financial liabilities are classified as financial liabilities at amortised cost.

De-recognition of financial liabilities

Financial liabilities are derecognised when, and only when, the Group's obligations are discharged, cancelled or they expire.

2.16 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, and it is probable that the Group will be required to settle that obligation. Provisions are the Authority's best estimate of the expenditure required to settle the obligation at the reporting date, and are discounted to present value where the effect is material.

Notes to the financial statements - continued

Nuclear Provisions
The financial statements include provisions for the NDA's obligations in respect of nuclear liabilities, being the costs associated with the nuclear decommissioning of designated sites. These are the licensed nuclear sites designated to the NDA by the Secretary of State under powers provided by the Energy Act 2004 and operated under contract to the NDA by the SLCs. These provisions are based on the latest assessments of the processes and methods likely to be used in the future, and represent best estimates of the amount required to discharge the relevant obligations. The NDA's obligations are reviewed on a continual basis and provisions are updated accordingly.

Where some or all of the expenditure required to settle a provision is expected to be recovered from a third party, in accordance with IAS 37 'Provisions, Contingent Liabilities and Contingent Assets', the recoverable amount is treated as a non-current asset. Provision charges in the Statement of Comprehensive Net Expenditure are shown net of changes in the amount recoverable from customers. Provision changes are accounted for in the year in which they arise.

The Nuclear Provision and recoverable balances are expressed at current price levels and discounted in accordance with guidance issued by HM Treasury. In reporting periods up to and including 2017/18 HM Treasury determined a real terms discount rate to be applied in calculating provisions. A real terms rate combines a nominal discount rate and an implied inflation rate.

From 2018/19 onwards guidance issued by HM Treasury determines a nominal discount rate, and recommends (in what is termed a rebuttable presumption) an implied inflation rate based on forecasts of Consumer Price Index (CPI) inflation made by the Office of Budget Responsibility (OBR). Reporting entities are able to select and apply an implied inflation rate which differs from the recommended rate where this can be demonstrated to be clearly more applicable to the underlying nature of the entity's cash flows.

The Authority has determined that, based on inflation experienced in its cash flows in recent years and future expectations, the implied inflation rate recommended by HM Treasury is appropriate for use in calculating its provisions.

	Time Period	Nominal discount rate	Implied inflation rate	Real terms discount rate	Equivalent rate in 2017/18
Short term	Between 0 and up to and including 5 years	0.76%	2.10%	-1.34%	-2.42%
Medium term	After 5 and up to and including 10 years	1.14%	2.10%	-0.96%	-1.85%
Long term	After 10 and up to and including 40 years	1.99%	2.10%	-0.11%	-1.56%
Long term	Exceeding 40 years	1.99%	2.10%	-0.11%	-1.56%

The application of the HM Treasury guidance produces a substantial decrease in the discounted nuclear provision, due mainly to the implied inflation rate element being lower than that (typically circa 3%) used by HM Treasury to determine the real terms rates in previous years. The lower implied inflation rate produces a less negative real terms discount rate and therefore a significant reduction in the discounted value of the provision.

Provision movement expenditure in the statement of comprehensive net expenditure includes the adjustments necessary to unwind one year's discount and restate the liabilities to current price levels. The movement also includes the adjustments arising from the change in discount rates described.

2.17 Grants from parent department
In accordance with the FReM the NDA prepares its financial statements showing grants received from BEIS as credited to the general reserve, and as financing in the statement of cash flows. Grants are received gross from BEIS and receipts are surrendered separately.

2.18 Contractor costs
Contractor costs are defined as payments to contractors relating to the core NDA programme (work performed on behalf of NDA by contractors) adjusted to eliminate payments made between those contractors. Contractor costs are recognised as an expense under programme expenditure within the Statement of Comprehensive Net Expenditure, in the period to which they relate.

3. Critical accounting judgements and key sources of estimation uncertainty
In the application of the NDA's accounting policies, which are described in note 2, the Authority is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical Judgements in Applying the NDA's Accounting Policies
The following are the critical judgements, apart from those involving estimations (which are dealt with separately below), that management has made in the process of applying the NDA's accounting policies and that have the most significant effect on the amounts recognised in the financial statements.

Income recognition
The Authority applied IFRS 15 at 1 April 2018, and in doing so was required to perform a number of significant accounting judgements. These judgements, the methods employed in determining them, and the associated uncertainties are described below. The judgements have been made on a prospective basis from the application date onwards, in accordance with the Authority's derogation from HM Treasury to set aside the retrospective restatement requirements of the standard (described in note 2).

The expected value of each of the contracts with customers (the transaction price).

The Authority has determined the transaction price of each contract on a prospective basis at 1 April 2018 (being the total expected price of the contract less the revenue recognised in prior periods). The transaction price of each contract comprises the total payments made on account and the total of future cash flows from the customer. In determining the latter the Authority has determined that future cash flows will not be subject to significant variation from existing contractual terms. This is on the basis that the Authority does not currently anticipate significant discounts, returns, refunds or other types of variable consideration to apply to the contracts other than the indexation of cash flows as set out in contracts as applicable. Where such indexation arises in future reporting periods, an adjustment to the contract price will be applied in that period.

The amounts of the transaction price of each contract to be allocated to each of the performance obligations in the contract.

In recognition of the complexity of the Authority's major long term contracts, which typically do not feature standalone services with discreet prices the Authority has allocated the transaction price of each contract to the performance obligations in that contract through the estimation of the expected future cost of fulfilling each performance obligation, and subsequently allocating the transaction price in proportion to the future cost of each. In doing so the Authority determines that any difference between the price and cost of each contract (notional profit or loss) will be applied to each performance obligation in proportion to the cost of fulfilment.

The basis of determining the cost of each performance obligation requires significant judgement on future cost forecasts. These are derived from and consistent with the cost estimates used to determine the Authority's nuclear provision and subject to the same estimation uncertainties described below. Specifically in respect of the costs of fulfilling the performance obligations in the applicable contracts, the estimates rely on:

- judgements of the continued operation of certain plants and services, the conclusion of certain works programmes, and other assumed milestones.
- judgements of the appropriate allocation of costs to individual performance obligations based on estimates of the extent of capacity, utilisation of other measure of service provision as they apply to each contract and the performance obligations therein.

In accordance with the requirements of IFRS 15 the above determinations were made for existing contracts at the point of application of the standard and will not be revised for future reporting periods. Determinations will be made for new contracts at the point of inception.

The timing of satisfaction of performance obligations

The Authority has determined that performance obligations will be satisfied in accordance with contractually defined timescales, and in accordance with strategic assumptions implicit in the site lifetime plans. Examples of the assumed timing of satisfaction of performance obligations include that the Authority:

Notes to the financial statements - continued

- satisfied its performance obligations in respect of the receipt of spent fuel intended for reprocessing, and the reprocessing thereof, upon cessation of reprocessing operations at THORP at Sellafield and effective closure of the plant in the reporting period of 2018/ 19, and therefore that the transaction price allocated to these performance obligations was recognised in full in 2018/19
- will continue to store spent fuels, waste, products and other materials in line with the respective storage periods contained in each contract, that the associated performance obligation will be satisfied over time, and therefore that the transaction price allocated to these performance obligations will be recognised as revenue evenly over the respective time periods
- will continue to provide services for the interim storage of wastes produced by spent fuel reprocessing and the subsequent treatment of said wastes, concluding in 2025, that these performance obligations will be satisfied evenly over time, and therefore that the transaction price allocated to these performance obligations will be recognised as revenue evenly over the period to 2025. This judgement assumes and relies upon the continued availability and performance of waste treatment plants at Sellafield and a significant disruption in plant operations and/or change in duration of the remaining waste treatment programme would require the Authority to review and potentially amend its assumptions on the timing of the satisfaction of this performance obligation. For example a significant unplanned temporary halt to operations in a future reporting period may reduce the revenue recognised in that period.
- will continue to receive spent fuel which is not intended for reprocessing, and in doing so will assume title of ownership for said fuel at the point in time when it is received by the Authority, therefore that the transaction price of the contract will be allocated to a single performance obligation, and therefore that the transaction price will be recognised as revenue in proportion to the volume of spent fuel received and taken into ownership in each reporting period, relative to the total volume of spent fuel expected to be received and taken into ownership for the remainder of the duration of the contract

The costs to fulfil contracts with customers

The Authority has determined the remaining costs of fulfilling each contract, prospectively at the point of application, comprising the following and has applied judgements as described:

- costs incurred prior to contract inception have been estimated in previous reporting period, and amortised in proportion to the revenue recognised in each reporting period, relative to the total revenue still to be recognised. The respective balances for each contract are defined as 'contract assets' under IFRS 15 and are disclosed at note 14.
- costs expected to be incurred in fulfilling the remaining performance obligations for each contract are estimated as described above, are stated at note 14 and will be expensed in each reporting period as they arise. The balances are deemed financial assets under IAS 37 and offset against costs provided in the nuclear provision at note 24.

In addition to the above, costs incurred in the acquisition of property, plant and equipment required to fulfil the contracts are capitalised, depreciated and otherwise valued, in accordance with the Authority's accounting policies and stated in total at note 11.

Further information on the application of IFRS 15 is contained in Note 9.

Key Sources of Estimation Uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below.

Impairment of property, plant and equipment

Impairment is measured by comparing the carrying value of the asset or cash-generating unit with its recoverable amount. The NDA has therefore reviewed the asset base and all assets are reviewed for evidence of impairment. Given the ageing asset base this calculation has a degree of uncertainty within it. The carrying amount of property, plant and equipment at the reporting date was £652 million.

Nuclear Provisions

The nuclear provision represents the best estimate of the costs of delivering the NDA objective of decommissioning the plant and equipment on each of the designated nuclear licensed sites and returning the sites to pre-agreed end states in accordance with the published strategy. This programme of work will take until 2137. The estimates are necessarily based on assumptions of the processes and methods likely to be used to discharge the obligations, reflecting a combination of the latest technical knowledge available, the requirements of the existing regulatory regime, Government policy and commercial agreements. Given the very long timescale involved, and the complexity of the plants and material being handled, considerable uncertainty remains in the cost estimate particularly in the later years.

In preparing the estimate of the cost of decommissioning the designated sites, the NDA has focussed in particular on the first 20 years, which represents £50 billion out of the total £131 billion provision (2018: £56 billion out of £234 billion). In undiscounted terms it represents £48 billion out of a total of £124 billion (2018: £47 billion out of £121 billion).

As part of the preparation of the financial statements, the principal assumptions and sensitivities for the cost estimates have again been updated and reviewed by the NDA executive and, where appropriate, updates to the estimates have been made to reflect changed circumstances and more recent knowledge.

In preparing the best estimate of the provision required to settle the NDA obligations, it is recognised that there remains a significant degree of inherent uncertainty in the future cost estimates. Should outcomes differ from assumptions in any of the following areas, this may require a material adjustment to the carrying amount of the Nuclear Provision and related assets and liabilities:

- potential changes in the NDA funding profile, requiring the tailoring of expenditure across the estate to ensure the right balance between addressing high risk, hazard and affordability; for example emanating from either economic conditions or changes in funding resulting from the next Government Spending Review
- the length of time over which the necessary programme of work will be delivered – stretching out to 2137
- interdependencies between programmes of work both within SLCs and across SLC boundaries. For example, a shortage of flasks for transport of spent fuel from the Magnox power stations to Sellafield could delay defueling and increase costs at Magnox, and also impact the production schedule and direct operations costs at Sellafield
- uncertainty over the future location of the planned Geological Disposal Facility (GDF) and the timing of its availability
- a lack of detailed information on the design of the Legacy Ponds and Silos at Sellafield and the exact quantities and chemical composition of the historical wastes held in them, resulting in potential significant uncertainty in both the process and costs of dealing with these materials
- uncertainty over future Government policy positions and potential regulatory changes
- possible technological advances which may occur which could impact the work to be undertaken to decommission and clean up the sites
- Changes to the decommissioning strategy for the Magnox sites, which are currently being developed for consideration but not yet reflected in the estimate

Government has indicated that the preferred policy for management of plutonium is for reuse. Any final decision is conditional on business case approval for reuse of the material. Following review of the likely costs of the preferred policy, and the credible alternative of storage and disposal in the long-term, a prudent estimate of £6.7 billion (discounted) has been included within the Provision.

4. Operating segments

For management purposes, the NDA is currently organised into various operating units, which are grouped according to activity type. The segmental analysis in the following table presents the net expenditure for each of the continuing operations.

NDA Group 2019	Sellafield reprocessing and transport £m	Magnox electricity generation and research sites £m	Dounreay site restoration £m	Waste management £m	Springfields and Capenhurst £m	NDA admin and other non-programme £m	Subsidiaries and Group adjustments £m	**Total 2019 £m**
Authority administration expenditure	–	–	–	–	–	51	–	**51**
Programme expenditure	2,367	574	202	129	56	81	96	**3,505**
Decommissioning costs charged to nuclear provision	(1,673)	(556)	(188)	(72)	(110)	–	–	**(2,599)**
Decommissioning costs charged to other provisions	(164)	–	–	–	–	–		**(164)**
Nuclear Provision increase/(decrease)	(63,830)	(20,627)	291	(13,401)	(1,373)	–	(94)	**(99,034)**
Other provisions increase/(decrease)	(411)	–	–	–	–	–	-	**(411)**
Adjustments to provisions	(66,078)	(21,183)	103	(13,473)	(1,483)	–	(94)	**(102,208)**
Depreciation and impairment	40	–	–	–	–	2	16	**58**
Income (a)	(813)	(7)	(1)	(6)	–	(23)	(50)	**(900)**
Interest payable	–	–	–	–	–	–	22	**22**
Interest receivable	–	–	–	–	–	(1)	(17)	**(18)**
Net expenditure / (income) from continuing operations for the year before taxation	(64,484)	(20,616)	304	(13,350)	(1,427)	110	(27)	**(99,490)**

(a) See note 9 for commentary on revenue from contracts. Income in 'subsidiaries and group adjustments' includes revenue from rail and marine transport services and property rental

(b) The basis for accounting for transactions between reportable segments is given in note 30

(c) There have been no changes from the prior period to the measurement methods used to determine reported segment net expenditure

NDA Group 2018	Sellafield reprocessing and transport £m	Magnox electricity generation and research sites £m	Dounreay site restoration £m	Waste management £m	Springfields and Capenhurst £m	NDA admin and other non-programme £m	Subsidiaries and Group adjustments £m	Total 2018 £m
Authority administration expenditure	–	–	–	–	–	44	–	44
Programme expenditure	2,474	588	208	110	88	107	95	3,670
Decommissioning costs charged to nuclear provision	(1,703)	(707)	(182)	(55)	(94)	–	–	(2,741)
Decommissioning costs charged to other provisions	(174)	–	–	–	–	–	(2)	(176)
Nuclear Provision increase/(decrease)	47,248	13,745	175	9,471	1,746	–	(26)	72,359
Other provisions increase/(decrease)	19	–	–	–	–	–	-	19
Adjustments to provisions	45,390	13,038	(7)	9,416	1,652	–	(28)	69,461
Depreciation and impairment	79	–	–	–	–	–	21	100
Income (a)	(814)	(12)	(1)	(5)	–	(190)	(42)	(1,064)
Interest payable	–	–	–	–	–	–	22	22
Interest receivable	–	–	–	–	–	(1)	(8)	(9)
Net expenditure / (income) from continuing operations for the year before taxation	47,129	13,614	200	9,521	1,740	(40)	60	72,224

(a) See note 9 for commentary on revenue from contracts. Income in 'subsidiaries and group adjustments' includes revenue from rail and marine transport services and property rental

(b) The basis for accounting for transactions between reportable segments is given in note 30

(c) There were no changes from the prior period to the measurement methods used to determine reported segment net expenditure

Geographical information
The NDA Group's income is attributed to countries on the basis of the customer's location, as follows:

	2019 £m	2018 £m
United Kingdom	**655**	613
Germany	**7**	101
Japan	**217**	139
Italy	**7**	197
Other countries	**14**	14
Total income	**900**	1,064

The Group's non-current assets are primarily located or based in the United Kingdom.

5. Authority administration expenditure

Authority	2019 £m	2018 £m
Staff costs (see Remuneration and People Report)	**31**	26
Administration costs	**17**	15
Rentals under operating leases – other	**3**	3
Auditors' remuneration	**–**	–
	51	44

Directors' emoluments are included in the above figures and can be seen in the Remuneration and People Report on pages 67 to 77.

Auditors' remuneration represents fees payable to the NAO for the audit of the Authority and the NDA Group and amounted to £330,000 (2018: £340,000). No other remuneration has been paid to the NAO.

6. Programme expenditure

	NDA Group		Authority	
NDA Group & Authority	2019 £m	2018 £m	2019 £m	2018 £m
Contractor and subsidiary costs (a), (b)	**3,068**	3,100	**3,003**	3,024
Amortisation of recoverable contract costs (see note 14)	**166**	228	**166**	228
Revalorisation of advance payments (see note 23)	**123**	181	**123**	181
Fees payable to SLCs	**44**	56	**44**	56
Trading costs	**38**	36	**38**	36
Rentals under operating leases – other	**29**	21	**–**	–
Research and development costs	**14**	11	**8**	7
Insurance (c)	**9**	-	**16**	6
Skills and socio-economic development programme	**7**	3	**7**	3
Release of fees previously accrued	**(24)**		**(24)**	
Release of pension costs previously accrued	**(15)**	-	**(15)**	-
Material title transfer	**-**	18	**–**	18
Dividend payable to minority interest	**2**	1	**-**	-
Information Governance	**15**	5	**15**	5
Cyber Security	**11**	3	**11**	3
Plutonium Management Strategy	**7**	2	**7**	2
Office accommodation relocation	**2**	-	**2**	-
Other costs	**9**	5	**8**	6
Programme expenditure	**3,505**	3,670	**3,409**	3,575

a) Contractor and subsidiary costs shown are after deduction for capitalisation of £7 million (2018: £9m) as Property, Plant & Equipment, and deduction for payments between contractors.
(b) Contractor and subsidiary costs include auditors' remuneration payable for the audit of the NDA subsidiary companies amounting to £258,835 (2018: £321,592).
(c) Insurance costs in both Authority and NDA Group for 2017/18 are shown after deduction of a £4 million adjustment relating to 2016/17.

Notes to the financial statements - continued

7. Adjustments to provisions

NDA Group & Authority	NDA Group 2019 £m	NDA Group 2018 £m	Authority 2019 £m	Authority 2018 £m
Movement in nuclear provisions:				
Provided for in the year (see note 24)	**(95,410)**	73,623	**(95,408)**	73,622
In-year group provision adjustment (see note 24)	**(92)**	(27)	**–**	–
Unwinding of discount (see note 24)	**(3,532)**	(1,237)	**(3,532)**	(1,237)
	(99,034)	72,359	**(98,940)**	72,385
Release of provision (see note 24)	**(2,599)**	(2,741)	**(2,599)**	(2,741)
	(101,633)	69,618	**(101,539)**	69,644
Movement in other provisions:				
Provided for in the year (see note 25)	**(396)**	35	**(396)**	35
Unwinding of discount (see note 25)	**(15)**	(16)	**(15)**	(16)
	(411)	19	**(411)**	19
Release of provision (see note 25)	**(164)**	(176)	**(164)**	(174)
	(575)	(157)	**(575)**	(155)
Total provisions movement	**(102,208)**	69,461	**(102,114)**	69,489

8. Depreciation and impairments

NDA Group & Authority	NDA Group 2019 £m	NDA Group 2018 £m	Authority 2019 £m	Authority 2018 £m
Depreciation of PPE (see note 11)	**56**	64	**40**	43
Impairment of PPE (see note 11)	**-**	36	**-**	36
Impairment of financial instruments for expected credit loss (see notes 20 and 21)	**2**	-	**2**	-
	58	100	**42**	79

9. Income

NDA Group & Authority	NDA Group 2019 £m	NDA Group 2018 £m	Authority 2019 £m	Authority 2018 £m
Spent fuel reprocessing and associated waste management	**346**	347	**346**	347
Spent fuel receipt	**226**	243	**226**	243
Other contracts for waste and product storage	**55**	55	**55**	55
Storage and destorage of residues	**4**	26	**4**	26
Waste substitution (destorage and return of substituted waste)	**-**	63	**-**	63
Revenue from major contracts (continuing)	**631**	**734**	**631**	**734**
Legacy Waste management	**134**	10	**134**	10
Waste substitution (initial substitution agreement)	**-**	182	**-**	182
Revenue from major contracts (non-recurring)	**134**	**192**	**134**	**192**
Transportation of nuclear fuel, waste and materials	**86**	102	**40**	62
Energy trading	**7**	11	**7**	11
Sundry	**22**	16	**15**	14
Admin / non-programme	**17**	8	**20**	8
Other contracts	**132**	**137**	**82**	**95**
Revenue from contracts with customers	**897**	**1,063**	**847**	**1,021**
Other revenues (rental income)	**3**	1	**3**	1
Total revenues	**900**	**1,064**	**850**	**1,022**

The total revenue from contracts with customers totalled £897 million (2018: £1,063 million) of which:

- £631 million (2018: £734 million) was recognised on major contracts which will continue beyond the reporting date
- £134 million (2018: £192 million) was recognised on non-recurring major contracts which concluded during the reporting period.
- £132 million (2018: £137 million) was recognised on other contracts

The Authority's major contracts with customers, the main performance obligations remaining on each contract and the factors affecting future cash flows and timing of revenue recognition can be summarised as follows:

Contract type and customer(s)	Main categories of performance obligation	Factors potentially affecting future cash flows and revenue recognition
Spent fuel reprocessing and associated waste management Customer(s): Nuclear energy producers in the UK and overseas	Receipt of spent fuel (concluded in 2018/19)	N/a – performance obligations completed
	Spent fuel reprocessing (concluded in 2018/19)	N/a – performance obligations completed
	Storage of spent fuel not reprocessed (to 2086)	Overall contract value is materially certain, and timing of recognition is certain (corresponds directly to contracted storage period)
	Interim storage of wastes (expected to continue to 2025)	Overall contract value is materially certain. Revenue is recognised over time, and period of recognition is dependent on future performance of waste management plants
	Treatment of wastes (expected to continue to 2025	Overall contract value is materially certain. Revenue is recognised over time, and period of recognition is dependent on future performance of waste management plants
	Storage of treated wastes (to 2038 or 2086 depending on type of material)	Overall contract value is materially certain, and timing of recognition is certain (corresponds directly to contracted storage periods)
	Storage of products (to 2086)	Overall contract value is materially certain, and timing of recognition is certain (corresponds directly to contracted storage period)
Spent fuel receipt and management Customer(s): Nuclear energy producers in the UK	Receipt of spent fuel, currently expected to continue until 2034	Overall contract value dependent on volume of spent fuel produced by customer Timing of revenue recognition dependent on ability of customer to consign spent fuel and on ability of Authority to receive spent fuel
Storage and destorage of residues Customer(s): Nuclear energy producers overseas	Storage of residues, currently expected to continue until 2025	Contract values may vary according to storage periods required by customers
	Subsequent destorage of residues, currently expected to continue until 2023	Contract values may vary according to storage periods required by customer Timing of revenue recognition dependent on ability of Authority to destore residues and on ability of customer to receive residues

Contract type and customer(s)	Main categories of performance obligation	Factors potentially affecting future cash flows and revenue recognition
Waste substitution Customer(s): Nuclear energy producers overseas	Destorage and transportation of wastes	Contract value is materially certain. Timing of revenue recognition dependent on ability of Authority to destore wastes and on ability of customer to receive wastes
Transportation of nuclear fuel, waste and materials	Transportation of nuclear fuel, waste and materials	Availability of transportation capacity and customer ability and readiness to receive nuclear fuel, waste and materials; customer demand for transportation services
Energy trading	Production of electricity and sales of gas	Performance of electricity producing plants
Sundry	Various including provision of rechargeable services to third parties	Continued demand for services.
Admin / non programme	Various	Continued demand for services

The key uncertainty in the Authority's revenue forecasts is the volume and timing of spent fuel which is received and not intended for reprocessing. There is uncertainty in the overall value of the contract because it is directly related to the volume of spent fuel produced by the customer. There is uncertainty in the timing of revenue recognition in each reporting period because revenue is recognised at the point of receipt of spent fuel, therefore the revenue recognised in each reporting period is directly related to the volume of fuel received in that reporting period. The volume of fuel received is subject to a number of uncertain external factors which are not entirely within the control of the Authority.

The table shows the main types of contract, the main areas of performance obligations therein, and for each category:
- the revenue recognised in the reporting period [A]:
- the revenue expected to be recognised in future reporting periods (being the aggregate amount allocation to performance obligations that are wholly or partially unsatisfied at the reporting date) [B]
- an indication of when the Authority expects to recognise the remaining contract price

Contract type	Categories of performance obligation	[A] £m	[B] £m	Of which £m:		
				2019-2025	2026- 2038	2039-2087
Spent fuel reprocessing and associated waste management	Receipt of spent fuel	30	-	-	-	-
	Spent fuel reprocessing	140	-	-	-	-
	Spent fuel storage	10	709	63	135	511
	Interim storage of wastes	83	496	496	-	-
	Treatment of wastes	62	370	370	-	-
	Storage of treated wastes	4	174	24	51	99
	Storage of products	17	844	100	216	528
Spent fuel receipts	Receipt of spent fuel	226	4,421	1,869	2,552	-
Other storage contracts	Storage of materials	55	1,161	422	536	203
Storage and destorage of residues	Storage	2	4	4	-	-
	Destorage	2	32	32	-	-
Waste substitution	Destorage	-	70	70	-	-
Legacy waste		134	178	178		
Management						
TOTAL		**765**	**8,459**	**3,628**	**3,490**	**1,341**

10. Tax

The explanation for the nil tax charge for the period is set out below.

NDA Group & Authority	**2019 £m**	2018 £m
NDA Group net expenditure before tax	(99,490)	72,224
Deficit on ordinary activities before tax at the UK standard rate of corporation tax of 19% (2018: 19%)	(18,903)	13,722
Effects of:		
Income and expenditure which is not taxable or tax deductible	19,103	(13,558)
Capital allowances for the year in excess of depreciation	116	113
Unutilised losses	(316)	(277)
Current tax charge for the year	-	-
Diverted Profits Tax	-	-
Deferred tax release	-	-
Total tax charge / (credit)	-	-

The NDA does not pay tax on any profits arising from its activities in relation to decommissioning, and similarly losses are not deductible in relation to decommissioning. Subsidiaries do not pay tax on profits arising as these are offset against the taxable losses of the NDA. A deferred tax asset has not been recognised in respect of any non-decommissioning losses incurred by the NDA as the NDA does not anticipate taxable surpluses arising in the foreseeable future. The NDA is liable for Controlled Foreign Company Tax on the activities of Rutherford Indemnity Limited, NDA's wholly-owned captive insurance company based in Guernsey.

11. Property, plant and equipment

NDA Group 2019	Land £m	Buildings £m	Fixtures and fittings £m	Plant and equipment £m	Transport equipment £m	Assets under construction £m	Total £m
Cost or valuation							
At 1 April 2018	37	2,135	5	4,742	70	104	7,093
Revaluations	(22)	-	–	–	–	–	(22)
Eliminations (d)	-	(1,838)	–	(101)	–	–	(1,939)
Additions	–	–	–	–	–	9	9
Other reclassifications (e)	–	–	–	(73)	1	(37)	(109)
Disposals	–	–	–	(48)	-	–	(48)
At 31 March 2019	**15**	**297**	**5**	**4,520**	**71**	**76**	**4,984**
Depreciation							
At 1 April 2018	–	(2,066)	(4)	(4,164)	(29)	–	(6,263)
Eliminations (d)	-	1,838	–	101	–	–	1,939
Charged in year	–	(2)	–	(50)	(4)	–	(56)
Disposals	–	–	–	48	-	–	48
At 31 March 2019	**–**	**(230)**	**(4)**	**(4,065)**	**(33)**	**–**	**(4,332)**
Net book value at 31 March 2018	37	69	1	578	41	104	830
Net book value at 31 March 2019	**15**	**67**	**1**	**455**	**38**	**76**	**652**

The net book value of plant and equipment at 31 March 2019 (£455 million) includes £279 million relating to future decommissioning costs.

Notes to the financial statements - continued

11. Property, plant and equipment (continued)

NDA Group 2018	Land £m	Buildings £m	Fixtures and fittings £m	Plant and equipment £m	Transport equipment £m	Assets under construction £m	Total £m
Cost or valuation							
At 1 April 2017	62	2,135	5	4,651	51	209	7,113
Adjustment in respect of prior period	-	1	–	1	10	(12)	-
Revaluations	(25)	(1)	–	–	–	–	(26)
Additions	–	–	–	–	-	28	28
Other reclassifications (e)	–	-	–	100	10	(88)	22
Disposals	–	–	–	(6)	(1)	–	(7)
Impairment (f)	-	-	-	(4)	–	(33)	(37)
At 31 March 2017	**37**	**2,135**	**5**	**4,742**	**70**	**104**	**7,093**
Depreciation							
At 1 April 2017	–	(2,063)	(4)	(4,115)	(25)	–	(6,207)
Charged in year	–	(3)	–	(56)	(5)	–	(64)
Disposals	–	–	–	6	1	–	7
Impairment (f)	–	-	–	1	–	–	1
At 31 March 2018	**–**	**(2,066)**	**(4)**	**(4,164)**	**(29)**	**–**	**(6,263)**
Net book value at 31 March 2017	62	72	1	536	26	209	906
Net book value at 31 March 2018	**37**	**69**	**1**	**578**	**41**	**104**	**830**

The net book value of plant and equipment at 31 March 2018 (£578 million) includes £293 million relating to future decommissioning costs.

Authority 2019	Land £m	Buildings £m	Fixtures and fittings £m	Plant and equipment £m	Transport equipment £m	Assets under construction £m	Total £m
Cost or valuation							
At 1 April 2018	33	2,091	3	4,240	4	104	6,475
Revaluations	(22)	–	–	–	–	–	(22)
Eliminations (d)	–	(1,838)	–	(101)	–	-	(1,939)
Additions	–	-	–	–	–	7	7
Other reclassifications (e)	–	–	–	37	–	(37)	–
At 31 March 2019	**11**	**253**	**3**	**4,176**	**4**	**74**	**4,521**
Depreciation							
At 1 April 2018	–	(2,066)	(3)	(3,970)	(1)	–	(6,040)
Eliminations (d)	–	1,838	–	101	–	–	1,939
Charged in year	–	(1)	–	(38)	(1)	–	(40)
At 31 March 2019	**–**	**(229)**	**(3)**	**(3,907)**	**(2)**	**–**	**(4,141)**
Net book value at 31 March 2018	33	25	–	270	3	104	435
Net book value at 31 March 2019	**11**	**24**	**–**	**269**	**2**	**74**	**380**

The net book value of plant & equipment at 31 March 2019 (£269 million) includes £113 million relating to future decommissioning costs.

11. Property, plant and equipment (continued)

Authority 2018	Land £m	Buildings £m	Fixtures and fittings £m	Plant and equipment £m	Transport equipment £m	Assets under construction £m	Total £m
Cost or valuation							
At 1 April 2017	58	2,069	3	4,167	4	197	6,498
Revaluations	(25)	-	–	–	–	–	(25)
Additions	–	22	–	–	–	17	39
Other reclassifications	–	–	–	78	-	(78)	-
Impairment (f)	-	–	–	(5)	–	(32)	(37)
At 31 March 2018	**33**	**2,091**	**3**	**4,240**	**4**	**104**	**6,475**
Depreciation							
At 1 April 2017	–	(2,064)	(3)	(3,930)	(1)	–	(5,998)
Charged in year	–	(2)	–	(41)	-	–	(43)
Impairment (f)	–	–	–	1	–	–	1
At 31 March 2018	**–**	**(2,066)**	**(3)**	**(3,970)**	**(1)**	**–**	**(6,040)**
Net book value at 31 March 2017	58	5	-	237	3	197	500
Net book value at 31 March 2018	**33**	**25**	**-**	**270**	**3**	**104**	**435**

The net book value of plant and equipment at 31 March 2018 (£270 million) includes £125 million relating to future decommissioning costs.

(a) The NDA accounts for non-waste management assets on nuclear licensed sites, which have an ongoing value in use or realisable value, in accordance with IAS 16 and the requirements of FReM. Assets outside the nuclear licensed site boundaries are revalued in accordance with FReM.

The NDA continues to require SLCs to maintain inventories of all property, plant and equipment held on nuclear licensed sites and which are subject to validation and audit as part of the contractual terms in place between the NDA and license holders.

(b) Land and buildings located outside the nuclear licensed site boundaries, were revalued at 31 March 2019 on the basis of existing use value or market value, as appropriate, by external qualified valuers. The valuations were undertaken in accordance with the Royal Institution of Chartered Surveyors Valuation Standards (6th Edition) by Avison Young Ltd Chartered Surveyors.

(c) Contracted capital commitments relating to those economic assets expected to be subsequently capitalised, were £4 million (2018: £22 million).

(d) During the year NDA eliminated fully depreciated assets no longer performing commercial activity, which had a gross book value and accumulated depreciation of £1,939 million. The assets included the Thorp reprocessing plant and associated buildings and plant and equipment which no longer perform commercial activity following the cessation of reprocessing during the year.

(e) Changes in the estimated future cost of decommissioning, related to commercial property, plant and equipment, are offset by matching changes in the value of the IAS 37 property, plant and equipment asset. A decrease of £109 million was recognised in the year (2018: £22 million increase), see note 24.

(f) No impairment charges to expenditure were made in the year (2018: £36 million).

Notes to the financial statements - continued

12. Intangible assets

Intangible assets had no economic value at 31 March 2019 and 31 March 2018

13. Investments in subsidiaries

Authority	2019 £m	2018 £m
Cost		
At 1 April	**259**	229
Additions	**-**	30
At 31 March	**259**	**259**
Impairment		
At 1 April	**–**	–
Reversal	**–**	–
At 31 March	**–**	–
Net book value at 1 April	259	229
Net book value at 31 March	**259**	**259**

Details of the Authority's subsidiaries at 31 March 2019 are as follows:

Name	Country of incorporation	Nature of business	Proportion of ordinary shares held by NDA %
Direct Rail Services Ltd	UK	Rail transport services within the UK	100
International Nuclear Services France SAS (i)	France	Transportation of spent fuel	100
International Nuclear Services Japan KK (i)	Japan	Transportation of spent fuel	100
International Nuclear Services Ltd (INS Ltd)	UK	Contract management and the transportation of spent fuel, reprocessing products and waste	100
NDA Properties Ltd	UK	Property management	100
Pacific Nuclear Transport Ltd (i)	UK	Transportation of spent fuel, reprocessing products and waste	68.75
Rutherford Indemnity Ltd	Guernsey	Nuclear insurance	100
Radioactive Waste Management Ltd	UK	Development of Geographical Disposal Facility	100
NDA Archives Ltd	UK	Operation of Nucleus – The Nuclear and Caithness Archive	100
Sellafield Ltd	UK	Operation of nuclear licensed sites	100

(i) Ownership through INS Ltd.

The results of all of the above subsidiaries are included within these consolidated financial statements.

NDA is a member of Energus, a company limited by guarantee registered in the UK, providing training facilities in support of the nuclear estate. NDA's liability is limited to £10.

NDA is a member of North Highland Regeneration Fund Limited, a company limited by guarantee registered in Scotland and contributing to socio-economic development in the North Highland region. NDA's liability is limited to £100.

NDA is a member of Energy Coast West Cumbria Limited, a company limited by guarantee registered in the UK and contributing to the economic regeneration of west Cumbria. NDA's liability is limited to £1.

14. Recoverable contract costs

The NDA Authority and Group have commercial agreements in place under which some or all of the expenditure required to settle Nuclear Provisions will be recovered from third parties.

Recoverable contract costs comprise costs which were incurred before the revenue recognition period of each contract and which are amortised each year in line with revenue ('Historic costs' below) and costs which form part of the nuclear provision, which are restated each year for unwinding of discount and other changes in estimate, and released as they occur in each year ('Future costs' below).

NDA Group and Authority	2019 £m	2018 £m
Recoverable contract costs relating to Nuclear Provisions:		
Gross recoverable contract costs	**5,046**	7.081
Less applicable payments received on account (see note 23)	**(3,092)**	(3,192)
Less associated contract loss provisions (see note 25)	**(334)**	(543)
	1,620	3,346

The movements in the gross recoverable contract costs during the year are detailed in the table below.

			2019			2018
NDA Group and Authority	**Historic costs £m**	**Future costs £m**	**Total costs £m**	Historic costs £m	Future costs £m	Total costs £m
Balance as at 1 April	**1,783**	**5,298**	**7,081**	2,011	4,874	6,885
Increase in year (see note 24)	**–**	**(1,510)**	**(1,510)**	–	764	764
Unwind of discount (see note 24)	**–**	**(83)**	**(83)**	–	(49)	(49)
Amortisation (see note 6)	**(166)**	**–**	**(166)**	(228)	–	(228)
Release in year (see note 24)	**–**	**(276)**	**(276)**	–	(291)	(291)
Balance as at 31 March	**1,617**	**3,429**	**5,046**	1,783	5,298	7,081

The historic costs within the above are deemed contract assets under IFRS 15. The opening balances, amortisation in period and closing balances for each main contract type are:

NDA Group and Authority	**Spent fuel reprocessing and associated waste management £m**	**Spent fuel receipt and management £m**	**2019 Total £m**	**Spent fuel reprocessing and associated waste management £m**	**Spent fuel receipt and management £m**	**2018 Total £m**
Balance as at 1 April	1,162	621	1,783	1,359	652	2,011
Amortisation	(136)	(30)	(166)	(196)	(32)	(228)
Balance as at 31 March	1,026	591	1,617	1,163	620	1,783

Contract assets under IFRS 15 are deemed financial instruments for the purposes of IFRS 9 and therefore are ordinarily required to be reviewed for expected credit loss impairment. The above contract asset balances comprise costs which have been previously incurred and are now being amortised in each reporting period. They are matched in full by payments on account and therefore a credit loss impairment is not required.

Notes to the financial statements - continued

15. Deferred taxation

Deferred tax liability not recognised
There were no unrecognised deferred tax liabilities at 31 March 2019 or 31 March 2018.

Deferred tax assets not recognised
The following deferred tax assets have not been recognised as the NDA does not anticipate a taxable surplus arising in the foreseeable future:

NDA Group	**2019 £m**	2018 £m
Tax losses	1,277	1,220
Accelerated capital allowances	568	557
Intangibles	6	6
Short term timing differences	7	7
Deferred tax asset at UK standard rate of Corporation Tax for 2019 of 19% (2019: 20%)	1,858	1,790

16. Inventories

	NDA Group		**Authority**	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Raw materials and consumables	**43**	36	**34**	29
Work-in-progress	**39**	32	**–**	–
	82	68	**34**	29

The cost of raw materials and consumables recognised as an expense in the year was £74 million in Authority (2018: £80 million) and £81 million in NDA Group (2018: £86 million).

Work-in–progress recognised as an expense in the year in both Authority and NDA Group was nil (2018: £4 million).

17. Financial instruments by category

The accounting classification of each category of financial instruments, and their carrying values, is set out in the following table:

		NDA Group		Authority	
	note	**2019** **£m**	2018 restated £m	**2019** **£m**	2018 restated £m
Financial assets					
Fair value through profit or loss (FVTPL):					
Other investments	19	**450**	374	**–**	–
		450	374	**-**	-
Financial assets at amortised cost:					
Non-current finance lease receivable	20	**43**	43	**43**	43
Non-current other receivables	21	**8**	10	**8**	10
Current trade and other receivables (a)	21	**90**	120	**294**	316
Current finance lease receivables	20	**2**	2	**2**	2
Cash and cash equivalents	22	**113**	214	**28**	82
		256	389	**375**	453

		NDA Group		Authority	
	note	**2019** **£m**	2018 £m	**2019** **£m**	2018 £m
Financial liabilities					
Financial liabilities at amortised cost:					
Current trade and other payables (b)	23	**(564)**	(737)	**(576)**	(729)
		(564)	(737)	**(576)**	(729)

a) Prepayments and VAT are excluded.
b) Payments on account, deferred income and amounts owed to HMRC (in Note 23, other taxes and social security) are excluded.

Generally, financial assets and financial liabilities are generated by day-to-day operational activities and are not held to manage the risks facing the NDA in undertaking its activities. Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial asset and financial liability are disclosed in note 2.15. Other investments measured at fair value through profit or loss are valued using inputs which are deemed level 1 in the fair value hierarchy set out in IFRS 13 (Fair Value Measurement).

The Group has a small number of Euro-denominated contracts which are not significant to the Financial Statements of the Group. This small currency risk is nonetheless still mitigated through the use of forward currency contracts placed with the Government Banking Service. The currency risk arising from overseas operations within the group is negligible.

The Group is not exposed to any significant level of interest rate risk due to the absence of any commercial borrowings in its Consolidated Statement of Financial Position.

The Group is exposed to a low level of price risk in respect of its energy trading operations. This risk is mitigated by the trading strategy employed which stipulates how far ahead of time energy products are purchased and sold. Due to the pricing structure and historical nature of reprocessing contracts, there is no significant exposure to price risk.

There is no significant exposure of the Group to liquidity risk due to the nature of its funding arrangement with BEIS.

The NDA is required to place deposit deeds as collateral in respect of certain energy trading costs incurred. £2 million of such collateral is included within current trade and other receivables in both the Authority and Group Statement of Financial Position at 31 March 2019 (2018: £2 million). The risk of loss associated with these deposits is considered to be minimal.

In addition to this, a letter of credit is issued by a commercial bank on the NDA's behalf in favour of a certain supplier, with respect to energy trading costs. This does not give rise to a financial asset in the accounts of NDA Authority or Group.

Notes to the financial statements - continued

18. Financial risk management

The NDA is financed by a combination of Government funding and commercial activities, and as such is not exposed to the degree of financial risk faced by other business entities. Consequently, financial instruments play a more limited role in creating and managing risk than would apply to a non-public sector body. It does however experience some degree of risk due to the variability of commercial income.

The NDA applies for funding as part of the Government Spending Review. This sets the annual expenditure limit net of the NDA's commercial income, derived largely from reprocessing and spent fuel and waste management contracts. The NDA is required to prioritise and allocate funding to deliver the required programme of work within this net limit, whilst mindful of the potential vulnerability of commercial income to plant breakdown. This is achieved through the use of an extensive reporting and control mechanism, which supports a portfolio based approach to managing the opportunities and risks within both the expenditure and commercial income. The approach has enabled the NDA to consistently control net expenditure within the prescribed limits set by the funding regime.

Separately the NDA has developed an extensive programme to embed risk management practices, covering both operational and financial risks, across all its functions and to provide contractual mechanisms to obtain assurance of good risk management practices from the SLCs. The primary financial risks faced by the NDA are commodity price risk and credit risk. Market risk, comprising foreign currency risk, liquidity risk and interest rate risk, is not considered to be a significant risk for the NDA.

Commodity price risk

Commodity price risk is the risk or uncertainty arising from possible price movements and their impact on the commercial income and therefore ultimately on the funding requirements of the NDA.

The risk to NDA in relation to electricity prices is not considered to be significant.

Credit risk

Credit risk is the risk that a counterparty will default on its contractual obligations resulting in financial loss to the NDA. This risk is managed through ongoing monitoring of the aging of receivables (for which expected credit loss impairments have been made under IFRS 9). The Authority's contracts are almost entirely reprocessing and spent fuel and waste management contracts, for which the NDA is not taking on any new customers.

19. Other investments

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Investments carried at fair value:				
Bank deposits	**53**	47	**–**	–
Managed investments	**397**	327	**–**	–
	450	374	**–**	–

Managed investments comprises of funds held within Rutherford Indemnity Limited in order to allow it to provide insurance for assets across the NDA estate.

20. Finance lease receivables

Present value of minimum lease payments

	NDA Group		Authority	
	2019 £m	2018 restated £m	**2019 £m**	2018 restated £m
Amounts receivable under finance leases:				
Not later than one year	**2**	2	**2**	2
Later than one year and not later than five years	**6**	6	**6**	6
Later than five years	**174**	175	**174**	175
	182	183	**182**	183
Less: unearned finance income	**(135)**	(136)	**(135)**	(136)
Present value of minimum lease payments receivable	**47**	47	**47**	47
Less: expected credit loss	**(2)**	(2)	**(2)**	(2)
Present value of minimum lease payments receivable after expected credit loss	**45**	45	**45**	45
Of which:				
Current	**2**	2	**2**	2
Non-current	**43**	43	**43**	43

20. Finance lease receivables (continued)

	Present value of minimum lease payments NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Amounts receivable under finance leases:				
Not later than 1 year	**2**	2	**2**	2
Later than 1 year and not later than 5 years	**5**	5	**5**	5
Later than 5 years	**40**	40	**40**	40
Present value of minimum lease payments receivable	**47**	47	**47**	47

The finance lease receivable relates to:

a) Land and buildings of the Springfields Fuels operation which was disposed of to Westinghouse Electric UK Holdings Limited by way of a 150 year lease on 1 April 2010. The interest rate inherent in the lease was fixed at the contract date for all of the lease term. The average effective interest rate contracted approximates to 3.50% per annum; and
b) Certain land and buildings of the Capenhurst site which were disposed of to Urenco UK Ltd on 29 November 2012 by way of a combination of freehold and leasehold sales. The interest rate inherent in the lease was fixed at the contract date for all of the lease term. The average effective interest rate contracted approximates to 3.50% per annum.

The finance lease receivable balance is secured over the assets leased. The NDA is not permitted to sell or re-pledge the collateral in the absence of default by the lessee.

Notes to the financial statements - continued

21. Trade and other receivables

	NDA Group		Authority	
	2019	2018 restated	**2019**	2018 restated
	£m	£m	**£m**	£m
Non-current:				
Prepayments	**31**	30	**31**	30
Other receivables	**8**	10	**8**	10
Less provision for expected credit loss	**-**	-	**-**	-
	39	40	**39**	40
Current:				
Trade receivables	**62**	48	**282**	262
Accrued income	**20**	40	**13**	44
Amounts receivable from Consolidated Fund	**-**	1	**-**	1
Other receivables	**11**	32	**2**	10
Prepayments	**10**	10	**6**	6
VAT	**71**	92	**70**	91
	174	223	**373**	414
Less: provision for expected credit loss	**(3)**	(1)	**(3)**	(1)
	171	222	**370**	413

Non-current other receivables relate to lump sum payments made under early retirement arrangements to individuals working for SLCs who have retired early, or who have accepted early retirement, before 31 March 2019. These payments are refundable to the NDA from the appropriate pension scheme at or after the date on which the individual concerned would have reached normal retirement age.

Provision for expected credit loss

The Authority has assessed its expected credit loss on trade and other receivables as at the reporting date as follows:

- Amounts owed by UK government departments are considered to have no expected credit loss, in accordance with FReM
- Amounts owed by entities in the NDA estate (subsidiaries and site licence companies) are considered to have no expected credit loss, based on the Authority's knowledge of the financial position and future operations of each company
- Amounts owed by all other entities have been subject to a probability weighted assessment based on the outcomes of default and no default.

Amounts past due (following table) include amounts owed by government departments, other NDA estate entities and other entities considered relatively low risk by the NDA, therefore the overall expected credit loss risk for these sums is assessed as being realively low.
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Ageing of current trade receivables:

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Nit past due	**17**	45	**240**	260
Past due in the following periods:				
Within 30 days	**34**	2	**33**	–
31 to 60 days	**2**	1	**1**	1
61 to 90 days	**2**	-	**2**	-
91 to 120 days	**-**	-	**-**	-
Over 120 days	**7**	-	**6**	1
Total	**62**	48	**282**	262

22. Cash and cash equivalents

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Balance at 1 April	**214**	135	**82**	69
Net change in cash and cash equivalent balances	**(101)**	79	**(54)**	13
Balance at 31 March	**113**	214	**28**	82
The balances at 31 March were held at:				
Commercial banks	**78**	128	**1**	1
Government Banking Service	**35**	86	**27**	81
	113	214	**28**	82

Cash and cash equivalents comprise cash and short term bank deposits with an original maturity of 3 months or less.

Notes to the financial statements - continued

23. Trade and other payables

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Current:				
Trade payables	**103**	224	**138**	278
Receipts to surrender to the Consolidated Fund	**2**	-	**2**	-
Other payables	**2**	9	**–**	-
Accruals	**457**	504	**436**	451
	564	737	**576**	729
Other taxes and social security	**55**	52	**–**	-
Payments received on account	**468**	660	**461**	654
Deferred income	**6**	14	**1**	8
	1,093	1,463	**1,038**	1,391
Non-current:				
Payments received on account	**1,696**	1,620	**1,696**	1,620
	1,696	1,620	**1,696**	1,620

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Movements on gross payments received on account				
Balance at 1 April	**5,472**	5,586	**5,466**	5,580
Reclassification to accrued income	**-**	3	**-**	3
Revalorisation (see note 6)	**123**	181	**123**	181
Amounts received	**448**	690	**447**	690
Released to income	**(787)**	(988)	**(787)**	(988)
Balance at 31 March	**5,256**	5,472	**5,249**	5,466

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Gross payments on account at 31 March	**5,256**	5,472	**5,249**	5,466
Deduction of recoverable contract costs (see note 14)	**(3,092)**	(3,192)	**(3,092)**	(3,192)
Net payments on account at 31 March	**2,164**	2,280	**2,157**	2,274
Of which:				
Current	**468**	660	**461**	654
Non-current	**1,696**	1,620	**1,696**	1,620
	2,164	2,280	**2,157**	2,274

Trade and other payables and accruals principally comprise amounts outstanding for trade purchases and ongoing costs. The NDA has procedures in place to ensure that all payables are paid within the pre-agreed credit terms. Payments received on account relate to amounts which customers have paid for the provision of services under long-term contracts. These payments will be recognised as income when the services are provided. Payments received on account are shown net after deduction of any applicable recoverable contract costs (see note 14). Payments on account not yet recognised as revenue are adjusted for inflation each year (known as revalorisation).

Payments on account balances are deemed contract liabilities under IFRS 15.

24. Nuclear Provisions

	NDA Group			Authority
	2019 £m	2018 £m	**2019 £m**	2018 £m
Balance at 1 April	**233,569**	163,505	**234,066**	163,998
Provided for in the year and charged to:				
– Statement of Comprehensive Net Expenditure (note 7)	**(95,410)**	73,623	**(95,408)**	73,622
– Recoverable contract costs (a) (note 14)	**(1,510)**	764	**(1,510)**	764
Unwinding of discount charged to:				
– Statement of Comprehensive Net Expenditure (note 7)	**(3,532)**	(1,237)	**(3,532)**	(1,237)
– Recoverable contract costs (a) (note 14)	**(83)**	(49)	**(83)**	(49)
Decommissioning costs utilised in the year (note 7)	**(2,599)**	(2,741)	**(2,599)**	(2,741)
Recoverable contract costs released in year (note 14)	**(276)**	(291)	**(276)**	(291)
In-year group provision adjustment (b) (note 7)	**(92)**	(27)	**–**	–
Provision changes impacting property, plant and equipment (note 11)	**(109)**	22	**–**	–
Total change in provision	**(103,611)**	70,064	**(103,408)**	70,068
Balance at 31 March	**129,958**	233,569	**130,658**	234,066
Of which:				
Current	**2,735**	2,860	**2,735**	2,855
Non-current	**127,223**	230,709	**127,923**	231,211
	129,958	233,569	**130,658**	234,066

(a) The NDA has commercial agreements in place under which a portion of the expenditure required to settle certain elements of the Nuclear Provision are recoverable from third parties. Changes in the future cost estimates of discharging those elements of the Nuclear Provision are therefore matched by a change in future recoverable contract costs. In accordance with IAS 37, these recoverable amounts are not offset against the Nuclear Provision but are treated as a separate asset. The amount recoverable at 31 March 2019 (NDA Group and Authority) is £3,429 million (2018: £5,298 million) – the 'future costs' balance in note 14.

b) An in-year group provision adjustment is made for the movements in the net pension deficit at Sellafield Ltd, which is already implicitly included in the nuclear provision it is deducted here. The opening balance of the net pension deficit is included in the Group opening nuclear provision, and the in-year movement of the deficit included in the note. The 2018/19 increase in this pension deficit was £92 million (2017/18: £27 million).

The discount implicit in recognising nuclear provisions is unwound over the life of the provisions, with the impact of the unwind of one years' discount shown in adjustments to provisions in the Statement of Comprehensive Net Expenditure. An increase of 0.5% in the discount rate (producing a less negative, or more positive, discount rate) would reduce the provision to £110 billion, whilst a decrease in discount rate of 0.5% (producing a more negative, or less positive, discount rate) would increase the provision to £158 billion.

The change in discount rates (see note 2.16) in the current financial year produced a decrease of £107,764 million (2018: £65,973 million increase).

Changes in the cost estimates of discharging the Nuclear Provision (representing increase or decrease in future decommissioning costs) are charged to the adjustments to provisions in the Statement of Comprehensive Net Expenditure. This charge includes the impact of restating liabilities from March 2018 values to current price levels. The overall decrease in the provision was £103,611 million (2018: £70,064 million increase) of which the Authority estimates that £9,915 million related to changes in price levels (2018: £5,326 million).

A total of £2,875 million (2018: £3,032 million) has been released from the Nuclear Provision in the year to 31 March, being the amount provided for that year as at 31 March 2018, adjusted for price changes.

Changes in the estimated future cost of decommissioning, related to commercial property, plant and equipment, are offset by matching changes in the value of the IAS 37 property, plant and equipment asset. A decrease of £109 million was recognised in the year (2018: £22 million increase).

Notes to the financial statements - continued

24. Nuclear Provisions (continued)

Analysis of expected timing of discounted cash flows for the NDA Group Nuclear Provision is as follows:

NDA Group	Waste £m	Research £m	Sellafield £m	Fuel manufacturing and generation £m	Others £m	**2019 Total £m**	2018 Total £m
Within 1 year	77	257	1,912	420	72	2,738	2,860
2–5 years	328	1,051	8,130	1,311	339	11,159	11,581
6–20 years	2,354	1,883	30,405	1,165	644	36,451	41,583
21–50 years	3,907	208	33,343	806	488	38,752	62,943
After 50 years	4,788	61	24,742	11,893	133	41,617	115,269
	11,454	3,460	98,532	15,595	1,676	130,717	234,236
Deduction in respect of Sellafield pension deficit (b)						(759)	(667)
Total NDA Group						129,958	233,569
Sensitivity							
Increase	28,244	180	83,098	5,707	112		
Reduction	(4,191)	(360)	(13,850)	(5,707)	(225)		

The NDA calculates its provision based on management's best estimate of the future costs of the decommissioning programme, which is expected to take until 2137 to complete. The NDA also considers credible risks and opportunities which may increase or decrease the cost estimate, but which are deemed less probable than the best estimate. These are the basis of the sensitivities identified above, and the key sensitivities are as follows:

- waste activities cover the Low Level Waste Repository and the GDF, with the key sensitivities being in the timing and costs of constructing and operating the GDF. The above range from a reduction of £4,191 million to an increase of £28,244 million reflects three separate sensitivities:
  - The potentially higher costs of constructing and operating the GDF itself, which dependent on the location and construction requirements of the facility, could be up to £25,144 million higher (or £4,191 million lower) than the base case assumption
  - The impact of the timing of the facility's construction and operations. The current planned date for the facility to receive waste is 2045. NDA has identified a risk that the construction and opening of the facility may be delayed beyond 2045 (see page 64). A delay to this date may increase the cost of the facility itself, along with the cost of interim storage of waste at sites across the NDA estate. A delay of a small number of years is considered to be within the overall tolerance of the estimate for GDF construction and waste transfer, and is not considered to have a material impact on the provision estimate. A longer delay of say 20 years could materially impact the provision, by approximately £2,100 million.
  - A delay of 20 years would not necessarily increase the underlying costs of the facility, but would increase the discounted value of the estimate by approximately £1,000 million due to the effect of long term negative discount rates.
- Activities on the sites primarily used for research (Dounreay, Harwell, and Winfrith) are concerned with final decommissioning of assets and site clearance. Sites will be cleared by 2080. Options are being explored to accelerate site clearance, which in the case of Dounreay would reduce the provision by £360 million; an increase in the cost and/or a delay of past the latest anticipated Interim State date (2033) would increase the provision by up to £180 million.
- Sellafield represents activities associated with operation of the site, reprocessing and eventual decommissioning, and includes all site overheads. Principal sensitivities are around the cost of delivering the plan, particularly the costs of new construction, decommissioning and post operational clean out (POCO) work in the long-term (beyond the next twenty years). The potential costs range from a £13,850 million reduction against the current estimate, to a £83,098 million increase.
- fuel manufacturing and generation (which for this purpose includes Magnox and Springfields) programme of work includes defueling the generating stations and preparing for interim Care and Maintenance (complete by 2030) followed by a final site clearance phase around 2070 to 2107. The main cost risk is in the final site clearance phase, which may increase costs by £5,707 million. Conversely a reduction in the costs associated with this phase may reduce costs by £5,707 million.

25. Other provisions

NDA Group	Restructuring £m	Contract loss £m	Other £m	**Total £m**
Movements in gross provisions				
Balance at 31 March 2017	**72**	**1,094**	**37**	**1,203**
Provided for in the year (see note 7)	-	35	-	**35**
Released in the year (see note 7)	(9)	(165)	(2)	**(176)**
Unwinding of discount (see note 7)	-	(16)	-	**(16)**
Balance at 31 March 2018	**63**	**948**	**35**	**1,046**
Provided for in the year (see note 7)	5	(403)	2	**(396)**
Released in the year (see note 7)	(7)	(157)	-	**(164)**
Unwinding of discount (see note 7)	-	(15)	-	**(15)**
Balance at 31 March 2019	**61**	**373**	**37**	**471**

Authority	Restructuring £m	Contract loss £m	Other £m	Total £m
Movements in gross provisions				
Balance at 31 March 2017	**70**	**1,092**	**11**	**1,173**
Provided for in the year (see note 7)	(4)	39	-	**35**
Released in the year (see note 7)	(8)	(165)	(1)	**(174)**
Unwinding of discount (see note 7)	(1)	(15)	-	**(16)**
Balance at 31 March 2018	**57**	**951**	**10**	**1,018**
Provided for in the year (see note 7)	11	(407)	-	**(396)**
Released in the year (see note 7)	(7)	(157)	-	**(164)**
Unwinding of discount (see note 7)	-	(15)	-	**(15)**
Balance at 31 March 2019	**61**	**372**	**10**	**443**

Analysis of net provisions

	NDA Group		**Authority**	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Balance at 31 March	**471**	1,046	**443**	1,018
Amount deducted from recoverable contract costs (see note 14)	**(334)**	(543)	**(334)**	(543)
Net balance at 31 March	**137**	503	**109**	475
Of which:				
Current	**10**	143	**9**	141
2 to 5 years	**35**	177	**33**	151
After 5 years	**92**	183	**67**	183
Non-current	**127**	360	**100**	334
	137	503	**109**	475

Restructuring provisions have been recognised to cover continuing annual payments to be made under early retirement arrangements to individuals working for SLCs who retired early, or had accepted early retirement, before 31 March 2019. These payments continue at least until the date at which the individual would have reached normal retirement age. Lump sums paid to individuals on retirement are held as receivables, since they are refundable to the NDA from the appropriate pension scheme at or after the date on which the individual concerned would have reached normal retirement age.

Contract loss provisions have been recognised to cover the anticipated shortfall between total income and total expenditure on relevant long-term contracts. The above balances are shown net after deduction from any applicable recoverable contract costs (see note 14). The amount provided in the year for the contract loss provision relates to changes in estimates of the costs of existing contracts.

Other provisions comprises of provisions for insurance claims.

Notes to the financial statements - continued

26. Retirement benefit schemes

The NDA Group has a range of pension schemes including both defined contribution and defined benefit plans.

Defined contribution schemes

NDA and RWM employees have pension benefits provided through the Civil Service pension arrangements. From 1 April 2015 a new pension scheme for civil servants was introduced – the Civil Servants and Others Pension Scheme or alpha, which provides benefits on a career average basis with a normal pension age equal to the member's State Pension Age (or 65 if higher, details are described on page 75). Prior to that date, NDA and RWM employees participated in the Principal Civil Service Pension Scheme (PCSPS), an unfunded multi-employer defined benefit scheme in which the NDA and RWM are unable to identify their share of the underlying assets and liabilities. The scheme actuary valued the scheme as at 31 March 2012 and details can be found in the resource accounts of the Cabinet Office: Civil Superannuation at http://www.civilservicepensionscheme.org.uk/about-us/resource-accounts/. In accordance with guidance issued by HM Treasury, the PCSPS and Alpha are accounted for as defined contribution schemes in these financial statements. The next actuarial valuation will be as at 31 March 2019, but has not yet been completed.

Direct Rail Services Limited (DRS) employees joining after 1 April 2008 participate on a defined contribution basis in the Combined Nuclear Pension Plan (CNPP).

Sellafield Limited employees joining with effect from 24 November 2008 participate on a defined contribution basis in the Combined Nuclear Pension Plan (CNPP).

International Nuclear Services Ltd (INS) employees participate in the United Kingdom Atomic Energy Authority (UKAEA) Combined Pension Scheme, the CNPP and the Magnox Electric Group section of the Electricity Supply Pension Scheme. Participation in these schemes is in sections with other employers and INS is unable to identify its share of the underlying assets and liabilities. Consequently INS's participation in these schemes is accounted for as if they were defined contribution schemes, as permitted under IAS 19. INS's contributions to these schemes are assessed as part of regular actuarial valuations of those schemes and will vary in line with the funding position of the relevant scheme.

Pacific Nuclear Transport Ltd (PNTL) participates in the following industry wide defined contribution schemes:

- The ENSIGN Retirement Plan (for the MNOPF) which replaced the Merchant Navy Officers' Pension Plan (MNOPP); the scheme was closed to new contributions on 31 July 2015 and all existing members' benefits were transferred to the ENSIGN scheme.
- The Merchant Navy Ratings' Group Personal Pension Plan (MNRGPPP) which replaced the MNRPP in September 2010.

The National Employment Savings Trust (NEST) is an auto enrolment scheme set up by the Government. There is a small number of NDA Group employees who have exhausted their participation in their respective pension schemes and have been auto enrolled into NEST.

The total cost charged to expenditure of £29,407,000 (2018: £26,794,000) represents contributions payable to these schemes by the Group at rates specified in the rules of the schemes. No contributions were outstanding at this or the previous year end.

Defined benefit schemes

The Group participates in various pension schemes which are accounted for as defined benefit schemes.

GPS DRS section of the CNPP

DRS participates in the GPS DRS section of the CNPP, a defined benefit (final salary) funded pension scheme. The defined benefit structure was available to all DRS employees until 31 March 2008 when it was closed to new entrants.

Nirex section of the CNPP

The Nirex section of the CNPP is a defined benefit (final salary) funded pension scheme. The Nirex section was closed to new entrants on 1 April 2007 and has no active members.

Closed section of the CNPP

On the disposal of the Springfields Fuels operation the NDA took over direct responsibility of the pension liability within the Springfields Fuels section of the CNPP on 1 April 2010. The Closed section (formerly the Springfields Fuels Section) of the CNPP is a defined benefit (final salary) funded pension scheme. The Closed section was closed to new entrants and further accrual on 31 March 2010.

Sellafield and GPS SLC sections of the CNPP

Sellafield Limited participates in the Sellafield and GPS SLC sections of the CNPP, a defined benefit (final salary) funded pension scheme. The defined benefit structure was available to all Sellafield Limited employees up to 24 November 2008 when it was closed to new entrants.

A small number of Sellafield Limited employees participate in the Magnox Electric Group section of the Electricity Supply Pension Scheme. Participation in this scheme is in a section with other employers and Sellafield Limited is unable to identify its share of the underlying assets and liabilities. Consequently Sellafield Limited's participation in this scheme is accounted for as if it were a defined contribution scheme, as permitted under IAS 19. Sellafield Limited's contributions to this scheme are assessed as part of a regular actuarial valuation and will vary in line with the funding position of the scheme.

Merchant Navy Officers Pension Fund (MNOPF)

PNTL employees participate in the Merchant Navy Officers Pension Fund (MNOPF). The MNOPF is an industry wide defined benefit (final salary) funded pension scheme. The scheme was closed on 1 November 1996. All costs relating to 'Pacific' vessels are recoverable under contract from customers and hence a recoverable amount is recognised to offset the related pension scheme deficit.
pension scheme deficit.

26. Retirement benefit schemes (continued)

Merchant Navy Ratings Pension Fund (MNRPF)
PNTL employees participate in the Merchant Navy Ratings Pension Fund (MNRPF). The MNRPF is an industry wide defined benefit (final salary) funded pension scheme. The scheme was closed on 31 May 2001. The liabilities of the scheme have been capped at the level of benefits accrued to employees at the closure date, subject to adjustment for future actuarial valuations. All costs relating to 'Pacific' vessels are recoverable under contract from customers and hence a recoverable amount is recognised to offset the related pension scheme deficit.

In relation to the CNPP it is noted that:

- The scheme is sectionalised and individual sections cannot be liable for any other sections' obligations under the rules of the scheme;
- There is no agreed allocation of any surplus or deficit should a participating employer withdraw from the scheme or on wind up. In such an event the participating employer's obligations would be subject to negotiation with the scheme trustees in light of the funding position of the scheme at that time;
- The aggregate average duration of the CNPP obligation is 23 years (2018: 23 years), although this differs slightly by section.

In relation to the Merchant Navy schemes, whilst the schemes are sectionalised they operate on a "last man standing" basis such that a participating employer can become liable for part of the obligations of another participating employer should that employer withdraw from the scheme with underfunded obligations. The average duration of the Merchant Navy schemes obligations is 14 years (2018: 14 years).

Actuarial valuations for the various defined benefit schemes referred to above are performed on a triennial basis with 'roll forward' valuations performed in intervening years. Accordingly the relevant valuations have been updated at 31 March 2019 by independent actuaries using assumptions that are consistent with the requirements of IAS 19 and the results of those calculations have been incorporated in the figures below. Investments have been valued for this purpose at fair value.

Risks associated with the Group's defined benefit schemes
The defined benefit schemes expose the Group to a number of risks such as:

Changes in bond yields
Pension liabilities are calculated using discount rates linked to bond yields which are subject to volatility. In order to mitigate this risk the schemes hold a proportion of their assets in bonds, which provide a hedge against falling bond yields.

Investment risk
Some asset classes such as equities, which are expected to provide higher returns over the long term, are subject to short term volatility and may lead to deficits if assets underperform the discount rate used to calculate future liabilities. The allocation to such assets is monitored to ensure it remains appropriate given the schemes' long-term objectives.

Inflation risk
Since most of the scheme liabilities are indexed in line with price inflation, higher than assumed levels of inflation will increase the liabilities. In order to mitigate this risk the schemes hold a proportion of their assets in index-linked bonds.

Longevity risk
Increases in life expectancy will result in an increase in liabilities. The scheme actuaries regularly review actual experience of the scheme membership against the actuarial assumptions underlying the valuation of the liabilities and carry out detailed analysis when setting appropriate scheme specific mortality assumptions.

Other risks
There are a number of other risks involved in sponsoring defined benefit schemes including operational risks and legislative risks. The scheme trustees regularly assess these risks as part of their ongoing governance process.

The High Court ruled in the Lloyds Bank case on 26 October 2018 that schemes must equalise Guaranteed Minimum Pensions (GMPs) between men and women. GMPs were earned until April 1997 for schemes that were "contracted out" of the SERPS state pension. The judgement applies to GMP earned between 17 May 1990 (the date of the Barber judgment) and 5 April 1997 (when all GMPs ceased accrual). For the sections of the Combined Nuclear Pension Plan affected, allowance for GMP equalisation has been treated as a Past Service Cost through the Profit and Loss.

Notes to the financial statements - continued

26. Retirement benefit schemes (continued)

NDA Group
Employee benefit obligations
The amounts recognised in the Statement of Financial Position are as follows:

	2019 £m	2018 £m
Benefit obligations	3,147	2,841
Fair value of scheme assets	(2,354)	(2,136)
Deficit in schemes	**793**	705
Unrecognised asset under IAS 19 para 64b *	5	1
Receivable from third parties	–	–
Net deficit recognised in schemes	**798**	706

* Relates to MNOPF and MNRPF schemes which would otherwise be in surplus, although position for all 7 schemes in aggregate is a net deficit

Statement of Comprehensive Net Expenditure
The amounts recognised in the Statement of Comprehensive Net Expenditure are as follows:

	2019 £m	2018 £m
Current service cost	165	173
Past service cost	1	-
Net interest on net defined benefit (DB) assets / liabilities	18	18
Net cost in SoCNE	**184**	191
Actuarial (gain) / loss	(12)	(81)
Movement in unrecognised asset under IAS 19 para 64b	4	-
Receivable from third parties	-	-
Actuarial (gain) / loss recognised in OCE	**(8)**	(81)

Changes in the present value of the defined benefit obligations
The amounts recognised in the Statement of Financial Position are as follows:

	2019 £m	2018 £m
Opening defined benefit obligation	2,841	2,675
Current service cost	165	173
Past service cost	1	-
Net interest on scheme liabilities	74	69
Employee contributions	18	18
Actuarial (gain) / loss	95	(55)
Benefits paid	(47)	(39)
Closing defined benefit obligation	**3,147**	2,841

Changes in the fair value of the scheme assets are as follows:

	2019 £m	2018 £m
Opening fair value of scheme assets	2,136	2,002
Interest income on scheme assets	56	51
Actuarial gain	103	26
Employer contributions	88	78
Employee contributions	18	18
Benefits paid	(47)	(39)
Closing fair value of scheme assets	**2,354**	2,136

26. Retirement benefit schemes (continued)

Changes in the value of unrecognised assets under IAS 19 para 64b are as follows:

	2019 £m	2018 £m
Opening value of unrecognised assets	1	1
Movement in unrecognised assets	4	-
Closing value of unrecognised assets	**5**	1

Estimated expected employer contributions over the next financial year are as follows:

	2019 £m	2018 £m
Contributions including deficit repair payments	89	86

The major categories of plan assets as a percentage of total scheme assets are as follows:

	2019 %	2018 %
Equities	38	49
Property	12	12
Fixed Interest Gilts	2	2
Index Linked Gilts	19	10
Corporate Bonds	10	10
Hedge funds	-	–
Credit investment	19	17
Cash	-	-
Total	**100**	100

Principal actuarial assumptions at the date of the SOFP (expressed in weighted averages):

	2019 %	2018 %
Discount rate	2.45	2.55
Future salary increases *	1.00–2.85	1.00–2.85
Rate of increase of pensions in payment	3.35–3.50	3.30–3.45
Rate of increase of pensions in deferment	2.35–3.50	2.30–3.45
Retail Price Inflation	3.50	3.45
Life expectancy for a male pensioner aged 65 (in years)	21.8	21.9
Life expectancy for a male non-pensioner currently aged 45 from age 65 (in years)	22.9	23.1

* For those schemes with members accruing benefits future salary increases for 2019 are assumed to be 1.0% for the next two years, 2.3% each of the following ten years, and then 2.8% thereafter.

Mortality assumption

2019

S1NA Year of Birth tables with CMI 2017 projections subject to minimum improvements of 1% trend for males and females

2018

S1NA Year of Birth tables with CMI 2016 projections subject to minimum improvements of 1% trend for males and females

	2018 £'000	2014 £'000
Experience adjustments on plan liabilities	3	(57)
Experience adjustments on plan assets	104	26

26. Retirement benefit schemes (continued)

Sensitivity analysis

Change to	Change in assumption	Impact on DB obligation as at 31.03.18	Change in assumption	Impact on DB obligation as at 31.03.18
Discount rate	Increase by 0.5%	-11%	Decrease by 0.5%	12%
Rate of salary increase	Increase by 0.5%	4%	Decrease by 0.5%	-3%
Rate of price inflation	Increase by 0.5%	12%	Decrease by 0.5%	-11%
Rate of mortality	Increase by 1 year	4%		

Authority
Employee benefit obligations
The amounts recognised in the Statement of Financial Position are as follows:

	2019 £m	2018 £m
Benefit obligations	158	154
Fair value of scheme assets	(140)	(134)
Deficit in schemes	**18**	20
Receivable from third parties	–	–
Net deficit recognised in schemes	**18**	20

Statement of Comprehensive Net Expenditure
The amounts recognised in the Statement of Comprehensive Net Expenditure are as follows:

	2019 £m	2018 £m
Current service cost	–	–
Net interest on net defined benefit assets / liabilities	–	–
Net cost in SoCNE	**–**	**–**
Actuarial (gain) / loss	(2)	5
Receivable from third parties	–	–
Actuarial (gain) / loss recognised in OCE	**(2)**	5

Changes in the present value of the defined benefit obligations
The amounts recognised in the Statement of Financial Position are as follows:

	2019 £m	2018 £m
Opening defined benefit obligation	154	148
Net interest on scheme liabilities	4	3
Actuarial loss	5	6
Benefits paid	(5)	(3)
Closing defined benefit obligation	**158**	154

Changes in the fair value of the scheme assets are as follows:

	2019 £m	2018 £m
Opening fair value of scheme assets	134	133
Interest income on scheme assets	4	3
Employer contributions	-	–
Actuarial gain	7	1
Benefits paid	(5)	(3)
Closing fair value of scheme assets	**140**	134

The Authority made contributions to the Authority's defined benefit pension schemes during the year. The value of these contributions was below the level of rounding used in the financial statements.

26. Retirement benefit schemes (continued)

Estimated expected employer contributions over the next financial year are as follows:

	2019 £m	2018 £m
Contributions including deficit repair payments	1	1

The major categories of plan assets as a percentage of total scheme assets are as follows:

	2019 %	2018 %
Equities	27	35
Property	10	11
Fixed Interest Gilts	-	–
Index Linked Gilts	28	21
Corporate Bonds	22	20
Credit investments	13	12
Cash	-	1
Total	100	100

Principal actuarial assumptions at the date of the SOFP (expressed in weighted averages):

	2019 %	2018 %
Discount rate	2.45	2.55
Future salary increases	–	–
Rate of increase of pensions in payment	3.35–3.50	3.30 –3.45
Rate of increase of pensions in deferment	2.35–3.50	2.30–3.45
Retail Price Inflation	3.50	3.45
Life expectancy for a male pensioner aged 65 (in years)	21.8	21.9
Life expectancy for a male non pensioner currently aged 45 from age 65 (in years)	22.9	23.1

Mortality assumption

2019

S1NA Year of Birth tables with CMI 2017 projections subject to minimum improvements of 1% trend for males and females

2018

S1NA Year of Birth tables with CMI 2016 projections subject to minimum improvements of 1% trend for males and females

	2019 £m	2018 £m
Experience adjustments on plan liabilities	-	(3)
Experience adjustments on plan assets	6	1

Sensitivity analysis

Change to	Change in assumption	Impact on DB obligation as at 31.03.18	Change in assumption	Impact on DB obligation as at 31.03.18
Discount rate	Increase by 0.5%	-9%	Decrease by 0.5%	10%
Rate of salary increase	Increase by 0.5%	-	Decrease by 0.5%	-
Rate of price inflation	Increase by 0.5%	10%	Decrease by 0.5%	-9%
Rate of mortality	Increase by 1 year	4%		

Notes to the financial statements - continued

27. Non-controlling interests

Non-controlling interests balance is the non-controlling interests' share of one non-wholly owned subsidiary (see note 13).

NDA Group	**2019 £m**	2018 £m
At 1 April	**2**	2
Change in equity of non-controlling interests during year	**–**	–
At 31 March	**2**	2

28. Commitments under leases

28 (a) Operating leases – NDA as lessee

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Minimum lease payments under operating leases recognised as an expense in the year	**32**	24	**3**	3

Total future minimum lease payments under operating leases are given in the table below:

	NDA Group		Authority	
	2019 £m	2018 Restated £m	**2019 £m**	2018 £m
Buildings and other:				
Not later than 1 year	**32**	24	**3**	3
Later than 1 year and not later than 5 years	**58**	55	**7**	8
Later than 5 years	**13**	11	**33**	34
	103	90	**43**	45

NDA Group figures for 2018 in the above table are restated for correction in respect of a small number of leases not previously included

Operating lease payments represent rentals payable by the Group for some of its properties, vehicles, locomotives and office equipment. All properties are rented on commercial terms and include office buildings with leases expiring between 2019 and 2044, and leases for industrial facilities with expiry dates between 2021 and 2099.

28 (b) Operating leases – NDA as lessor

Property rental income earned during the year amounted to £3 million (2018: £1 million).

Total future minimum lease receivables under operating leases are given in the table below:

	NDA Group		Authority	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Buildings:				
Not later than 1 year	**2**	3	**5**	5
Later than 1 year and not later than 5 years	**8**	9	**13**	17
Later than 5 years	**21**	24	**64**	70
	31	36	**82**	92

Operating lease receipts represent rentals receivable by the Group in respect of various properties leased on commercial terms and historical agricultural lease agreements.

29. Contingent liabilities

Indemnities
Under the transfer scheme of 1 April 2005, the NDA has assumed responsibility for all occurrences relating to the designated nuclear sites that took place up to that date.

a. At 31 March 2019 the NDA held inventories of reprocessed uranic material. These materials are currently held at nil value, due to uncertainty over their future use, which may result in as-yet-unquantified liabilities for the NDA.

b. Whilst not the lead employer, the NDA is the lead organisation and has ultimate responsibility for certain nuclear industry pension schemes, including the Combined Nuclear Pension Plan, the Magnox section of the ESPS, and the GPS Pension Scheme. Provisions for known deficits are included within Nuclear Provisions. However, movements in financial markets may adversely impact the actuarial valuations of the schemes, resulting in an increase in scheme deficits and consequent increase in nuclear provision.

International Carrier Bond
During 2014/2015 the NDA procured a US Bond on behalf of their subsidiary, INS Ltd, in order to meet US law in respect of vessels calling at US ports for commercial purposes. This Bond is required to ensure that all duties, taxes and fees owed to the federal government are paid. The Bond would therefore only be called on in the case of non-payment of any of the above, and the total cost would not be expected to exceed $100,000.

30. Related parties

Government bodies
The NDA is an Executive NDPB sponsored by BEIS, which is regarded as a related party. During the year, the NDA has had various material transactions with BEIS and with other entities for which BEIS is regarded as the responsible department. The NDA receives grant financing from BEIS.
In the course of its normal business the NDA enters into transactions with Government owned banks. In addition, the NDA has a small number of material transactions with other Government Departments and other central Government bodies.

Directors' transactions
During the year, no Board member, key manager or other related party has undertaken any material transactions with the NDA.

Related party transactions
During the year, group companies entered into the following transactions with related parties:

Trading transactions
Transactions between the Authority and its subsidiaries were as follows:

	Sales of goods to parent		Purchase of goods from parent		Amounts owed by related parties		Amounts owed by related parties	
	2019 £m	2018 £m	**2019 £m**	2018 £m	**2019 £m**	2018 £m	**2019 £m**	2018 £m
Direct Rail Services Ltd	**(37)**	(36)	**-**	1	**7**	7	**–**	–
International Nuclear Services Ltd	**(64)**	(91)	**1**	-	**181**	185	**–**	–
NDA Properties Ltd	**(9)**	(39)	**1**	-	**24**	41	**–**	–
Pacific Nuclear Transport Ltd	**–**	–	**2**	2	**–**	–	**–**	–
Rutherford Indemnity Ltd	**–**	-	**–**	-	**–**	–	**–**	–
Radioactive Waste Management Ltd	**(38)**	(29)	**3**	1	**–**	–	**–**	–
NDA Archives Ltd	**(5)**	(4)	**2**	2	**–**	–	**–**	–
Sellafield Ltd	**(2,026)**	(2,011)	**17**	16	**–**	–	**331**	391

Sales of goods to related parties were made at arm's length prices. The amounts outstanding are unsecured and will be settled in cash. No guarantees have been given or received. No provisions have been made for doubtful debts in respect of the amounts owed by related parties.

Loans to related parties
Amounts owed by DRS includes a loan of £7 million which is interest bearing at a fixed percentage above Bank of England base rate. The loan is not repayable until at least 2019.

Amounts owed by NDA Properties Limited includes a loan of £20 million which is interest bearing at a fixed rate, repayable in instalments over 25 years to 2038. At 31 March 2019 the balance owing was £16 million (2018: £17 million).

Key management compensation
Key management includes Executive and Non-executive directors together with those members of senior management who form part of the Executive Team. The compensation paid or payable to key management for employee services is set out below in aggregate for each of the categories specified in IAS 24 'Related Party Disclosures'. Further information about the remuneration of individual directors is provided in the audited part of the Remuneration and people report on pages 67 to 77.

Authority	**2019 £'000**	2018 £'000
Short-term employee benefits	3,547	2,693
Post-employment benefits	322	332
Other long-term benefits	1,155	868
	5,024	3,893

31. Events after the reporting period

- IAS 10 requires the NDA to disclose the date on which the accounts are authorised for issue, which is the date of the Certificate and Report of the Comptroller and Auditor General.