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Independent auditor's report to the members of Polymetal International plc

Report on the audit of the financial statements

Opinion

In our opinion the financial statements of Polymetal International plc ('the Group'):

- **give a true and fair view of the state of the Group's affairs as at 31 December 2018 and of the Group's profit for the year then ended;**
- **have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and as issued by the International Accounting Standards Board (IASB);**
- **have been properly prepared in accordance with Companies (Jersey) Law, 1991.**

We have audited the financial statements which comprise:

- the consolidated income statement;
- the consolidated statement of comprehensive income;
- the consolidated balance sheet;
- the consolidated statement of cash flows;
- the consolidated statement of changes in equity; and
- the related notes 1 to 35.

The financial reporting framework that has been applied in their preparation is the applicable law and IFRSs as adopted by the European Union and as issued by the IASB.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Summary of our audit approach

Key audit matters	The key audit matters that we identified in the current year were: • Recoverability of exploration and evaluation assets • Recoverability of ore stock piles and heap leach work in progress • Accounting for corporate transactions
Materiality	The materiality that we used for the Group financial statements was US$21 million (2017: US$22 million) which was determined on the basis of adjusted profit before tax. We have adjusted profit before tax for net foreign exchanges losses of US$40 million, the revaluation gain on the initial share on business combination of US$41 million and the net loss on disposal of subsidiaries of US$54 million (2017: US$10 million net foreign exchange loss).
Scoping	Our scoping identified 12 components – • Svetloye, Dukat, Omolon, Albazino, Voro and Kyzyl were subject to a full scope audit • Focussed procedures were performed at Varvara, Amursk, Mayskoye and the Corporate component • Analytical review procedures were performed at Okhotsk and Armenia. This scoping represents a change from our 2017 audit where all components were subject to a full scope audit other than the Armenian component where focussed procedures were performed. In 2018, a number of balances across all components were tested centrally, as the business activities, processes and controls related to these balances are centralised in the Group's head office.
Significant changes in our approach	Following the acquisitions of Prognoz, Nezhda and Amikan in the year and the related judgements associated with accounting for these transactions, we have added identified a key audit matter in respect of accounting for corporate transactions. As noted above, we have also revised our scoping in 2018 with more testing performed centrally and fewer full scope audits at the component level.

Independent auditor's report to the members of Polymetal International plc continued

Conclusions relating to going concern, principal risks and viability statement

Going concern We have reviewed the directors' statement in note 1 to the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements. We considered as part of our risk assessment the nature of the group, its business model and related risks including where relevant the impact of the relevant political and economic environments including the UK's pending withdrawal from the European Union, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the directors' assessment of the group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the directors' plans for future actions in relation to their going concern assessment. We are required to state whether we have anything material to add or draw attention to in relation to that statement required by Listing Rule 9.8.6R(3) and report if the statement is materially inconsistent with our knowledge obtained in the audit.	**We confirm that we have nothing material to report, add or draw attention to in respect of these matters.**
Principal risks and viability statement Based solely on reading the directors' statements and considering whether they were consistent with the knowledge we obtained in the course of the audit, including the knowledge obtained in the evaluation of the directors' assessment of the Group's ability to continue as a going concern, we are required to state whether we have anything material to add or draw attention to in relation to: • the disclosures on pages 79–83 that describe the principal risks and explain how they are being managed or mitigated; • the directors' confirmation on page 128 that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or • the directors' explanation on pages 128–129 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions. We are also required to report whether the directors' statement relating to the prospects of the Group required by Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.	**We confirm that we have nothing material to report, add or draw attention to in respect of these matters.**

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Recoverability of exploration and evaluation assets
Refer to the Audit Committee report on page 99 and the disclosure in Note 19 on page 175.

Key audit matter description	At 31 December 2018, the Group held exploration and evaluation (E&E) assets of US$365 million (2017: US$150 million). Recoverability of E&E assets is dependent on the expected future success of exploration activities. E&E costs, including geophysical, topographical, geological and similar types of costs, are capitalised into exploration assets if management concludes that future economic benefits are likely to be realised based on an assessment of exploration results and identified mineral resources. The evaluation of each asset's future prospects requires significant judgement. Under *IFRS 6 Exploration for and evaluation of mineral resources*, potential indicators of impairment include management's plans to discontinue the exploration activities, lack of further substantial exploration expenditure planned, expiry of exploration licences in the period or in the nearest future, or existence of other data indicating the expenditure capitalised is not recoverable.
How the scope of our audit responded to the key audit matter	We have reviewed and challenged management's assumptions used in the assessment of the recoverability of the Group's E&E assets, the most significant being the newly acquired Prognoz asset. We have also evaluated the design and implementation of management's relevant controls relating to the recoverability of E&E assets. We have reviewed the Board minutes to check that there are no plans to discontinue exploration activities and reviewed the Board-approved budget for 2019 to check that specific exploration project spend was identified, where relevant. We have assessed the recoverability of assets by meeting with operational management to discuss material E&E assets, reviewing drilling and other testing results in the year and confirming future development plans. Where relevant, we have also reviewed models to support the net present value of E&E assets. We have reviewed licence conditions to check that there were no breaches of key terms, and no licences have expired or expire in the near term. We have performed detailed testing to assess the validity of costs capitalised in the year.
Key observations	No additional impairments of E&E assets were identified from the work performed.

Recoverability of ore stock piles and heap leach work in progress
Refer to the Audit Committee report on page 99 and the disclosure in Note 22 on page 177.

Key audit matter description	At 31 December 2018 the Group held US$264 million (2017: US$265 million) in respect of ore stockpiles and heap leach work in progress. The net write-down of these metal inventories in the year ended 31 December 2018 was US$21 million (2017: US$16 million). The assessment of the recoverability of ore stockpiles and heap leach work in progress requires management judgement in the determination of expected quantities of metal to be recovered, costs to process into concentrate or doré for sale, and in estimating future revenue to be realised on sale. As the nature of other types of metal inventories (concentrate, gold in circuit and doré) is such that their processing is substantially complete, there is less uncertainty surrounding the estimation of their net realisable value. Due to the level of judgement involved, and opportunity for management manipulation associated with these inventories, we determined that there was a fraud risk associated with the recoverability of ore stockpile and heap leach work in progress.
How the scope of our audit responded to the key audit matter	We have attended inventory counts performed by management's experts, performed roll forward testing from the count dates through to year end by testing management's metal inventory models, and assessed management's experts' methodology, expertise and objectivity. In addition, we evaluated the design and implementation and tested the operating effectiveness of relevant controls relating to management's stock count process. To challenge management's recoverability assessment, we have analysed the metal inventory balances to identify adverse changes in costs per unit, and reviewed the production reports specifically focusing on unusual variances in grades of ore extracted, stockpiled and processed, achieved recoveries and technical losses in comparison to prior periods and approved life of mine plans. Where a recoverability risk has been identified, we have recalculated the estimated net realisable values based on expected commodity prices, technological recoveries and costs to complete. We challenged management's assumptions against the achieved technological recoveries, actual processing costs in the year and the approved life of mine plans. We have also performed substantive analytical procedures on management's inventory costing calculations.
Key observations	No additional write-downs of ore stockpiles and heap leach work in progress were identified from the work performed.

Independent auditor's report to the members of Polymetal International plc continued

Corporate transactions Refer to the Audit Committee report on page 99 and the disclosures in Note 4 on pages 158 to 163.	
Key audit matter description	During the year ended 31 December 2018, the Group has completed a number of acquisitions resulting in it obtaining control of the mining operations at Prognoz (for a total consideration of US$200 million), Nezhda (for a total consideration of US$208 million) and Amikan (for a total consideration of US$68 million). The accounting for these acquisitions involves a number of key judgements, specifically in respect of determining if each of the acquisitions is a business combination or an asset acquisition, calculating the purchase price allocation (PPA) to the identifiable assets and liabilities of the business acquired, the gain arising on revaluation of pre-existing stake and (specifically in relation to Prognoz) estimating the fair value of the contingent consideration. We note that the PPA in respect of the Amikan acquisition is still a preliminary assessment, whereas Prognoz and Nezhda have now been finalised.
How the scope of our audit responded to the key audit matter	We challenged management's assessment of whether the acquisitions meet the definition of a business under IFRS 3 Business combinations through assessment of the acquiree's business activities, employees, other inputs, processes and outputs. For each transaction we have reviewed the purchase agreement. We have challenged management's calculation of the PPA, including, where applicable, the net present value (NPV) model and life of mine plan prepared by management to support the valuation of the mineral rights recognised, and gains arising on revaluation of the Group's pre-existing interest in the acquired businesses. We also evaluated the design and implementation of relevant controls relating to the acquisition process. We challenged the assumptions made by management in relation to the NPV models, including the discount rate used, the commodity prices, capital expenditure and operating cost forecasts, forecast tax cash flows and the expected production profiles, by comparison to recent analyst forecast commodity price and foreign exchange data, reference to third party documentation where available, consultation with operational management and consideration of sensitivity analyses. We also reviewed the inputs used for consistency across all transactions and asset impairment testing under IAS 36. We reviewed whether the life of mine plans used in the NPV models are based on the most up-to-date Ore Reserve and Mineral Resource reports prepared by management's experts. We evaluated the consistency of the key assumptions used in the preparation of those reports with the assumptions used in the valuation models and assessed the competence, experience and objectivity of management's experts. Specifically in respect of the Prognoz contingent consideration, we involved Deloitte valuation specialists to test the integrity and output of the valuation model used. We have also checked that the inputs to the model are consistent with those tested in the NPV models or can be reconciled to third party documentation.
Key observations	We are satisfied that all three acquisitions (including the gains on the revaluation of the pre-existing interests, where appropriate) have been accounted for appropriately. The assumptions used in management's models are reasonable and have been determined and applied on a consistent basis, where relevant, across the Group. We also found that the assumptions and methodology used by management in the valuation of the deferred contingent consideration were reasonable.

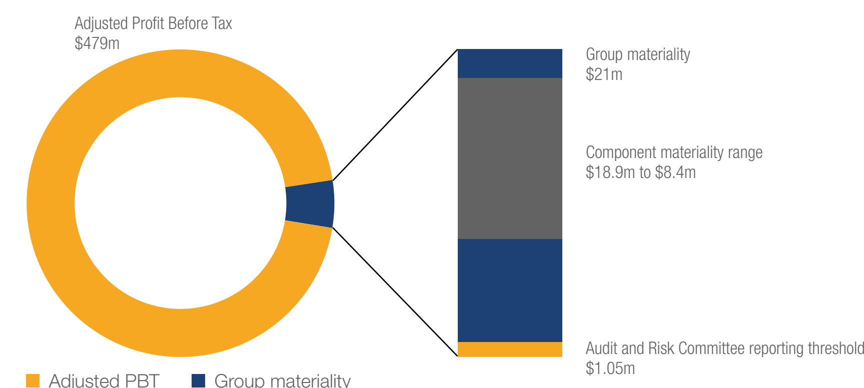
Our application of materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

Group materiality	US$21 million (2017: US$22 million)
Basis for determining materiality	We used the Group's adjusted profit before tax as a key benchmark, supported by a range of other relevant financial metrics, to determine the Group's materiality. This approach is consistent with our 2017 audit and the selected materiality figure represents 4.4% of the adjusted profit before tax figure (2017: 4.9%) and 1.5% of net assets (2017: 1.7%).
Rationale for the benchmark applied	The use of this metric is consistent with our 2017 audit and has been chosen on the basis that the adjusted profit before tax is a key benchmark for management and investors to appraise the Group's performance. We have adjusted profit before tax for net foreign exchanges losses of US$40 million, the revaluation gain on the initial share on business combination of US$41 million and the net loss on disposal of subsidiaries of US$54 million (2017: US$10 million net foreign exchange loss).

ADJUSTED PROFIT BEFORE TAX



We agreed with the Audit and Risk Committee that we would report to the Committee all audit differences in excess of US$1.05 million (2017: US$1.1 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

An overview of the scope of our audit

The Group holds various mining assets in Russia, Kazakhstan and Armenia. Our scoping identified 12 components (Svetloye, Dukat, Omolon, Albazino, Voro, Kyzyl, Varvara, Amursk, Mayskoye, Okhotsk, Armenia, together with a single component comprising the support function corporate entities).

Our 2018 scoping differentiated between balances which, following increased centralisation and standardisation of the Group's processes and controls, could be tested centrally, and those which needed to be tested at the local component level. For balances which were tested centrally, we have performed substantive audit procedures on all components.

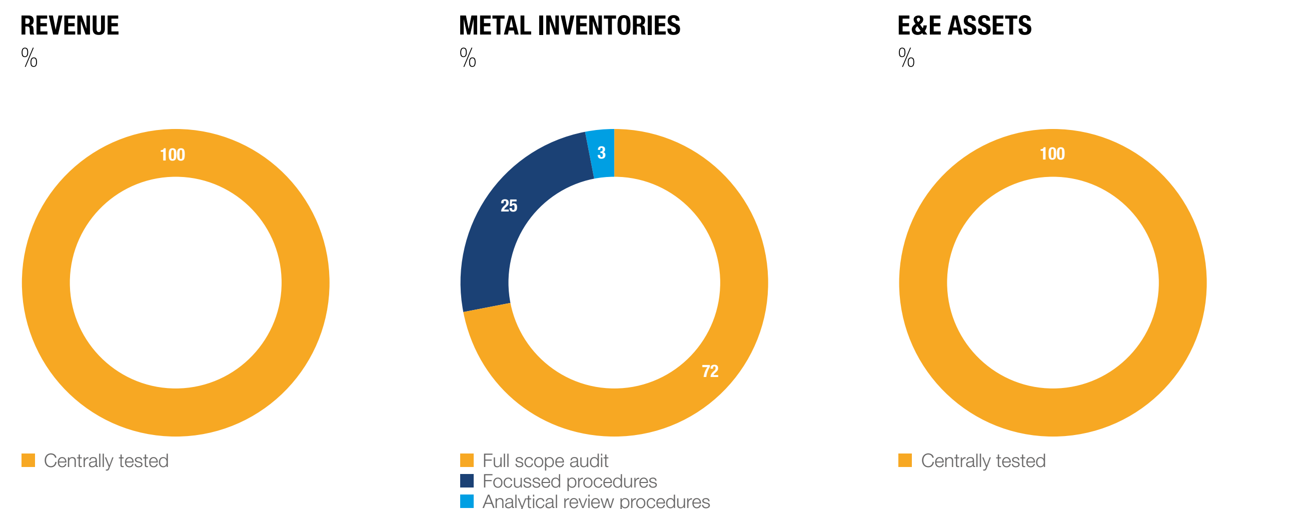
We determined the scope of the procedures to be performed at each component on the balances not tested centrally. We have performed full scope audits at Svetloye, Dukat, Omolon, Albazino, Voro and Kyzyl with focused procedures on specific risks performed at Varvara, Amursk, Mayskoye and the Corporate component, and an analytical review of the Okhotsk and Armenian components. This represents a change from our 2017 scoping where all component were subject to a full scope audit with the exception of the Armenian component, where focussed procedures were performed.

The Group audit team was involved in the work of the component auditors at all stages of the audit process. The signing partner and senior members of the Group engagement team visited the head office in St. Petersburg regularly throughout the year and during the final audit in 2019. The signing partner also visited the Amursk component in the year (2017: the signing partner visited Kyzyl).

Our audit work was executed at levels of materiality applicable to each individual component, which were between US$8.4 million and US$18.9m (2017: US$8.8 million and US$19.8 million).

Independent auditor's report to the members of Polymetal International plc continued

Below we have illustrated the coverage of certain key balances by testing performed centrally, full scope audit, focussed procedures and analytical review procedures.



Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon.	**We have nothing to report in respect of these matters.**

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

In this context, matters that we are specifically required to report to you as uncorrected material misstatements of the other information include where we conclude that:

- *Fair, balanced and understandable* – the statement given by the directors that they consider the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- *Audit committee reporting* – the section describing the work of the audit committee does not appropriately address matters communicated by us to the audit committee; or
- *Directors' statement of compliance with the UK Corporate Governance Code* – the parts of the directors' statement required under the Listing Rules relating to the company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

Responsibilities of directors

As explained more fully in the statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

Opinion on other matter prescribed by our engagement letter

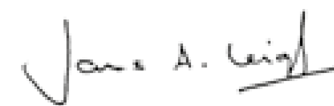
In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the provisions of the UK Companies Act 2006 as if that Act had applied to the company.

Matters on which we are required to report by exception

Adequacy of explanations received and accounting records Under the Companies (Jersey) Law, 1991 we are required to report to you if, in our opinion: • we have not received all the information and explanations we require for our audit; or • proper accounting records have not been kept by the parent company, or proper returns adequate for our audit have not been received from branches not visited by us; or • the financial statements are not in agreement with the accounting records and returns.	**We have nothing to report in respect of these matters.**

Use of our report

This report is made solely to the company's members, as a body, in accordance with Article 113A of the Companies (Jersey) Law, 1991. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.



James Leigh FCA
For and on behalf of Deloitte LLP

Recognized Auditor
London
8 March 2019

Consolidated financial statements

Consolidated income statement

	Note	Year ended 31 December 2018			Year ended 31 December 2017		
		Continuing operations $m	**Discontinued operations[1] $m**	**Total Group $m**	Continuing operations $m	Discontinued operations[1] $m	Total Group $m
Revenue	7	1,706	176	1,882	1,607	208	1,815
Cost of sales	8	(971)	(125)	(1,096)	(966)	(140)	(1,106)
Gross profit		**735**	**51**	**786**	**641**	**68**	**709**
General, administrative and selling expenses	12	(164)	(11)	(175)	(149)	(9)	(158)
Other operating expenses, net	13	(47)	(28)	(75)	(44)	–	(44)
Share of (loss)/profit of associates and joint ventures	21	(1)	–	(1)	3	–	3
Operating profit		**523**	**12**	**535**	**451**	**59**	**510**
Foreign exchange loss, net		(37)	(3)	(40)	(10)	–	(10)
Revaluation of initial share on business combination	4	41	–	41	–	–	–
Loss on disposal of subsidiaries, net	4	(54)	–	(54)	–	–	–
Change in fair value of contingent consideration liability	29	7	–	7	2	–	2
Finance income		8	–	8	4	–	4
Finance costs	16	(71)	–	(71)	(63)	–	(63)
Profit before income tax		**417**	**9**	**426**	**384**	**59**	**443**
Income tax expense	17	(65)	(6)	(71)	(80)	(9)	(89)
Profit for the financial period		**352**	**3**	**355**	**304**	**50**	**354**
Profit for the financial period attributable to:							
Equity shareholders of the Parent		352	2	354	304	50	354
Non-controlling interest		–	1	1	–	–	–
		352	**2**	**354**	**304**	**50**	**354**
Earnings per share ($)							
Basic	31	0.79	0.00	0.79	0.71	0.11	0.82
Diluted	31	0.79	0.00	0.79	0.70	0.11	0.81

Consolidated statement of comprehensive income

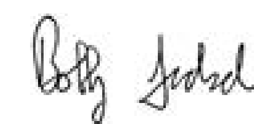
	Year ended 31 December 2018 $m	Year ended 31 December 2017 $m
Profit for the period[2]	355	354
Items that may be reclassified to profit and loss		
Exchange differences on translating foreign operations	(485)	113
Currency exchange differences on intercompany loans forming net investment in foreign operations, net of income tax	17	(23)
Currency exchange differences recycled to income statement on disposal of foreign operation	19	–
Total comprehensive (loss)/income for the period	**(94)**	**444**
Total comprehensive (loss)/income for the period attributable to:		
Equity shareholders of the Parent	(95)	444
Non-controlling interest	1	–
	(94)	**444**

1 Refer to Note 5 Assets held for sale and discontinued operations.
2 Profit for the period includes $3 million of profits relating to discontinued operations and a loss of $63 million arising on the disposal of such operations, amounting to a net loss of $60 million.

Consolidated balance sheet

	Note	**31 December 2018 $m**	31 December 2017 $m
Assets			
Property, plant and equipment	19	2,426	2,054
Goodwill	20	15	18
Investments in associates and joint ventures	21	2	96
Non-current loans and receivables		6	15
Deferred tax asset	17	73	61
Non-current inventories	22	95	123
Total non-current assets		**2,617**	**2,367**
Assets held for sale	5	74	–
Current inventories	22	537	514
VAT receivable		95	96
Trade receivables and other financial instruments	23	81	71
Prepayments to suppliers		44	38
Income tax prepaid		8	6
Cash and cash equivalents	24	379	36
Total current assets		**1,218**	**761**
Total assets		**3,835**	**3,128**
Liabilities and shareholders' equity			
Accounts payable and accrued liabilities	27	(146)	(135)
Prepayments received	7	(100)	–
Current borrowings	25	(117)	(26)
Income tax payable		(8)	(10)
Other taxes payable		(37)	(38)
Current portion of contingent consideration liability	29	(5)	(5)
Liabilities associated with assets classified as held for sale	5	(8)	–
Total current liabilities		**(421)**	**(214)**
Non-current borrowings	25	(1,782)	(1,430)
Contingent consideration liability	29	(49)	(57)
Deferred tax liability	17	(152)	(77)
Environmental obligations	26	(32)	(39)
Other non-current liabilities		(2)	(4)
Total non-current liabilities		**(2,017)**	**(1,607)**
Total liabilities		**(2,438)**	**(1,821)**
NET ASSETS		**1,397**	**1,307**
Stated capital account	31	2,414	2,031
Share-based compensation reserve	32	24	21
Translation reserve		(1,599)	(1,151)
Retained earnings		540	406
Shareholders' equity		**1,379**	**1,307**
Non-controlling interest	4	18	–
Total equity		**1,397**	**1,307**

Notes on pages 144 to 189 form part of these financial statements. These financial statements are approved and authorised for issue by the Board of Directors on 8 March 2019 and signed on its behalf by:



Vitaly Nesis
Group CEO

Bobby Godsell
Chair of the Board of Directors

Consolidated statement of cash flows

	Note	**Year ended 31 December 2018 $m**	Year ended 31 December 2017 $m
Net cash generated by operating activities	34	**513**	**533**
Cash flows from investing activities			
Purchases of property, plant and equipment	19	(344)	(383)
Acquisitions of joint venture and associate	21	–	(16)
Loans forming part of net investment in joint ventures	21	(51)	(52)
Call option related to the Nezhda acquisition paid	4	–	(12)
Net cash outflow on acquisitions	4	(6)	(7)
Proceeds from disposal of subsidiaries	4	15	
Loans advanced		(28)	(18)
Receipt of repayment of loans provided		35	11
Net cash used in investing activities		**(379)**	**(477)**
Cash flows from financing activities			
Borrowings obtained	25	1,697	3,108
Repayments of borrowings	25	(1,254)	(3,032)
Dividends paid	18	(213)	(138)
Contingent consideration liabilities paid	29	(6)	(5)
Net cash from/(used in) financing activities		**224**	**(67)**
Net increase/(decrease) in cash and cash equivalents		358	(11)
Cash and cash equivalents at the beginning of the period	24	36	48
Effect of foreign exchange rate changes on cash and cash equivalents		(15)	(1)
Cash and cash equivalents at the end of the financial year		**379**	**36**

Consolidated statement of changes in equity

	Note	Number of shares outstanding (unaudited)	Stated capital account $m	Share-based compensation reserve $m	Translation reserve $m	Retained earnings $m	Total equity attributable to the parent $m	Non-controlling interest $m	Total equity $m
Balance at 1 January 2017		**428,262,338**	**2,010**	**12**	**(1,241)**	**200**	**981**	**–**	**981**
Profit for the financial year		–	–	–	–	354	354	–	354
Other comprehensive income, net of income tax		–	–	–	90	–	90	–	90
Share-based compensation	32	–	–	10	–	–	10	–	10
Shares allotted to employees	32	144,219	1	(1)	–	–	–	–	–
Issue of shares to acquire non-controlling interest	31	893,575	10	–	–	(10)	–	–	–
Issue of shares for contingent consideration liabilities	29	815,348	10	–	–	–	10	–	10
Dividends	17	–	–	–	–	(138)	(138)	–	(138)
Balance at 31 December 2017		**430,115,480**	**2,031**	**21**	**(1,151)**	**406**	**1,307**	**–**	**1,307**
Profit for the financial year		–	–	–	–	353	353	2	355
Other comprehensive loss, net of income tax		–	–	–	(448)	–	(448)	(1)	(449)
Share-based compensation	32	–	–	12	–	–	12	–	12
Shares allotted to employees	32	1,001,365	9	(9)	–	–	–	–	–
Issue of shares for business combinations	4	36,402,296	358	–	–	–	358	17	375
Issue of shares for contingent consideration liabilities	29	1,015,113	10	–	–	–	10	–	10
Issue of shares to acquire non-controlling interest	31	834,055	6	–	–	(6)	–	–	–
Dividends	18	–	–	–	–	(213)	(213)	–	(213)
Balance at 31 December 2018		**469,368,309**	**2,414**	**24**	**(1,599)**	**540**	**1,379**	**18**	**1,397**

Notes to the consolidated financial statements

1. General

Corporate information

Polymetal Group (the Group) is a leading gold and silver mining group with operations in Russia and Kazakhstan.

Polymetal International plc (the Company) is the ultimate parent entity of Polymetal Group. The Company was incorporated in 2010 as a public limited company under Companies (Jersey) Law 1991 and has its place of business in Cyprus. Its shares are traded on the London and Moscow stock exchanges.

Significant subsidiaries

As at 31 December 2018 the Company held the following significant mining and production subsidiaries:

				Effective interest held, %	
Name of subsidiary	Deposits and production facilities	Segment	Country of incorporation	**31 December 2018**	31 December 2017
Gold of Northern Urals CJSC	Vorontsovskoye	Ural	Russia	100	100
Svetloye LLC	Svetloye	Khabarovsk	Russia	100	100
Magadan Silver JSC	Dukat	Magadan	Russia	100	100
	Lunnoye				
	Arylakh				
	Goltsovoye				
Mayskoye Gold Mining Company LLC	Mayskoye	Magadan	Russia	100	100
Omolon Gold Mining Company LLC	Birkachan	Magadan	Russia	100	100
	Tsokol				
	Dalneye				
	Sopka Kvartsevaya				
	Olcha				
Albazino Resources Ltd	Albazino	Khabarovsk	Russia	100	100
Amur Hydrometallurgical Plant LLC	AGMK Plant	Khabarovsk	Russia	100	100
Varvarinskoye JSC	Varvarinskoye	Kazakhstan	Kazakhstan	100	100
Bakyrchik Mining Venture LLC	Bakyrchik	Kazakhstan	Kazakhstan	100	100
Komarovskoye Mining Company LLC	Komarovskoye	Kazakhstan	Kazakhstan	100	100
South-Verkhoyansk Mining Company JSC	Nezhda	Yakutia	Russia	100	17.66
Prognoz Silver LLC	Prognoz	Yakutia	Russia	100	5

Going concern

In assessing its going concern status, the Group has taken account of its financial position, anticipated future trading performance, its borrowings and other available credit facilities, and its forecast compliance with covenants on those borrowings and its capital expenditure commitments and plans. As at 31 December 2018, the Group (excluding assets held for sale) held $379 million of cash and had net debt of $1,520 million, with $1,119 million of additional undrawn facilities of which $1,069 million are considered committed. Debt of $117 million is due for payment within one year. The Group's cash generation and liquidity remains strong and the Group believes it will be able to operate within existing facilities, but could secure additional financing if and when needed.

The Board is satisfied that the Group's forecasts and projections, having taken account of reasonably possible changes in trading performance, show that the Group has adequate resources to continue in operational existence for at least the next 12 months from the date of this report and that it is appropriate to adopt the going concern basis in preparing the consolidated financial statements for the year ended 31 December 2018.

Basis of presentation

The Group's annual consolidated financial statements for the year ended 31 December 2018 are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. The financial statements have been prepared on the historical cost basis, except for certain financial instruments which are measured at fair value as of end of the reporting period and share-based payments which are recognised at fair value as of measurement date.

The following accounting policies have been applied in preparing the consolidated financial statements for the year ended 31 December 2018.

New standards adopted by the Company and changes in accounting policies

IFRS 15 *Revenue from Contracts with Customers*. In May 2014, the IASB issued IFRS 15 *Revenue from Contracts with Customers* ('IFRS 15'), which covers principles that an entity shall apply to report information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer. This standard replaces IAS 18 *Revenue*, IAS 11 *Construction Contracts* and related interpretations. IFRS 15 uses a control-based approach to recognise revenue which is a change from the risk and reward approach under the IAS 18. The standard requires entities to apportion revenue earned from contracts to individual performance obligations, on a relative standalone selling price basis.

The Group has adopted IFRS 15 effective 1 January 2018 applying the modified retrospective approach. Under the modified retrospective approach, the Group recognises transition adjustments, if any, in retained earnings on the date of initial application (1 January 2018), without restating the financial statements on a retrospective basis.

The Group's revenue is primarily derived from commodity sales, for which the point of recognition is dependent on the contract sales terms, known as the international commercial terms (Incoterms). As the transfer of risks and rewards generally coincides with the transfer of control at a point in time under incoterms, the timing and amount of revenue recognised by the Group for the sale of commodities is not materially affected.

For the Incoterms Cost, Insurance and Freight (CIF) and Cost and Freight (CFR) the seller must contract for and pay the costs and freight necessary to bring the goods to the named port of destination. Consequently, the freight service on export commodity contracts with CIF/CFR incoterms represents a separate performance obligation as defined under the new standard, and a portion of the revenue earned under these contracts, representing the obligation to perform the freight service, is deferred and recognised over time as this obligation is fulfilled, along with the associated costs. The shipping services do not represent the Group's core activity and are fully outsourced, so these are presented within other operating income and expenses. For the period ended 31 December 2018 the revenues attributed to the shipping services amounted to $9 million. Under IFRS 15, there is no impact on the amounts recognised in the consolidated income statement and balance sheet, nor is there any change in the timing of revenue recognition.

The impact of applying the change during the year ended 31 December 2017 was to reduce both revenue and cost of sales by $9 million with no impact on profit, assets and liabilities as at 31 December 2017. Accordingly, there were no transition adjustments to the opening retained earnings and the information presented for 2017 has not been restated.

During the year ended 31 December 2018 the Group has entered into prepaid bullion sales arrangements, which are settled solely through bullion shipments and are priced based on the spot London Bullion Market Association (LBMA) price, prevailing at the date of the respective shipment. The arrangements fall under IFRS 15 *Revenue from Contracts with Customers* and advances received represent contract liabilities, which are presented on the face of the balance sheet as prepayments received. As of 31 December 2018 the contract liabilities amount to $100 million (31 December 2017: nil).

IFRS 9 *Financial instruments*. In July 2014, the IASB issued the final version of IFRS 9 *Financial instruments* ('IFRS 9'). This standard is effective for annual periods beginning on or after 1 January 2018. IFRS 9 provides a revised model for recognition, measurement and impairment of financial instruments. IFRS 9 also includes a substantially reformed approach to hedge accounting.

The impacts of adopting IFRS 9 on the Group retained earnings at 1 January 2018 are as follows:

- Impairment: The impact of the introduction of an 'expected credit loss' model for the assessment of impairment of financial assets held under amortised cost would be to increase the Group's operating costs by $4 million and decrease the Group's profit before tax by $4 million for the year ended 31 December 2017, and to reduce current assets by $4 million at 31 December 2017.
- Classification and measurement: The measurement and accounting treatment of the Group's financial assets is unchanged on application of the new standard, except for the trade receivables from provisional copper, gold and silver concentrate sales, which are classified and measured at fair value through profit and loss (FVTPL) under new Standard, rather than at amortised cost with embedded derivative, separated from the host contract and measured at fair value. The classification of these receivables as FVTPL does not change on raising of the final invoice.
- Hedge accounting: no impact as the Group does not elect to use hedge accounting.

As these effects are considered immaterial, the Group has concluded that no adjustments were required to its opening retained earnings and there were no significant changes to its measurement of financial instruments for the comparative period as a result of the adoption of IFRS 9.

The adoption of the expected credit loss impairment model had no impact on the Group's financial statements as of 31 December 2018.

Notes to the Consolidated financial statements continued

1. General continued

Amended accounting standards adopted by the Group

The following amendments to IFRSs became mandatory effective during the year ended 31 December 2018. The amendments generally require full retrospective application, with some amendments requiring prospective application.

- Amendments to IAS 40 *Investment Property*, effective for annual periods beginning on or after 1 January 2018;
- Amendments to IFRS 1 *First-time Adoption of International Financial Reporting Standards*, effective for annual periods beginning on or after 1 January 2018;
- Amendments to IFRS 2 *Share-based payments*, effective for annual periods beginning on or after 1 January 2018;
- Amendments to IFRS 4 *Insurance Contracts* – Applying IFRS 9 *Financial Instruments* with IFRS 4 *Insurance Contracts*;
- IFRIC 22 Foreign *Currency Transactions and Advance Consideration*, effective for annual periods beginning on or after 1 January 2018.

The Group has determined these amendments do not have a significant impact on its consolidated financial statements or are not applicable to the Group.

New accounting standards issued but not yet effective

IFRS 16 *Leases*. IFRS 16 replaces the following standards and interpretations: IAS 17 *Leases* and IFRIC 4 *Determining whether an Arrangement contains a Lease*. The new standard provides a single lessee accounting model for the recognition, measurement, presentation and disclosure of leases. IFRS 16 applies to all leases including subleases and requires lessees to recognise assets and liabilities for all leases, unless the lease term is 12 months or less, or the underlying asset has a low value. Lessors continue to classify leases as operating or finance. Application of the standard is mandatory for annual reporting periods beginning on or after 1 January 2019, with earlier application permitted.

The Group has decided to adopt the cumulative catch-up transition approach and so the cumulative effect of transition to IFRS 16 will be recognised in retained earnings with no restatement of the comparative period. The principal impact of IFRS 16 will be the change of lessee's accounting treatment for the contracts which are currently classified as operating leases. Such lease agreements will give rise to the recognition of a right of use asset within property, plant and equipment and a related liability for future lease payments.

Total impact of IFRS 16 on the Group's balance sheet is expected to be the recognition of right-of-use assets and respective lease liabilities. The Group has determined that surface lease arrangements with municipal government for the purposes of mining and exploration activities fall out of the IFRS 16 scope. Based on the analysis of the existing lease agreements, the right of use asset will principally relate to the leased office buildings and the expected impact approximates $28 million.

In the Group's income statement depreciation of right-of-use assets and interest expense on the lease liabilities will be recognised instead of operating lease expenses under IAS 17. The impact of the standard following adoption is expected to approximate to a $1 million decrease in underlying earnings and profit before tax.

The following standards and interpretations were in issue but not yet effective as of reporting date and are not applicable or have no effect on the Group:

- Amendments to IFRS 10 *Consolidated Financial Statements* and IAS 28 *Joint Ventures: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*, effective for annual periods beginning on or after 1 January 2019.
- IFRIC 23 *Uncertainty over Income Tax Treatment*, effective for annual periods beginning on or after 1 January 2019.
- IFRS 17 *Insurance Contracts*, effective for annual periods beginning on or after 1 January 2021. Earlier application is permitted.
- Amendments to IFRS 9 *Prepayment Features with Negative Compensation*, effective for annual periods beginning on or after 1 January 2019. Earlier application is permitted.
- Amendments to IAS 28 *Long-term Interests in Associates and Joint Ventures*, effective for annual periods beginning on or after 1 January 2019. Earlier application is permitted.
- Annual Improvements to IFRS Standards 2015–2017 Cycle: Amendments to IFRS 3 *Business Combinations*, IFRS 11 *Joint Arrangements*, IAS 12 *Income Taxes* and IAS 23 *Borrowing Costs*. All the amendments are effective for annual periods beginning on or after 1 January 2019. Earlier application is permitted.
- Amendments to IAS 19 *Employee Benefits Plan Amendment, Curtailment or Settlement*, effective for annual periods beginning on or after 1 January 2019.
- Definition of a Business – Amendments to IFRS 3 *Business Combinations*, effective for annual periods beginning on or after 1 January 2020.
- Definition of Material – Amendments to IAS 1 *Presentation of Financial Statements* and IAS 8 *Accounting Policies*, *Changes in Accounting Estimates and Errors*, effective for annual periods beginning on or after 1 January 2020.

2. Significant accounting policies

Basis of consolidations

Subsidiaries

The consolidated financial statements of the Group include the financial statements of the Company and its subsidiaries, from the date that control effectively commenced until the date that control effectively ceased. Control is achieved where the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

Income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated income statement from the effective date of acquisition and up to the effective date of disposal, as appropriate.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Group.

All intra-group balances, transactions and any unrealised profits or losses arising from intra-group transactions are eliminated on consolidation.

Changes to the Group's ownership interests that do not result in a loss of control over the subsidiaries are accounted for as equity transactions. The carrying amount of the Group's interests and non-controlling interests are adjusted to reflect the change in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interest is adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to the owners of the Company.

When the Group loses control of a subsidiary, the profit or loss on the disposal is calculated as the difference between 1) the aggregated fair value of the consideration received and the fair value of any retained interest and 2) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and non-controlling interests.

Business combinations

IFRS 3 *Business Combinations* applies to a transaction or other event that meets the definition of a business combination. When acquiring new entities or assets, the Group applies judgement to assess whether the assets acquired and liabilities assumed constitute an integrated set of activities, whether the integrated set is capable of being conducted and managed as a business by a market participant, and thus whether the transaction constitutes a business combination, using the guidance provided in the standard. Acquisitions of businesses are accounted for using the acquisition method. The consideration for each acquisition is measured at the aggregate of the fair values (at the date of exchange) of assets given, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognised in the consolidated income statement as incurred. Transaction costs incurred in connection with the business combination are expensed. Provisional fair values are finalised within 12 months of the acquisition date.

Where applicable, the consideration for the acquisition may include an asset or liability resulting from a contingent consideration arrangement. Contingent consideration is measured at its acquisition date fair value and included as part of the consideration transferred in a business combination. Subsequent changes in such fair values are adjusted against the cost of acquisition retrospectively with the corresponding adjustment against goodwill where they qualify as measurement period adjustments. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed at the acquisition date. The measurement period may not exceed one year from the effective date of the acquisition. The subsequent accounting for contingent consideration that does not qualify as a measurement period adjustment is based on how the contingent consideration is classified. Contingent consideration that is classified as equity is not subsequently remeasured. Contingent consideration that is classified as an asset or liability is remeasured at subsequent reporting dates in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* or *IFRS 9 Financial Instruments* with the corresponding amount being recognised in profit or loss.

The identifiable assets acquired and the liabilities assumed are recognised at their fair value at the acquisition date, except that:

- deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognised and measured in accordance with IAS 12 *Income Taxes* and IAS 19 *Employee Benefits*, respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 *Share-based Payment* at the acquisition date; and
- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that Standard.

Where a business combination is achieved in stages, the Group's previously held interests in the acquired entity are remeasured to fair value at the acquisition date (i.e. the date the Group attains control) and the resulting gain or loss, if any, is recognised in the consolidated income statement. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in equity are reclassified to profit or loss, where such treatment would be appropriate if that interest was disposed of.

Notes to the Consolidated financial statements continued

2. Significant accounting policies continued

Non-current assets held for sale

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell.

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition.

Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

Goodwill and goodwill impairment

Goodwill arising in a business combination is recognised as an asset at the date that control is acquired (the acquisition date). Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed.

If the Group's interest in the fair value of the acquiree's identifiable net assets exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held equity interest in the acquiree (if any), the excess is recognised immediately in the consolidated income statement as a bargain purchase gain.

Goodwill is not amortised but is reviewed for impairment at least annually. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination. Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

On disposal of a subsidiary, the attributable goodwill is included in the determination of the profit or loss on disposal.

Acquisition of mining licences

The acquisition of mining licences is often effected through a non-operating corporate entity. As these entities do not represent a business, it is considered that the transactions do not meet the definition of a business combination and, accordingly, the transaction is accounted for as the acquisition of an asset. The net assets acquired are accounted for at cost. Where asset acquisition is achieved in stages net assets acquired are accounted for sum of cost of the original interest acquired and the cost of additional interest acquired.

Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence and that is neither a subsidiary nor an interest in a joint arrangement. Significant influence constitutes the power to participate in the financial and operating policy decisions of the investee but does not extend to a control or joint control over the enactment of those policies. The results and assets and liabilities of associates are incorporated in the consolidated financial statements using the equity method of accounting.

A joint arrangement is defined as an arrangement of which two or more parties have joint control. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

A joint operation is a joint arrangement in which the parties that share joint control have rights to the assets, and obligations for the liabilities, relating to the arrangement. This includes situations where the parties benefit from the joint activity through a share of the output, rather than by receiving a share of the results of trading. In relation to its interest in a joint operation, the Group recognises: its share of assets and liabilities; revenue from the sale of its share of the output and its share of any revenue generated from the sale of the output by the joint operation; and its share of expenses.

A joint venture is a joint arrangement in which the parties that share joint control have rights to the net assets of the arrangement and is accounted for using the equity accounting method.

When entering in a new joint arrangement, the Group applies judgement to assess whether the parties that have joint control over the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement (joint operation) or rights to the net assets of the arrangement (joint venture), using the guidance provided in the standard. When a joint arrangement has been structured through a separate vehicle, consideration has been given to the legal form of the separate vehicle, the terms of the contractual arrangement and, when relevant, other facts and circumstances.

Equity method of accounting

Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated balance sheet at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the investee. When the Group's share of the losses of an associate or a joint venture exceeds the Group's interest in that entity, the Group ceases to recognise its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an investee at the date of acquisition is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognised immediately in profit or loss.

The requirements of IAS 36 *Impairment of Assets* (IAS 36) are applied to determine whether it is necessary to recognise any impairment loss with respect to the Group's investments. Where an indicator of impairment exists or the carrying value of the asset contains goodwill with an indefinite useful life, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 as a single cash-generating unit through the comparison of its recoverable amount (the higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with IAS 36.

When a Group entity transacts with its investees, profits and losses resulting from the transactions with the investee are recognised in the Group's consolidated financial statements only to the extent of interests in the associate or the joint venture that are not related to the Group.

Functional and presentation currency

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. For all Russian entities the functional currency is the Russian Rouble (RUB). The functional currency of the Group's entities located and operating in Kazakhstan (Varvarinskoye JSC, Bakyrchik Mining Venture LLC, Inter Gold Capital LLC, Komarovskoye Mining Company LLC) is the Kazakh Tenge (KZT). The functional currency of the Group's entity located and operating in Armenia (Kapan MPC CJSC) is the Armenian Dram (AMD). The functional currency of the parent company Polymetal International plc and its intermediate holding companies is US Dollar.

The Group has chosen to present its consolidated financial statements in US Dollars ($), as management believes it is a more convenient presentation currency for international users of the consolidated financial statements of the Group as it is a common presentation currency in the mining industry. The translation of the financial statements of the Group entities from their functional currencies to the presentation currency is performed as follows:

- all assets and liabilities are translated at closing exchange rates at each reporting period end date;
- all income and expenses are translated at the average exchange rates for the periods presented, except for significant transactions that are translated at rates on the date of such transactions;
- resulting exchange differences are recognised in other comprehensive income and presented as movements relating to the effect of translation to the Group's presentation currency within the Translation reserve in equity; and
- in the consolidated statement of cash flows, cash balances at the beginning and end of each reporting period presented are translated using exchange rates prevalent at those respective dates. All cash flows in the period are translated at the average exchange rates for the periods presented, except for significant transactions that are translated at rates on the date of transaction.

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a jointly controlled entity that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are reattributed to non-controlling interests and are not recognised in the consolidated income statement. For all other partial disposals (i.e. reductions in the Group's ownership interest in associates or jointly controlled entities that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to the consolidated income statement.

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognised in equity.

2. Significant accounting policies continued

The Group translates its income and expenses in presentation currency on a monthly basis. During the years ended 31 December 2018 and 31 December 2017 exchange rates used in the preparation of the consolidated financial statements were as follows:

	Russian Rouble/ US Dollar	Kazakh Tenge/ US Dollar	Armenian Dram/ US Dollar
31 December 2018			
Year ended	69.47	384.20	483.75
Average	62.68	344.76	483.03
Maximum monthly rate	67.66	372.41	486.30
Minimum monthly rate	56.79	320.70	480.45
31 December 2017			
Year ended	57.60	332.33	484.10
Average	58.35	326.02	482.71
Maximum monthly rate	59.96	338.78	486.51
Minimum monthly rate	56.43	312.48	478.25

The Russian Rouble, Kazakh Tenge and Armenian Dram are not freely convertible currencies outside the Russian Federation, Kazakhstan and Armenia, accordingly, any translation of Russian Rouble, Kazakh Tenge and Armenian Dram denominated assets and liabilities into US Dollar for the purpose of the presentation of consolidated financial statements does not imply that the Group could or will in the future realise or settle in US Dollars the translated values of these assets and liabilities.

Foreign currency transactions

Transactions in currencies other than an entity's functional currencies (foreign currencies) are recorded at the exchange rates prevailing on the dates of the transactions. All monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates prevailing at the reporting date. Non-monetary items carried at historical cost are translated at the exchange rate prevailing on the date of transaction. Non-monetary items carried at fair value are translated at the exchange rate prevailing on the date on which the most recent fair value was determined. Exchange differences arising from changes in exchange rates are recognised in the consolidated income statement. Exchange differences generated by monetary items that form part of the intragroup net investment in the foreign operation are recognised in the consolidated financial statements within foreign currency translation reserve.

Property, plant and equipment

Mining assets

Mining assets include the cost of acquiring and developing mining assets and mineral rights. Mining assets are depreciated to their residual values using the unit-of-production method based on proven and probable ore reserves according to the JORC Code, which is the basis on which the Group's mine plans are prepared. Changes in proven and probable reserves are dealt with prospectively. Depreciation is charged on new mining ventures from the date that the mining asset is capable of commercial production. In respect of those mining assets whose useful lives are expected to be less than the life of the mine, depreciation over the period of the asset's useful life is applied.

Mineral rights for the assets under development are included within Exploration and development. When a production phase is started, mineral rights are transferred into Mining assets and are depreciated as described below.

Capital construction-in-progress

Capital construction-in-progress assets are measured at cost less any recognised impairment. Depreciation commences when the assets are ready for their intended use.

Exploration and development assets

Mineral exploration and evaluation costs, including geophysical, topographical, geological and similar types of costs, are capitalised into exploration assets if management concludes that future economic benefits are likely to be realised based on current internal assessment of exploration results and identified mineral resources.

Exploration and evaluation expenditures are transferred to development assets when commercially-viable reserves are identified, so that the entity first establishes proved and probable reserves in accordance with JORC Code and respective mining plan and model are prepared and approved. At the time of reclassification exploration and evaluation assets are assessed for impairment based on the economic models prepared.

The costs to remove any overburden and other waste materials to initially expose the ore body, referred to as stripping costs, are capitalised as a part of mining assets when these costs are incurred.

Non-mining assets

Non-mining assets are depreciated to their residual values on a straight-line basis over their estimated useful lives. When parts of an item of property, plant and equipment are considered to have different useful lives, they are accounted for and depreciated separately. Depreciation methods, residual values and estimated useful lives are reviewed at least annually.

Estimated useful lives are as set out below:

- Machinery and equipment 5–20 years
- Transportation and other assets 3–10 years

Assets held under finance leases are depreciated over the shorter of the lease term and the estimated useful lives of the assets.

Gains or losses on disposal of property, plant and equipment are determined by comparing the proceeds from disposal with the asset's carrying amount at the date. The gain or loss arising is recognised in the consolidated income statement.

Stripping costs

During the production phase of a mine when the benefit from the stripping activity is the improved access to a component of the ore body in future periods, the stripping costs in excess of the average ore to waste ratio for the life of mine of that component are recognised as a non-current asset. After initial recognition, the stripping activity asset is depreciated on a systematic basis (unit-of-production method) over the expected useful life of the identified component of the ore body made accessible as a result of the stripping activity.

Estimated ore reserves

Estimated proven and probable ore reserves reflect the economically recoverable quantities which can be legally recovered in the future from known mineral deposits. The Group's reserves are estimated in accordance with the JORC Code.

Leases

Operating leases

Operating lease payments are recognised as an expense on a straight-line basis over the lease term. Contingent rentals arising under operating leases are recognised as an expense in the period in which they are incurred.

Impairment of property, plant and equipment

An impairment review of property, plant and equipment is carried out when there is an indication that those assets have suffered an impairment loss or there are impairment reversal indicators. If any such indication exists, the carrying amount of the asset is compared to the estimated recoverable amount of the asset in order to determine the extent of the impairment loss or its reversal (if any). Where it is not possible to estimate the recoverable amount of an individual asset, 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. The carrying amounts of all the cash-generating units are assessed against their recoverable amounts determined based on a fair value less costs to sell calculation. Fair value is based on the application of the Discounted Cash Flow Method (DCF) using post-tax cash flows. The DCF method is attributable to the development of proved and probable reserves and certain resources where a relevant resource-to-reserve conversion ratio can be reasonably applied.

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 in the consolidated income statement.

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 only to the extent that the increased carrying amount does not exceed the original carrying amount that would have been determined had no impairment loss been recognised in prior periods. Impairment loss may be subsequently reversed if there has been a significant change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised.

A reversal of an impairment loss is recognised in the consolidated income statement immediately.

Inventories

Metal inventories

Inventories including refined metals, metals in concentrate and in process, doré and ore stockpiles are stated at the lower of production cost or net realisable value. Production cost is determined as the sum of the applicable expenditures incurred directly or indirectly in bringing inventories to their existing condition and location. Work in-process, metal concentrate, doré and refined metal are valued at the average total production costs at each asset's relevant stage of production (i.e. the costs are allocated proportionally to unified metal where unified metal is calculated based on prevailing market metal prices). Ore stockpiles are valued at the average cost of mining that ore. Where ore stockpiles and work in-process are not expected to be processed within 12 months, those inventories are classified as non-current.

2. Significant accounting policies continued

Net realisable value represents the estimated selling price for that product based on forward metal prices for inventories which are expected to be realised within 12 months, and the flat long-term metal prices for non-current inventories, less estimated costs to complete production and selling costs.

Consumables and spare parts

Consumables and spare parts are stated at the lower of cost or net realisable value. Cost is determined on the weighted average moving cost. The portion of consumables and spare parts not reasonably expected to be used within one year is classified as a long-term asset in the Group's consolidated balance sheet. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

Financial instruments

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

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in the consolidated income statement.

Trade receivables without provisional pricing that do not have a significant financing component (determined in accordance with IFRS 15 *Revenue from Contracts with Customers*) are not initially measured at fair value, rather they are initially measured at their transaction price.

Financial assets

All recognised financial assets are measured subsequently in their entirety at either amortised cost or fair value, depending on the classification of the financial assets. Financial assets are classified as either financial assets at amortised cost, at fair value through other comprehensive income (FVTOCI) or at fair value through profit or loss (FVTPL) depending upon the business model for managing the financial assets and the nature of the contractual cash flow characteristics of the financial asset.

Trade receivables without provisional pricing that do not contain provisional price features, loans and other receivables are held to collect the contractual cash flows and therefore are carried at amortised cost adjusted for any loss allowance. The loss allowance is calculated in accordance with the impairment of financial assets policy described below.

Trade receivables arising from sales of gold, silver, copper and zinc concentrates with provisional pricing features are exposed to future movements in market prices and have contractual cash flow characteristics that are not solely payments of principal and interest and are therefore measured at fair value through profit or loss and do not fall under the expected credit losses mode described below.

Effective interest rate method

The effective interest rate method is a method of calculating the amortised cost of a financial instrument and of allocating interest income or expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash receipts or payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Impairment of financial assets

The Group recognises a loss allowance for expected credit losses on investments in debt instruments that are measured at amortised cost, trade and other receivables and contract assets, except for trade accounts receivable with provisional pricing. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognises lifetime ECL for trade receivables and other receivable. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other financial instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of trade receivables, when the amounts are over two years past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. Any recoveries made are recognised in profit or loss.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

Financial liabilities

All financial liabilities (including borrowings) are subsequently measured at amortised cost using the effective interest rate method.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in the consolidated income statement.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in the consolidated income statement in the period in which they are incurred.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances, cash deposits and highly liquid investments with original maturities of three months or fewer, which are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

Environmental obligations

An obligation to incur environmental restoration, rehabilitation and decommissioning costs arises when disturbance is caused by the development or ongoing production of mining assets. Such costs arising from the decommissioning of plant and other site preparation work, discounted to their net present value using a risk-free rate applicable to the future cash flows, are provided for and capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are recognised in the consolidated income statement over the life of the operation, through the depreciation of the asset in the cost of sales line and the unwinding of the discount on the provision in the finance costs line. Costs for restoration of subsequent site damage which is created on an ongoing basis during production are provided for at their net present values and recognised in the consolidated income statement as extraction progresses.

Changes in the measurement of a liability relating to the decommissioning of plant or other site preparation work (that result from changes in the estimated timing or amount of the cash flow or a change in the discount rate), are added to or deducted from the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the consolidated income statement.

2. Significant accounting policies continued

The provision for closure cost obligations is remeasured at the end of each reporting period for changes in estimates and circumstances. Changes in estimates and circumstances include changes in legal or regulatory requirements, increased obligations arising from additional mining and exploration activities, changes to cost estimates and changes to the risk free interest rate.

Employee benefit obligations

Remuneration paid to employees in respect of services rendered during a reporting period is recognised as an expense in that reporting period. The Group pays mandatory contributions to the state social funds, including the Pension Fund of the Russian Federation and Kazakhstan, which are expensed as incurred.

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax. Income taxes are computed in accordance with the laws of countries where the Group operates.

Current tax

The tax currently payable is based on taxable profit for the period. Taxable profit differs from profit as reported in the consolidated income statement because of items of income or expense that are taxable or deductible in other periods and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date.

Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

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

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Current and deferred tax

Current and deferred tax is recognised in the consolidated income statement, except when it relates to items that are recognised in the consolidated statement of comprehensive income or directly in equity, in which case, the current and deferred tax is also recognised in consolidated statement of comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

Uncertain tax positions

Provision for uncertain tax positions is recognised within current tax when management determines that it is probable that a payment will be made to the tax authority. For such tax positions the amount of the probable ultimate settlement with the related tax authority is recorded. When the uncertain tax position gives rise to a contingent tax liability for which no provision is recognised, the Group discloses tax-related contingent liabilities and contingent assets in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

Revenue recognition

The Group has two major streams: the sale of gold and silver bullions and sale of copper, gold and silver concentrate. Revenue is measured at the fair value of consideration to which an entity expects to be entitled in a contract with a customer in exchange for transferring promised goods, excluding amounts collected on behalf of third parties, such as value added tax (VAT). The Group recognises revenue when it transfers control of a product or service to a customer.

Sale of gold and silver bullion

The Group processes doré produced in the Russian Federation into London Good Delivery Bars prior to sale. This final stage of processing is carried out on a toll-treatment basis at four state-owned refineries. The Group sells gold and silver bullion to banks through long-term agreements. The sales price, as determined in the agreement, may be variable based upon the London Bullion Market Association (LBMA) spot or fixed price, however the Group does not enter into fixed price contracts. For domestic sales, control and title passes from the Group to the purchaser at the refinery gate with revenue recognised at that point. For export sales, once the gold and/or silver bars have been approved for export by Russian customs, they are then transported to the vault of the purchaser. Control and title passes and revenue is recognised at the point when the gold and/or silver bars are received by the purchaser.

Sales of copper, zinc, gold and silver concentrate

The Group sells copper, gold and silver concentrate underpricing arrangements where final prices are determined by quoted market prices in a period subsequent to the date of sale. Concentrate sales are initially recorded based on forward prices for the expected date of final settlement. Revenue is recorded at the time of shipment, when control passes to the buyer. Revenue is calculated based on the copper, gold and silver content in the concentrate and using the forward London Bullion Market Association (LBMA) or London Metal Exchange (LME) price to the estimated final pricing date, adjusted for the specific terms of the relevant agreement. Revenue is presented net of refining and treatment charges which are subtracted in calculating the amount to be invoiced.

Share-based compensation

The Group applies IFRS 2 *Share-based Payments* to account for share-based compensation. IFRS 2 requires companies to recognise compensation costs for share-based payments to employees based on the grant-date fair value of the award.

The fair value of the awards granted under the Performance Share Plan (PSP) (as defined in the Remuneration report) is estimated using a Monte Carlo model valuation (see Note 32).

Awards which are granted under Deferred Share Awards (DSA) plan and are released over a period of three years, are measured at share price at a grant date and are prorated across periods to the different vest dates (see Note 32).

The fair value of the awards granted is recognised as a general, administrative and selling expense over the vesting period with a corresponding increase in the share-based compensation reserve. Upon the exercise of the awards the amounts recognised within the share-based compensation reserve are transferred to the stated capital account.

Earnings per share

Earnings per share calculations are based on the weighted average number of common shares outstanding during the period. Diluted earnings per share are calculated using the treasury stock method, whereby the proceeds from the potential exercise of dilutive stock options with exercise prices that are below the average market price of the underlying shares are assumed to be used in purchasing the Company's common shares at their average market price for the period.

3. Critical accounting judgements and key sources of estimation uncertainty

In the course of preparing the financial statements, management necessarily makes judgements and estimates that can have a significant impact on those financial statements. The determination of estimates requires judgements which are based on historical experience, current and expected economic conditions, and all other available information.

Estimates and underlying assumptions are reviewed on an ongoing basis, with revisions recognised in the period in which the estimates are revised and in the future periods affected. The judgements involving a higher degree of estimation or complexity are set out below.

Critical accounting judgements

The following are the critical judgements, apart from those involving estimation (which are dealt with separately below), made in the process of applying the Group's accounting policies during the year that have the most significant effect on the amounts recognised in the financial statements.

Accounting for acquisitions

To determine the appropriate accounting approach to be followed for an acquisition transaction, the Group applies judgement to assess whether the acquisition is of a business, and therefore within scope of IFRS 3 *Business Combination*s, or is of a group of assets that do not constitute a business and is therefore outside scope of IFRS 3. In making this determination, management evaluates the inputs, processes and outputs of the asset or entity acquired. Judgement is used to determine whether an integrated set of activities and assets is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors or other owners, members or participants. Major acquisitions in the year included Prognoz, Nezhda and Amikan (Note 4). They have been assessed as business combinations under IFRS 3 and have thus been accounted for at their fair values.

3. Critical accounting judgements and key sources of estimation uncertainty continued

When accounting for acquisitions that represent business combinations, the Group applies judgement to determine the fair value of the identifiable assets acquired and the liabilities assumed at the acquisition date.

The consideration paid is considered to be the primary indicator of the fair value of the assets acquired (primarily mineral rights) and liabilities assumed, although the fair value of mineral rights is also supported by the Discounted Cash Flow Method (DCF) models prepared as described in the 'Key sources of estimation uncertainty' section below.

The Prognoz, Nezhda and Amikan acquisitions were all achieved in stages. Judgement is used to determine when control was obtained and the basis of fair value remeasurement of the Group's previously held interests in the acquired entities at that date (including consideration of any control premium paid), and the resulting gain or loss is recognised in the consolidated income statement.

Assessment of indicators of impairment or its reversal of operating and development assets

The Group is required to conduct an impairment test where there is an indication of impairment of an asset or a cash-generating unit. For goodwill, an annual impairment test is required. Judgement is required in the assessment of whether indicators of impairment (or its reversal) exist.

Operating and economic assumptions, which could affect the valuation of assets using discounted cash flows (DCF), are updated regularly as part of the Group's planning and forecasting processes. Significant judgement is required to determine whether any economic or operating assumptions represent significant changes in the economic value of an asset or CGU. Discounted cash flow models are prepared on the basis of such assumptions to determine whether there are any indicators of impairment or impairment reversal.

In making the assessment for impairment indicators, assets that do not generate independent cash inflows are allocated to an appropriate cash-generating unit. Management necessarily applies judgement in allocating assets that do not generate independent cash inflows to appropriate cash-generating units, and also in estimating the timing and value of underlying cash flows within the value-in-use calculation. Subsequent changes to the cash-generating unit allocation or to the timing of cash flows could impact the carrying value of the respective assets. Refer to Note 20 for further information.

Recoverability of exploration and evaluation assets

Exploration and evaluation assets include mineral rights and exploration and evaluation costs, including geophysical, topographical, geological and similar types of costs. Exploration and evaluation costs are capitalised if management concludes that future economic benefits are likely to be realised and determines that economically viable extraction operation can be established as a result of exploration activities and internal assessment of mineral resources.

According to IFRS 6 *Exploration for and evaluation of mineral resources*, the potential indicators of impairment include: management's plans to discontinue the exploration activities, lack of further substantial exploration expenditure planned, expiry of exploration licences in the period or in the nearest future, or existence of other data indicating the expenditure capitalised is not recoverable. At the end of each reporting period, management assesses whether such indicators exist for the exploration and evaluation assets capitalised, which requires significant judgement.

As of 31 December 2018 total exploration and evaluation costs capitalised amount to $365 million (2017: $150 million) with the most significant asset of $290 million attributable to the Prognoz silver property acquired during the year ended 31 December 2018.

Key sources of estimation uncertainty

The following are the sources of estimation uncertainty that carry the most significant risk of material effect on next year's accounts, being items where actual outcomes in the next 12 months could vary significantly from the estimates made in determining the reported amount of an asset or liability.

Cash flow projections for fair value accounting and impairment testing

Expected future cash flows used in DCF models are inherently uncertain and could materially change over time. They are significantly affected by a number of factors including ore reserves, together with economic factors such as commodity prices, exchange rates, discount rates and estimates of production costs and future capital expenditure.

- Ore reserves and mineral resources – Recoverable reserves and resources are based on the proven and probable reserves and resources in existence. Reserves and resources are incorporated in projected cash flows based on ore reserve statements and exploration and evaluation work undertaken by appropriately qualified persons (see below). Mineral resources, adjusted by certain conversion ratios, are included where management has a high degree of confidence in their economic extraction, despite additional evaluation still being required prior to meeting the required confidence to convert to ore reserves.
- Commodity prices – Commodity prices are based on latest internal forecasts, benchmarked against external sources of information. Polymetal currently uses a flat real long-term gold and silver price of $1,200 per ounce (2017: $1,200) and $15 per ounce (2017: $16), respectively.
- Foreign exchange rates – Foreign exchange rates are based on latest internal forecasts, benchmarked with external sources of information for relevant countries of operation. Management have analysed RUB/US$ rate movements for the year ended 31 December 2018. RUB/US$ exchange rate is estimated at 65 RUB/US$ (2017: RUB/US$60).
- Discount rates – The Group used a post-tax real discount rate of 9.0% (2017: 9.0%). Cash flow projections used in fair value less costs of disposal impairment models are discounted based on this rate.
- Operating costs, capital expenditure and other operating factors – Cost assumptions incorporate management experience and expectations, as well as the nature and location of the operation and the risks associated therewith. Underlying input cost assumptions are consistent with related output price assumptions. Other operating factors, such as the timelines of granting licences and permits are based on management's best estimate of the outcome of uncertain future events at the balance sheet date.

No impairment for property, plant and equipment was recognised during the year ended 31 December 2018 as no indicators of impairment were identified. The sensitivities for goodwill impairment testing are disclosed in Note 20, and in the absence of indicators for impairment, these are not extended to impairment testing more generally. The sensitivity of items held at fair value is not material.

Ore reserves

An ore reserve estimate is an estimate of the amount of product that can be economically and legally extracted from the Group's properties. Ore reserve estimates are used by the Group in the calculation of: depletion of mining assets using the units-of-production method; impairment charges and in forecasting the timing of the payment of decommissioning and land restoration costs. Also, for the purpose of impairment review and the assessment of the timing of the payment of decommissioning and land restoration costs, management may take into account mineral resources in addition to ore reserves where there is a high degree of confidence that such resources will be extracted.

In order to calculate ore reserves, estimates and assumptions are required about geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices, discount rates and exchange rates. Estimating the quantity and/or grade of ore reserves requires the size, shape and depth of ore bodies to be determined by analysing geological data such as the logging and assaying of drill samples. This process may require complex and difficult geological judgements and calculations to interpret the data.

Ore reserve estimates may change from period to period as additional geological data becomes available during the course of operations or if there are changes in any of the aforementioned assumptions. Such changes in estimated reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- asset carrying values due to changes in estimated future cash flows;
- depletion charged in the consolidated income statement where such charges are determined by using the units-of-production method;
- provisions for decommissioning and land restoration costs where changes in estimated reserves affect expectations about the timing of the payment of such costs;
- carrying value of deferred tax assets and liabilities where changes in estimated reserves affect the carrying value of the relevant assets and liabilities; and
- contingent consideration liabilities where these are determined by the future production levels.

Ore reserves are subject to annual reestimation (please refer to the Reserves and Resources section of the Annual Report). Based on the ore reserves estimate as of 1 January 2019, the depreciation charge for the year ended 31 December 2018 would decrease by $20 million (2017: decrease by $15 million based on the ore reserves estimate as of 1 January 2018).

Recoverability of deferred tax assets

Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised (Note 17). There is an application of judgement in assessing the amount, timing and probability of future taxable profits and repatriation of retained earnings. These factors affect the determination of the appropriate rates of tax to apply and the recoverability of deferred tax assets. These judgements are influenced, inter alia, by factors such as estimates of future production, commodity lines, operating costs, future capital expenditure and dividend policies. If actual results differ from these estimates or if these estimates must be adjusted in future periods, the financial position, results of operations and cash flows may be negatively affected.

Deferred tax assets arising from tax losses carried forward recognised as of 31 December 2018 amount to $167 million (2017: $126 million). Tax losses carried forward represent amounts available for offset against future taxable income generated by Mayskoye Gold Mining Company LLC, JSC South-Verkhoyansk Mining Company and JSC Polymetal Management (Russian Federation), JSC Varvarinskoye and Bakyrchik Mining Venture LLC (Kazakhstan). Each legal entity within the Group represents a separate tax-paying component for income tax purposes. The tax losses of one entity cannot be used to reduce taxable income of other entities of the Group. Gross tax losses carried forward of $495 million (2017: $448 million), for which a deferred tax asset is recognised in JSC Varvarinskoye and Bakyrchik Mining Venture LLP are available during the period up to 2028, with the most significant portion expiring in 2025 and 2028 (Note 17). The remaining gross tax losses have an indefinite life. It is not practical to show the likely impact on the deferred tax balances of changes in corporate parameters because of number of legal entities with tax losses available and the different tax attributes applicable to each entity.

3. Critical accounting judgements and key sources of estimation uncertainty continued

Recoverability of stockpiles and work in-process

The assessment of the recoverability of metal inventories requires judgement both in terms of calculating expected costs to process and refine ore stock piles to produce concentrate or doré for sale, and in terms of estimating future prices to be realised on sale (Note 22). The Group uses survey and assay techniques to estimate quantities of the ore stockpiled and ore stacked in heap leach pads, as well as the recoverable metal in this material and work in-process. The amount of the recoverable metals, that will be available for sale, is determined based on technological recoveries, which are established for each deposit and extraction technology. Changes in these estimates can result in a change in mine operating costs of future periods and carrying amounts of inventories.

During the year ended 31 December 2018 the Group provided for net realisable value of metal inventories in the amount of $21 million (year ended 31 December 2017: write-down of $16 million).

The amount of inventories held at net realisable value at 31 December 2018 is $99 million (31 December 2017: $60 million).

The key assumptions used in determining the net realisable value of inventories at 31 December 2018 are consistent with those used for goodwill impairment testing.

Valuation of contingent consideration payable

The Group has recorded contingent consideration liabilities of $54 million as at 31 December 2018 (2017: $62 million) related to various acquisitions made, as set out in Note 29 to the financial statements. Various estimates must be made when determining the value of contingent consideration to be recognised at each balance sheet date. The assumptions made are consistent with those made for impairment testing purposes (see above), and additional assumptions are included in Note 29. Significant changes in assumptions could cause an increase, or reduction, in the amount of contingent consideration payable, with a resulting charge or credit in the consolidated income statement.

4. Acquisitions and disposals

(a) Year ended 31 December 2018

Prognoz silver property acquisition

In January 2017 the Group entered into an agreement with Polar Acquisition Ltd (PAL), under which Polymetal would participate in the development of the Prognoz silver deposit in Yakutia, Russia ('Prognoz'). Under the agreement, Polymetal acquired a 5% interest in Prognoz for $5 million (including $2 million of related expenses) in cash through the purchase of 10% of Polar Silver Resources' LLC share capital (a subsidiary of PAL), the entity holding a 50% interest in Prognoz, with the remaining 50% owned by a private investor. The arrangement allowed Polymetal to acquire from PAL their remaining 45% interest in Prognoz for a consideration based on the JORC compliant reserves estimate upon completion of the technical study. As of acquisition date and as of 31 December 2017 the Group had determined that Prognoz constituted a joint venture under IFRS 11 *Joint Arrangements* and therefore the investment was accounted for using the equity method. In January 2018 Polymetal agreed with PAL to accelerate the exercise of the option in order to acquire the remaining 45% ownership stake PAL had in Prognoz at a fixed price.

In April 2018 the Group completed the acquisition of Prognoz through two consecutive deals. On 13 April 2018 the Group completed the acquisition of the 45% stake from PAL for consideration paid through the issue of 6,307,000 Polymetal new ordinary shares and on 23 April 2018 acquired the remaining 50% a stake from the private investor for consideration paid by issuing 14,152,668 new ordinary shares of the Company.

As a result of the transactions, Polymetal now consolidates its 100% stake in Prognoz.

In addition to the consideration paid to PAL for the 45% stake Polymetal also committed to pay PAL a net smelter return ('NSR') royalty of between 2% and 4% (prorated for the 45% stake being acquired), which will be dependent on the applicable statutory mineral extraction tax rate at the time when the asset enters commercial production.

In addition to the consideration paid to the private investor for the 50% stake Polymetal also committed to pay a NSR royalty in the range of 0.5% to 2.5%, prorated for the 50% stake which was acquired and capped at $40 million. The royalty will be only payable if the silver price is $19/oz or higher, with the actual royalty rate within the range determined on a progressive scale dependent on the silver price.

The Group has determined that it obtained control over the Prognoz silver property as of 23 April 2018.

Prognoz is the largest undeveloped primary silver deposit in Eurasia with JORC-compliant Indicated and Inferred Resources, estimated by Micon in 2009 of 292 Moz at 586 g/t silver. In October 2018 the Group prepared the updated resource estimate of 256 Moz at 789 g/t silver equivalent with an increased share of resources within the Indicated category.

As the Prognoz operations represent an integrated set of activities with a focus on exploration, it was determined that it meets the definition of a business pursuant to IFRS 3 and that it should be fair value accounted for using the acquisition method.

Consideration transferred

The fair value of the newly issued 6,307,000 ordinary shares issued as part of the consideration paid for Prognoz to PAL was determined based on the spot price at the acquisition date, being $9.63, and it was valued at $61 million.

The fair value of the newly issued 14,152,668 ordinary shares issued as part of the consideration paid for Prognoz to the private investor was determined based on the spot price at the acquisition date, being $9.83, and it was valued at $139 million, with $24 million allocated to the acquired shareholders' loan.

The NSR royalties described above meet the definition of contingent consideration and are accounted for at their fair value at the acquisition date as set out below.

The fair value of the NSR payable to PAL was determined using a valuation model based on expected silver production and forecast silver prices. The royalty agreement is subject to a cap that increases progressively with the silver price.

Based on the internal forecast, benchmarked against the external sources of information, the Group applied the long-term silver price assumption of $15 per ounce, resulting in the NSR cap of $100 million, a higher cap of $250 million could apply under more beneficial price assumptions. At the acquisition date, the fair value of the contingent consideration was estimated at $9 million.

The fair value of the NSR payable to the private investor was similarly determined using a valuation model based on the expected production of silver at the silver prices as above and was calculated using Monte Carlo modelling. At the acquisition date, the fair value of the contingent consideration was estimated at $5 million. The fair value of the NSR payable to PAL was determined using a valuation model which simulates expected production silver and the silver prices to estimate Prognoz future revenues. The royalty agreement is subject to an agreed cap that increases progressively with the silver price.

The key assumptions used in the contingent consideration calculations are set out below:

Silver price volatility	31.69%
Silver price as of acquisition date/long-term real price per ounce	$16.94/$15
Discount rate	9%

Assets acquired and liabilities recognised at the date of acquisition

In finalising the allocation of the purchase price for the Prognoz transaction as shown above, the Group has refined the valuation of the Group's pre-existing interest in Prognoz, which determines any gain or loss arising when control was obtained. The preliminary purchase price allocation based this valuation on the weighted average cost of the Group's total investment in Prognoz, but the Group has now completed a full valuation of the pre-existing interest on a stand-alone basis. As a result the gain on obtaining control has reduced from an initial $24 million gain to nil. Other refinements have been made to the initial purchase price allocation as set out below, with the most significant effect being on the valuation of Property, plant and equipment.

The amounts recognised in respect of the identifiable assets acquired and liabilities assumed and their reconciliation to the provisional accounting, reported in the interim consolidated financial statements for the period ended 30 June 2018, are set out in the table below:

	Provisional amounts previously reported $m	Adjustments $m	Adjusted amounts $m
Assets acquired and liabilities recognised at the date of acquisition			
Property, plant and equipment	321	(31)	290
Other current assets	2	–	2
Borrowings	(47)	5	(42)
Deferred tax liabilities	(57)	7	(50)
Fair value of the net assets acquired	**219**	**(19)**	**200**
Consideration transferred			
Fair value of shares issued to PAL for 45%	61	–	61
Contingent consideration payable to PAL	9	–	9
Consideration for 45% share in JV	**70**	–	**70**
Fair value of shares issued for 50% share	139	–	139
Contingent consideration payable	5	–	5
Less consideration allocated to the Shareholders' loan	(24)	–	(24)
Total consideration for 50% share	**120**	–	**120**
Initial 50% investment in JV as of acquisition date	5	5	10
Revaluation of 50% achieved by 13 April 2018	24	(24)	–
Total consideration	**219**	**(19)**	**200**

No significant financial assets were acquired in business combination.

4. Acquisitions and disposals continued

Impact of the acquisition on the result of Group

The impact of Prognoz on the Group's financial result was not significant because Prognoz had not generated any revenue or expenses during the period from 23 April 2018 to 31 December 2018.

Nezhda gold property acquisition

In December 2015 the Group entered into a joint arrangement, under which Polymetal participates in advancing the development of the Nezhdaninskoye gold deposit (Nezhda) in Yakutia, Russia. On 19 January 2016 Polymetal obtained a 15.3% interest in the joint venture entity holding 100% of JSC South-Verkhoyansk Mining Company, a licence holder for Nezhda, for a total cash consideration of $18 million. It was determined that the arrangement met the definition of a joint arrangement as per IFRS 11 Joint Arrangements, as joint control of two investors was established. As the arrangement was structured through a separate vehicle and the investors had rights over their share in net assets of the joint arrangement, it was concluded that the joint arrangement meets the definition of a joint venture and should be accounted for using the equity method of accounting.

In November 2016 Polymetal increased its share in Nezhda to 17.7% for a cash consideration of $3 million.

In July 2017, Polymetal agreed to acquire an additional 7% in JSC South-Verkhoyansk Mining Company (Nezhda) for a cash consideration of $8 million, from its joint venture partner, Ivan Kulakov. Simultaneously, Polymetal acquired an option to buy out the remaining 75.3% in Nezhda (the 'Call Option'). The Call Option premium amounted to $12 million.

In April 2018, Polymetal served a Call option exercise notice to acquire the remaining 75.3% stake for consideration of $144 million, payable in cash and Polymetal shares.

The completion of the sale and purchase of the additional 7% share in the JV and exercise of the Call Option were subject to approval by the Russian Federal Government's Commission on Foreign Investments into Companies of Strategic Importance. The exercise of the Call Option was also subject to approval by the Russian Federal Antimonopoly Service.

In November 2018, Polymetal received all necessary regulatory approvals and completed the acquisition of the remaining 82.3% stake in Nezhda from entities owned by Ivan Kulakov in two separate transactions:

- 7% was acquired for $8 million in cash as part of the Shareholder agreement signed in July 2017;
- 75.3% was acquired for $146 million, of which $10 million was payable in cash and $136 million was payable in 13,486,579 newly issued Polymetal shares that represent 2.9% of Polymetal's increased share capital.

The Group has determined that it obtained control over the Nezhda gold property on 26 November 2018.

As Nezhda operations represent an integrated set of activities with a focus on exploration, it was determined that it meets the definition of a business pursuant to IFRS 3 and that it should be fair value accounted for using the acquisition method.

Consideration transferred

The fair value of the 13,486,579 ordinary shares issued as part of the consideration paid was determined based on the spot price at the acquisition date, being $10.07, and it was valued at $136 million. The fair value of the Call Option described above represents part of the consideration transferred and comprised $11 million as of acquisition date. The change in the fair value of the Call Option of $1 million was recognised in the consolidated income statement.

As the Group obtained control over the Nezhda gold property, which was previously considered a joint venture operation that constituted a business, the Group's previously recognised share of the business subject to joint control was remeasured in accordance with IFRS 3. The remeasurement resulted in a fair value gain of $20 million as of the acquisition date, and was recognised in the income statement.

Assets acquired and liabilities recognised at the date of acquisition

During the year ended 31 December 2018 the Group finalised the purchase price allocation for Nezhda. The amounts recognised in respect of the identifiable assets acquired and liabilities assumed are set out in the table below:

Assets acquired and liabilities recognised at the date of acquisition	$m
Property, plant and equipment	322
Inventories	3
Other current assets	10
Accounts payable and accrued liabilities	(10)
Environmental obligations	(1)
Borrowings	(78)
Deferred tax liabilities	(38)
Fair value of the net assets acquired	**208**
Consideration transferred	
Fair value of shares issued	136
Cash consideration paid	10
Call option premium paid	12
Call option fair value adjustment	(1)
Initial investment in JV as of acquisition date	31
Revaluation of initial share on business combination	20
Total consideration	**208**
Cash outflow in acquisition	**22**

Impact of the acquisition on the result of the Group

The impact of Nezhda on the Group's financial result was not significant given the close proximity between the acquisition date and the year ended 31 December 2018. Nezhda had not generated any revenue in this period.

Amikan acquisition

Following the acquisition of an additional 31.7% stake in October 2018, the Group increased its overall ownership in the Veduga gold deposit to 74.3%. Veduga is a high-grade refractory gold deposit with reserves of 1.4 Moz of gold at 4.8 g/t and additional mineral resources of 0.4 Moz at 4.9 g/t. The licence holder for the property is Amikan LLC ('Amikan').

Polymetal has been a partial owner of the property since 2006 with the original 50% stake acquired through the JV with AngloGoldAshanti and subsequently diluted by external equity financing. From 2012 the Group's equity ownership was 42.65% and it exercised significant influence over the property. The investment was accounted for using the equity method of accounting. In 2012–2018 2,882 Kt of ore with the average grade of 3.84 g/t containing 356 Koz of gold was extracted from the open-pit mine at Veduga. Historically ore was sold to multiple processing plants including Varvara.

As Amikan operations represent an integrated set of activities with a focus on mining and extraction of precious metals, it was determined that it meets the definition of a business pursuant to IFRS 3 and that it should be fair value accounted for using the acquisition method.

Consideration transferred

The total consideration comprised $21.5 million, payable by issuing 2,456,049 Polymetal new ordinary shares. The number of issued shares has been determined by dividing $19.7 million by $8.036, the spot price of ordinary shares of the Company on the Main Market of the London Stock Exchange as at market close on 10 October 2018 in US dollars. The fair value of the consideration transferred was determined based on the 12 October 2018 closing share spot price of 8.78 USD.

As the Group obtained control over the Amikan gold property, which was previously considered a joint venture operation that constituted a business, the Group's previously recognised share of the business subject to joint control was remeasured in accordance with IFRS 3. The remeasurement resulted in a fair value gain of $21 million as of the acquisition date, and was recognised in the income statement.

The non-controlling interest (25.69% ownership interest in Amikan) recognised at the acquisition date was measured as the proportionate share in the recognised amounts of the acquiree's identifiable net assets and amounted to $17 million.

4. Acquisitions and disposals continued

Assets acquired and liabilities recognised at the date of acquisition

At the date of finalisation of these consolidated financial statements, the calculation of environmental obligation and the valuation of property, plant and equipment have not been finalised and they have therefore only been provisionally determined based on the management best estimate.

The provisional amounts recognised in respect of the identifiable assets acquired and liabilities assumed are set out in the table below:

Assets acquired and liabilities recognised at the date of acquisition (preliminary)	$m
Property, plant and equipment	101
Inventories	5
Cash and cash equivalents	4
Other current assets	(1)
Environmental obligations	(1)
Borrowings	(26)
Deferred tax liability	(14)
Fair value of the net assets acquired	**68**
Consideration transferred	
Fair value of shares issued	22
Initial investment in JV as of acquisition date	8
Revaluation of initial share on business combination	21
Non-controlling interest at fair value	17
Total consideration	**68**
Cash and cash equivalents acquired	**4**

Impact of the acquisition on the result of the Group

Amikan contributed $5 million to the Group's profit for the year after control was consolidated by the Group following the acquisition of an additional 31.7% stake in October 2018. During the year ended 31 December 2018 all revenue recognised by Amikan originated from intercompany sales to Varvara.

Tarutin asset swap

In April 2018, Polymetal reached an agreement with the Russian Copper Company ('RCC') for an all-share exchange of Polymetal's Tarutin property in Russia for 85% of RCC's East Tarutin property in Kazakhstan. As a result of the transaction, Polymetal received 85% of Tarutinskoye LLP, the licence holder for the copper-gold East Tarutin deposit located in Kazakhstan. In return, Polymetal transferred 100% of Vostochny Basis LLC, the licence holder for the copper-gold Tarutin deposit located in the Russian Federation. The transaction represents an asset swap and does not entail any additional payments or deferred considerations.

East Tarutin is a copper-gold deposit located in proximity to the Varvara processing plant and is expected to source the ore for further processing at the Varvara hub.

The acquired company does not meet the definition of a business pursuant to IFRS 3 and the transaction represents the acquisition of mineral rights through a non-operating corporate entity and does not give rise to goodwill or a gain. Based on IFRS 3 guidance the carrying amount of the assets given up represent the cost of the investment in East Tarutin (Kazakhstan). As a result the Group has purchased mineral rights of $3 million.

Khakanja disposal

In December 2018 the Group disposed of its Khakanja operations (Okhotskaya Mining and Exploration Company LLC), which comprise the 600 Ktpa processing plant, related infrastructure at the Khakanja mine, and old stockpiles at Khakanja, Avlayakan and Ozernoye deposits with current ore reserves of approximately 0.1 Moz of GE, as well as the exploration properties of Kundumi and Mevachan. The total consideration for Khakanja of $5 million was received in cash. Further, debt of $25 million was transferred with the business at the point of disposal. Simultaneously the Group disposed of its Okhotsk port assets, which were previously accounted for as a part of Khakanja operations, for a consideration of $2 million paid in cash. The disposal of Khakanja operations was effected as part of a strategy of selling smaller short-lived assets.

The net assets of the disposed subsidiary at date of disposal were as follows:

	$m
Property, plant and equipment	19
Inventories	40
Other current assets (net)	21
Environmental obligations	(4)
Borrowings	(25)
Fair value of the net assets disposed	**51**
Cash consideration received	7
Loss on disposal	**(44)**
Cumulative exchange differences in foreign operation recycled from translation reserve	(19)
Total loss on disposal	**(63)**

Svetlobor disposal

In November 2018 the Group sold its 100% interest in the Svetlobor platinum exploration project to a group of unrelated private Russian buyers for $5.5 million in cash. Svetlobor's net assets were not significant and a gain on disposal of $5 million was recorded.

Other minor disposals

During the year ended 31 December 2018 the Group disposed of its minor subsidiary Kirankan, with a total loss on disposal of $2 million.

The Group also disposed of its interest in the joint venture Aktogai Mys LLC, which held the Dolinnoye exploration licence in Kazakhstan, with a total gain on disposal of $5 million (Note 21).

(b) Year ended 31 December 2017

Primorskaya GGK LLC

In May 2017 Polymetal purchased a 100% interest in Primorskaya GGK LLC, a company holding several licences for the silver-gold properties located in the Primorskiy region of Russia, from an unrelated party for a cash consideration of $2 million.

The company did not meet the definition of a business pursuant to IFRS 3 and the transaction was thus accounted for as an acquisition of a group of assets. Assets purchased as part of this transaction represent mineral rights held at cost of $2 million.

5. Assets held for sale and discontinued operations

In December 2018 the Group disposed of its Khakanja operations (Note 4). Khakanja was identified as a separate cash-generating unit and a separate major line of business, included in the Khabarovsk segment, and therefore it meet the definition of a discontinued operation in accordance with IFRS 5 *Assets held for sales and discontinued operations*.

In October 2018 the Group entered into a legally binding agreement to sell 100% of its stake in the Kapan MPC CJSC. The total consideration payable for Kapan amounted to $55 million, subject to working capital adjustments. The sale was completed in January 2019 (Note 35). Kapan was identified as the major part of the Armenia cash-generating unit and the Armenia operating segment, and therefore it met the definition of a discontinued operation and an asset held for sale in accordance with IFRS 5 *Assets held for sales and discontinued operations*. The proceeds from the Kapan disposal are expected to approximate to the carrying amount of the related net assets and accordingly no impairment loss has been recognised following the classification of these operations as held for sale.

The major classes of assets and liabilities held by Kapan which comprise operations classified as held for sale as of 31 December 2018 are as follows:

	$m
Property, plant and equipment	40
Deferred tax assets	7
Inventories	16
Cash and cash equivalents	3
Other current assets	8
Total assets classified as held for sale	74
Accounts payable and accrued liabilities	(8)
Total liabilities associated with assets classified as held for sale	(8)
Net assets of disposal groups	**66**
Intercompany balances, net	(12)
Net assets of disposal groups including intercompany balances	**54**

5. Assets held for sale and discontinued operations continued

The results of Khakanja operations and Kapan are shown as discontinued operations in the consolidated income statement and statement of consolidated statement of cash flows:

	Year ended 31 December 2018			Year ended 31 December 2017		
	Kapan $m	**Khakanja $m**	**Total $m**	Kapan $m	Khakanja $m	Total $m
Revenue	61	115	**176**	66	142	**208**
Expenses, net	(81)	(86)	**(167)**	(51)	(98)	**(149)**
Profit before income tax	**(20)**	**29**	**9**	**15**	**44**	**59**
Attributable income tax expense	(2)	(4)	**(6)**	(1)	(8)	**(9)**
Profit for the financial period	**(22)**	**25**	**3**	**14**	**36**	**50**
Loss on disposal of discontinued operations	–	(63)	**(63)**	–	–	**–**
Attributable tax expense	–	–	**–**	–	–	**–**
Net loss attributable to discontinued operations (attributable to equity shareholders of the Parent)	**(22)**	**(38)**	**(60)**	**14**	**36**	**50**
Net cash generated by/(used in)						
Operating activities	5	15	**20**	17	51	**68**
Investing activities	(10)	(8)	**(18)**	(24)	(16)	**(40)**
Financing activities	–	25	**25**	–	–	**–**

As Okhotskaya Mining Company LLC and Kapan MPC CJSC did not meet the criteria for classification as a discontinued operation or assets held for sale as at 31 December 2017 they have not been re-presented as such in the statement of financial position. The comparative income statement has been re-presented to show the discontinued operations separately from continuing operations for the respective period.

6. Segment information

The Group has identified four reportable segments:

- Magadan (Omolon Gold Mining Company LLC, Magadan Silver JSC, Mayskoye Gold Mining Company LLC);
- Ural (Gold of Northern Urals CJSC);
- Khabarovsk (Albazino Resources Ltd, Amur Hydrometallurgical Plant LLC, Svetloye LLC);
- Kazakhstan (Varvarinskoye JSC, Komarovskoye Mining Company LLC, Bakyrchik Mining Venture LLC, Inter Gold Capital LLC).

As the Group entered into an agreement to dispose of its Kapan operations during the year (Note 5) which are the core part of the Armenia segment, the entire Armenia segment is disclosed as discontinued operations.

Reportable segments are determined based on the Group's internal management reports, which are separated based on the Group's geographical structure. Minor companies and activities (management, exploration, purchasing and other companies) which do not meet the reportable segment criteria are disclosed within corporate and other segment. Each segment is engaged in gold, silver or copper mining and related activities, including exploration, extraction, processing and reclamation. The Group's segments are based in the Russian Federation, Kazakhstan and Armenia.

Nezhda and Prognoz (Note 4) are reported within Corporate and other as being development stage entities, as well as GKR Amikan (Note 4) as this operation is currently insignificant to the Group.

The measure which management and the Chief Operating Decision Maker (the CODM) use to evaluate the performance of the Group is segment Adjusted EBITDA, which is defined as profit for the period adjusted for depreciation and amortisation, write-downs and reversals of inventory to net realisable value, share-based compensation, rehabilitation expenses, gains or losses arising on acquisition or disposal of subsidiaries, foreign exchange gains or losses, changes in the fair value of contingent consideration, finance income, finance costs, income tax expenses and tax exposure accrued within other operating expenses. The accounting policies of the reportable segments are consistent with those of the Group's accounting policies under IFRS.

Revenue shown as corporate and other comprises, principally, intersegment revenue relating to the supply of inventories, spare parts and fixed assets, and rendering management services to the Group's production entities. Intersegment revenue is recognised based on costs incurred plus a fixed margin basis. External revenue shown within corporate and other represents revenue from services provided to third parties by the Group's non-mining subsidiaries.

Business segment current assets and liabilities, other than current inventory, are not reviewed by the CODM and therefore are not disclosed in these consolidated financial statements.

The segment adjusted EBITDA reconciles to the profit before income tax as follows:

Period ended 31 December 2018 ($m)	Magadan	Khabarovsk	Ural	Kazakhstan	Total continuing segments	Total discontinued operations	Corporate and other	Intersegment operations and balances	**Total**
Revenue from external customers	725	575	134	272	1,706	176	–	–	1,882
Intersegment revenue	–	1	1	12	14	10	234	(258)	–
Cost of sales, excluding depreciation, depletion and write-down of inventory to net realisable value	392	252	38	130	812	110	145	(178)	889
Cost of sales	487	305	47	168	1,007	122	145	(178)	1,096
Depreciation included in Cost of sales	(71)	(53)	(9)	(37)	(170)	(13)	–	–	(183)
Write-down of metal inventory to net realisable value	(21)	–	–	–	(21)	–	–	–	(21)
Write-down of non-metal inventory to net realisable value	(2)	–	–	(1)	(3)	1	–	–	(2)
Rehabilitation expenses	(1)	–	–	–	(1)	–	–	–	(1)
General, administrative and selling expenses, excluding depreciation, amortisation and share-based compensation	32	15	4	15	66	11	97	(14)	160
General, administrative and selling expenses	56	28	12	20	116	15	114	(70)	175
Intercompany management services	(24)	(13)	(8)	(4)	(49)	(4)	(3)	56	–
Depreciation included in SGA	–	–	–	(1)	(1)	–	(2)	–	(3)
Share-based compensation	–	–	–	–	–	–	(12)	–	(12)
Other operating expenses excluding additional tax charges	23	8	5	8	44	3	5	–	52
Other operating expenses	23	8	5	8	44	28	3	–	75
Lichkvaz exploration expenses and mineral rights write-off	–	–	–	–	–	(24)	–	–	(24)
Additional tax chargers/fines/penalties	–	–	–	–	–	(1)	2	–	1
Share of income of associates and joint ventures	–	–	–	–	–	–	(1)	–	(1)
Adjusted EBITDA	**278**	**301**	**88**	**131**	**798**	**62**	**(14)**	**(66)**	**780**
Depreciation expense	71	53	9	38	171	13	2	–	186
Rehabilitation expenses	1	–	–	–	1	–	–	–	1
Lichkvaz exploration expenses and mineral rights write-off	–	–	–	–	–	24	–	–	24
Write-down of non-metal inventory to net realisable value	2	–	–	1	3	(1)	–	–	2
Write-down of metal inventory to net realisable value	21	–	–	–	21	–	–	–	21
Share-based compensation	–	–	–	–	–	–	12	–	12
Additional tax chargers/fines/penalties	–	–	–	–	–	1	(2)	–	(1)
Operating profit/(loss)	**183**	**248**	**79**	**92**	**602**	**25**	**(26)**	**(66)**	**535**
Net foreign exchange gains									(40)
Revaluation of initial share in Prognoz									41
Loss on disposal of subsidiaries									(54)
Change in fair value of contingent consideration liability									7
Finance income									8
Finance costs									(71)
Profit before tax									**426**
Income tax expense									(71)
Profit for the financial period									**355**
Current metal inventories	194	92	33	57	376	–	3	(11)	368
Current non-metal inventories	99	36	5	22	162	–	14	(7)	169
Non-current segment assets:									
Property, plant and equipment, net	364	387	20	823	1,594	3	829	–	2,426
Goodwill	15	–	–	–	15	–	–	–	15
Non-current inventory	65	8	2	22	97	–	–	(2)	95
Investments in associates	–	–	–	–	–	–	2	–	2
Total segment assets	**737**	**523**	**60**	**924**	**2,244**	**3**	**848**	**(20)**	**3,075**
Additions to non-current assets:									
Property, plant and equipment	74	101	5	134	314	15	48	–	377
Acquisition of subsidiaries	–	–	–	–	–	–	716	–	716

6. Segment information continued

Period ended 31 December 2017 ($m)	Magadan	Khabarovsk	Ural	Kazakhstan	Total continuing operations	Total discontinued operations	Corporate and other	Intersegment operations and balances	Total
Revenue from external customers	810	487	156	154	1,607	208	–	–	1,815
Intersegment revenue	–	13	1	6	20	1	218	(239)	–
Cost of sales, excluding depreciation, depletion and write-down of inventory to net realisable value	437	224	43	83	787	114	141	(167)	875
Cost of sales	540	282	56	114	992	140	141	(167)	1,106
Depreciation included in Cost of sales	(94)	(56)	(13)	(29)	(192)	(18)	–	–	(210)
Write-down of metal inventory to net realisable value	(12)	–	–	(1)	(13)	(4)	–	–	(17)
Write-down of non-metal inventory to net realisable value	3	(2)	–	(1)	–	(4)	–	–	(4)
General, administrative and selling expenses, excluding depreciation, amortisation and share-based compensation	29	15	5	13	62	9	89	(15)	145
General, administrative and selling expenses	53	26	12	17	108	14	102	(66)	158
Intercompany management services	(23)	(11)	(7)	(3)	(44)	(5)	(2)	51	–
Depreciation included in SGA	(1)	–	–	(1)	(2)	–	(1)	–	(3)
Share-based compensation	–	–	–	–	–	–	(10)	–	(10)
Other operating expenses excluding additional tax charges	24	6	11	9	50	6	6	(10)	52
Other operating expenses	21	7	9	9	46	–	8	(10)	44
Additional tax chargers/fines/penalties	3	(1)	2	–	4	6	(2)	–	8
Share of income of associates and joint ventures	–	–	–	–	–	–	3	–	3
Adjusted EBITDA	**320**	**255**	**98**	**55**	**728**	**80**	**(15)**	**(47)**	**746**
Depreciation expense	95	56	13	30	194	18	1	–	213
Write-down of non-metal inventory to net realisable value	(3)	2	–	1	–	4	–	–	4
Write-down of metal inventory to net realisable value	12	–	–	1	13	4	–	–	17
Share-based compensation	–	–	–	–	–	–	10	–	10
Additional tax chargers/fines/penalties	(3)	1	(2)	–	(4)	(6)	2	–	(8)
Operating profit/(loss)	**219**	**196**	**87**	**23**	**525**	**60**	**(28)**	**(47)**	**510**
Net foreign exchange gains									(10)
Change in fair value of contingent consideration liability									2
Finance income									4
Finance costs									(63)
Profit before tax									**443**
Income tax expense									(89)
Profit for the financial period									**354**
Current metal inventories	130	105	42	30	307	26	–	(5)	328
Current non-metal inventories	99	39	6	21	165	13	17	(9)	186
Non-current segment assets:	–	–	–	–	–	–	–	–	–
Property, plant and equipment, net	469	411	46	892	1,818	98	138	–	2,054
Goodwill	18	–	–	–	18	–	–	–	18
Non-current inventory	86	9	2	23	120	5	–	(2)	123
Investments in associates	–	–	–	–	–	–	96	–	96
Total segment assets	**802**	**564**	**96**	**966**	**2,428**	**142**	**251**	**(16)**	**2,805**
Additions to non-current assets:	–	–	–	–	–	–	–	–	–
Property, plant and equipment	106	100	9	165	380	38	13	–	431
Acquisition of group of assets	–	–	–	–	–	–	2	–	2

7. Revenue

Continuing operations

	Year ended 31 December 2018				Year ended 31 December 2017			
	Koz/t shipped (unaudited)	**Koz/t payable (unaudited)**	**Average price ($ per oz/t payable) (unaudited)**	**$m**	Koz/t shipped (unaudited)	Koz/t payable (unaudited)	Average price ($ per oz/t payable) (unaudited)	$m
Gold (Koz)	1,120	1,096	1,227	1,345	982	969	1,245	1,207
Silver (Koz)	24,110	23,735	14.8	351	24,748	24,397	16.0	391
Copper (t)	1,932	1,827	5,474	10	1,350	1,282	7,019	9
Total				**1,706**				**1,607**

Total continuing and discontinued operations

	Year ended 31 December 2018				Year ended 31 December 2017			
	Koz/t shipped (unaudited)	**Koz/t payable (unaudited)**	**Average price ($ per oz/t payable) (unaudited)**	$m	Koz/t shipped (unaudited)	Koz/t payable (unaudited)	Average price ($ per oz/t payable) (unaudited)	$m
Gold (Koz)	1,224	1,198	1,226	1,468	1,105	1,090	1,247	1,359
Silver (Koz)	26,118	25,675	14.8	380	26,888	26,469	16.1	426
Copper (t)	3,542	3,348	5,675	19	2,717	2,573	6,607	17
Zinc (t)	6,625	5,625	2,667	15	5,466	4,679	2,779	13
Total				**1,882**				**1,815**

Geographical analysis of revenue by destination is presented below:

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Sales within the Russian Federation	1,038	948	1,153	1 090
Sales to Kazakhstan	338	301	338	301
Sales to East Asia	245	183	263	200
Sales to Europe	85	175	128	224
Total	**1,706**	**1,607**	**1,882**	**1,815**

Included in revenues for the year ended 31 December 2018 are revenues which arose from the sales to the Group's largest customers, whose contribution to the Group's revenue exceeded 10% of the total revenue. In 2018, revenues from such customers amounted to $490 million, $228 million, $203 million and $173 million respectively (2017: $610 million, $200 million, $167 and $136 million, respectively).

During the year ended 31 December 2018 the Group has entered into prepaid bullion sales arrangements, which are settled solely through bullion shipments and are priced based on the spot London Bullion Market Association (LBMA) price, prevailing on the date of the respective shipment. The arrangements fall under IFRS 15 *Revenue from Contracts with Customers* and respective advances received represent contract liabilities, which are presented on the face of the balance sheet as prepayments received. As of 31 December 2018 prepayments received amount to $100 million (31 December 2017: nil).

7. Revenue continued

Presented below is an analysis per revenue streams:

	Magadan $m	Khabarovsk $m	Ural $m	Kazakhstan $m	Discontinued operations $m	Total $m
Year ended 31 December 2018						
Bullions	362	563	134	–	115	1,174
Concentrate and doré	363	12	–	272	61	708
	725	**575**	**134**	**272**	**176**	**1,882**
Year ended 31 December 2017						
Bullions	397	485	155	–	142	1,179
Concentrate and doré	413	3	–	154	66	636
	810	**488**	**155**	**154**	**208**	**1,815**

8. Cost of sales

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Cash operating costs				
On-mine costs (Note 9)	417	363	482	414
Smelting costs (Note 10)	314	277	349	316
Purchase of ore and concentrates from third parties	66	43	78	54
Purchase of ore from related parties (Note 33)	22	38	22	38
Mining tax	87	74	97	88
Total cash operating costs	**906**	**795**	**1,028**	**910**
Depreciation and depletion of operating assets (Note 11)	210	179	228	193
Rehabilitation expenses	1	–	1	–
Total costs of production	**1,117**	**974**	**1,257**	**1,103**
Increase in metal inventories	(174)	(29)	(187)	(26)
Write-down of metal inventories to net realisable value (Note 22)	21	12	21	16
Write-down of non-metal inventories to net realisable value (Note 22)	4	(1)	2	3
Idle capacities and abnormal production costs	3	10	3	10
Total	**971**	**966**	**1,096**	**1,106**

Mining tax includes royalties payable in the Russian Federation, Kazakhstan and Armenia. Mining tax in the Russian Federation and Kazakhstan is calculated based on the value of the precious metals extracted in the period. This value is usually determined based on the realised selling price of precious metals or, in the case where there were no sales during the period, cost of production of metals extracted (Russian Federation) or the average market price (Kazakhstan) during the reporting period. The royalty payable in Armenia is calculated as a percentage of actual sales during the reporting period.

Mining tax in respect of the metal inventories produced or sold during the year is recognised within cost of sales, while the additional mining tax accruals in respect of various disputes with tax authorities are recognised within other operating expenses (see Note 13).

Idle capacities and abnormal production costs were expensed as incurred and relate to idle capacities when processing plants are stopped for general maintenance.

9. On-mine costs

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Services	185	165	222	192
Labour	122	107	133	118
Consumables and spare parts	107	89	121	101
Other expenses	3	2	6	3
Total (Note 8)	**417**	**363**	**482**	**414**

10. Smelting costs

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Consumables and spare parts	143	115	159	132
Services	109	107	118	116
Labour	60	53	70	65
Other expenses	2	2	2	3
Total (Note 8)	**314**	**277**	**349**	**316**

11. Depletion and depreciation of operating assets

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
On-mine	154	128	169	137
Smelting	56	51	59	56
Total (Note 8)	**210**	**179**	**228**	**193**

Depreciation of operating assets excludes depreciation relating to non-operating assets (included in general, administrative and selling expenses) and depreciation related to assets employed in development projects where the charge is capitalised. Depreciation expense, which is excluded from the Group's calculation of Adjusted EBITDA (see Note 6), also excludes amounts absorbed into unsold metal inventory balances.

12. General, administrative and selling expenses

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Labour	120	110	127	116
Services	14	10	16	11
Share-based compensation (Note 32)	12	10	12	10
Depreciation	3	4	3	4
Other	15	15	17	17
Total	**164**	**149**	**175**	**158**

13. Other operating expenses, net

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Lichkvaz exploration expenses and mineral rights write-off	–	–	24	–
Additional tax charges/fines/penalties	(2)	(2)	(1)	(8)
Exploration expenses	12	15	13	18
Social payments	14	12	16	15
Provision for investment in Special Economic Zone	11	12	11	12
Taxes, other than income tax	13	11	13	11
Housing and communal services	4	4	4	4
Loss on disposal of property, plant and equipment	–	1	(1)	1
Change in estimate of environmental obligations	(1)	(4)	(1)	(4)
Other expenses	(4)	(5)	(3)	(5)
Total	**47**	**44**	**75**	**44**

From 1 January 2017 Omolon Gold Mining Company LLC and Magadan Silver JSC are entitled to the decreased statutory income tax rate of 17% for the operations held in the Special Economic Zone of the Russian Far East, as well a decreased mining tax rate (payable at 60% of the standard mining tax rates). In return for obtaining this tax relief the members of the regional free economic zone are obliged to invest 50% of their tax savings each year in the Special Economic Zone Development Programme, amounting to $11 million in the reporting year (2017: $12 million).

During the year ended 31 December 2018 the Group concluded that the Lichkvaz project, previously accounted for as part of the Armenia segment and regarded as a source of ore for Kapan (Note 5), is not economically viable. As a result, the Lichkvaz development asset was fully impaired (Note 19). No other exploration and development assets were written off during the year ended 31 December 2018 (2017: $2 million).

Operating cash flow spent on exploration activities amounts to $12 million (2017: $16 million).

Additional mining taxes, VAT, penalties and accrued interest have been accrued in respect of various disputes with the Russian and Armenian tax authorities.

14. Employee costs

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Wages and salaries	278	249	303	275
Social security costs	68	73	72	78
Share-based compensation	12	10	12	10
Total employee costs	**358**	**332**	**387**	**363**
Reconciliation:				
Less: employee costs capitalised	(35)	(38)	(37)	(40)
Less: employee costs absorbed into unsold metal inventory balances	(30)	9	(32)	12
Employee costs included in cost of sales	**293**	**303**	**318**	**335**

The weighted average number of employees during the year ended 31 December 2018 and year ended 31 December 2017 was:

	Year ended	
	31 December 2018	31 December 2017
Magadan	4,048	3,554
Khabarovsk	2,807	2,529
Kazakhstan	2,163	1,634
Armenia	953	1,007
Ural	809	810
Corporate and other	1,941	1,419
Total	**12,720**	**10,953**
Less discontinued operations	1,539	1,647
Total continuing operations	**11,181**	**9,306**

Compensation of key management personnel is disclosed within Note 33.

15. Auditor's remuneration

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Fees payable to the auditor and their associates for the audit of the Company's Annual Report		
United Kingdom	0.36	0.35
Overseas	0.72	0.76
Audit of the Company's subsidiaries	0.05	0.05
Total audit fees	**1.13**	**1.16**
Audit-related assurance services – half year review	0.46	0.43
Total audit and half-year review fees	**1.59**	**1.59**
Other services	0.08	0.01
Total non-audit fees	0.08	0.01
Total fees	**1.67**	**1.60**
Non-audit fees as % of audit and half-year review fees	**5%**	**1%**

16. Finance costs

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Interest expense on borrowings	67	57
Unwinding of discount on environmental obligations	3	3
Unwinding of discount on contingent consideration liabilities	1	3
Total	**71**	**63**

No significant amount of finance cost related to the discontinued operations.

During the year ended 31 December 2018 interest expense on borrowings does not include borrowing costs capitalised in the cost of qualifying assets of $11 million (2017: $8 million). These amounts were calculated based on the Group's general borrowing pool and by applying an effective interest rate of 4.19% (2017: 3.96%) to cumulative expenditure on such assets.

17. Income tax

The amount of income tax expense for the years ended 31 December 2018 and 31 December 2017 recognised in profit and loss is as follows:

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
Current income taxes	101	101	108	111
Deferred income taxes	(36)	(21)	(37)	(22)
Total	**65**	**80**	**71**	**89**

A reconciliation between the reported amounts of income tax expense attributable to income before income tax is as follows:

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Profit before income tax	**426**	**443**
Theoretical income tax expense at the tax rate of 20%	85	89
Effect of Special Economic Zone and Regional Investment project decreased tax rates	(27)	(25)
Effect of different tax rates of subsidiaries operating in other jurisdictions	17	5
Revaluation of initial share on business combination	(8)	–
Current year losses not recognised and losses previously recognised written-off	1	3
Non-deductible interest expense	5	5
Cumulative exchange differences in foreign operation recycled from translation reserve	3	–
Other non-taxable income and non-deductible expenses	(5)	12
Total income tax expense	**71**	**89**

The actual tax expense differs from the amount which would have been determined by applying the statutory rate of 20% for the Russian Federation, Kazakhstan and Armenia to profit before income tax as a result of the application of relevant jurisdictional tax regulations, which disallow certain deductions which are included in the determination of accounting profit. These deductions include share-based payment expenses, social related expenditures and other non-production costs, certain general and administrative expenses, financing expenses, foreign exchange related and other costs.

As from 1 January 2017 Omolon Gold Mining Company LLC and Magadan Silver JSC are entitled to the decreased statutory income tax rate of 17% for the operations held in the Special Economic Zone of the Russian Far East, the rate of 17% was used in calculation of income tax provision and deferred tax positions for those entities. From 1 January 2017 Svetloye LLC has received tax relief as a Regional Investment Project and is entitled to the statutory income tax rate of 0% up to 2021.

In the normal course of business, the Group is subject to examination by the tax authorities throughout the Russian Federation, Kazakhstan and Armenia. Of the large operating companies of the Group, the tax authorities have audited Okhotskaya Mining and Exploration Company LLC up to 2014, Omolon Gold Mining Company LLC up to 2013, Gold of Northern Urals CJSC and Magadan Silver JSC up to 2014, Mayskoye Gold Mining Company LLC up to 2013, and Varvarinskoye JSC for the period up to 2010. According to Russian, Kazakhstan and Armenian tax legislation, previously completed audits do not fully preclude subsequent claims relating to the audited period.

Tax exposures recognised in income tax

During the year ended 31 December 2018 and the year ended 31 December 2017 no individual significant exposures were identified as probable and provided for. Management has identified a total exposure (covering taxes and related interest and penalties) of approximately $46 million in respect of uncertain tax positions (31 December 2017: $5 million) which relate to income tax.

Income tax amounts included in other comprehensive income

An analysis of tax by individual item presented in the Consolidated statement of comprehensive income is presented below:

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Net foreign exchange losses on net investment in foreign operation		
Current tax expense	(1)	(2)
Deferred tax expense	(1)	(3)
Total income tax recognised in other comprehensive income	**(2)**	**(5)**

Current and deferred tax assets recognised within other comprehensive income relate to the tax losses originated by foreign currency exchange losses, allowable for tax purposes and generated by monetary items that form part of the intragroup net investment in the foreign operation. These foreign currency exchange losses are recognised in the consolidated financial statements within foreign currency translation reserve.

Deferred taxation

Deferred taxation is attributable to the temporary differences that exist between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes.

The following are the major deferred tax liabilities and assets recognised by the Group and movements thereon during the reporting period.

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Deferred tax liabilities	(152)	(77)
Deferred tax assets	73	61
	(79)	**(16)**

Deferred tax assets and liabilities are offset where the Group has a legally enforceable right to do so. The following analysis shows deferred tax balances presented for financial reporting purposes:

	Environmental obligation $m	Inventories $m	Property, plant, and equipment and other non-current assets $m	Trade and other payables $m	Tax losses $m	Long-term loans and payables $m	Intercompany loans $m	Other current assets $m	Total $m
At 1 January 2017	**7**	**(10)**	**(153)**	**10**	**105**	**2**	**(6)**	**5**	**(40)**
Charge to income statement	–	12	(3)	(2)	18	(1)	(1)	(1)	22
Recognised in other comprehensive income	–	–	–	–	–	–	3	–	3
Exchange differences	–	(1)	(3)	–	3	–	–	–	(1)
At 31 December 2017	**7**	**1**	**(159)**	**8**	**126**	**1**	**(4)**	**4**	**(16)**
Charge to income statement	–	(6)	(5)	(3)	46	–	1	4	37
Acquisitions (Note 4)	–	2	(124)	–	20	–	(2)	2	(102)
Disposals (Note 4)	–	2	1	–	(2)	–	–	–	1
Reclassified as held for sale (Note 5)	–	(2)	(2)	–	–	–	–	(3)	(7)
Recognised in other comprehensive income	–	–	–	–	–	–	(1)	–	(1)
Exchange differences	(1)	–	34	(1)	(23)	–	1	(1)	9
At 31 December 2018	**6**	**(3)**	**(255)**	**4**	**167**	**1**	**(5)**	**6**	**(79)**

The Group believes that recoverability of the recognised deferred tax asset (DTA) of $167 million at 31 December 2018, which is related to the tax losses carried forward, is more likely than not based upon expectations of future taxable income in the Russian Federation and Kazakhstan.

17. Income tax continued

Effective from 1 January 2017 changes were introduced to the Russian Federation tax law regarding loss carryforwards. Loss carryforwards will be limited to 50% of taxable profit in tax years 2017 through 2020. From 2021 the limitation will expire and it will be possible to fully utilise loss carryforwards against the corporate tax base in a given year. In addition to the above, the 10-year carryforward period for losses is eliminated, meaning that losses incurred from 2007 can be carried forward for an indefinite period until fully utilised.

Losses incurred in certain taxable entities in recent years have created a history of losses as of 31 December 2018. The Group has concluded that there is sufficient evidence to overcome the recent history of losses based on forecasts of sufficient taxable income in the carry-forward period.

Tax losses carried forward represent amounts available for offset against future taxable income generated predominantly by Mayskoye Gold Mining Company LLC, Varvarinskoye JSC and Bakyrchik Mining Venture LLC. Each legal entity within the Group represents a separate tax-paying component for income tax purposes. The tax losses of one entity cannot be used to reduce taxable income of other entities of the Group.

The Group's estimate of future taxable income is based on established proven and probable reserves which can be economically developed. The related detailed mine plans and forecasts provide sufficient supporting evidence that the Group will generate taxable earnings to be able to fully realise its net DTA even under various stressed scenarios. The amount of the DTA considered realisable, however, could be reduced in the near term if estimates of future taxable income during the carry forward period are reduced due to delays in production start dates, decreases in ore reserve estimates, increases in environmental obligations, or reductions in precious metal prices.

No deferred tax asset has been recognised in respect of $86 million (2017: $90 million) as it is not considered probable that there will be future taxable profits against which the losses can be utilised. No deferred tax was recognised in relation to Svetloye tax losses, accumulated by 1 January 2016, where the entity has received tax relief as a Regional Investment Project and is entitled to the statutory income tax rate of 0% up to 2021, thus will not be able to utilise accumulated losses. Included in unrecognised tax losses are losses of $4 million that mainly expire in 2025. Other losses may be carried forward indefinitely in accordance with enacted changes to Russian Federation legislation described above.

The deferred tax liabilities for taxes that would be payable on the unremitted earnings of certain of the Group subsidiaries have not been recognised as the Group has determined that the undistributed profit of its subsidiaries will not be distributed in the foreseeable future. The temporary differences associated with investments in subsidiaries, for which deferred tax liabilities have not been recognised, amount to $2,459 million (2017: $2,737 million).

18. Dividends

Dividends recognised during the years ended 31 December 2018 and 31 December 2017 are detailed below:

		Dividends			
	Cents per share	$m	Deducted from the equity during the period	Proposed in relation to the period	Paid in
Final dividend 2016	18	78	2017	2016	May 2017
Interim dividend 2017	14	60	2017	2017	September 2017
Final dividend 2017	30	136	2018	2017	May 2018
Interim dividend 2018	17	77	2018	2018	September 2018
Final dividend 2018	31	146	N/A	2018	N/A
Total dividends for the year ended 31 December 2017			**138**	**196**	**138**
Total dividends for the year ended 31 December 2018			**213**	**223**	**213**

19. Property, plant and equipment

	Development assets $m	Exploration assets $m	Mining assets $m	Non-mining assets $m	Capital construction in-progress $m	Total $m
Cost						
Balance at 31 December 2016	**564**	**140**	**1,750**	**65**	**150**	**2,669**
Additions	77	35	141	4	174	431
Transfers	4	(29)	89	(9)	(55)	–
Change in environmental obligations	–	–	–	–	3	3
Acquisitions (Note 4)	–	2	–	–	–	2
Disposals and write-offs including fully depleted mines	–	(2)	(32)	(1)	(1)	(36)
Translation to presentation currency	10	4	76	2	5	97
Balance at 31 December 2017	**655**	**150**	**2,024**	**61**	**276**	**3,166**
Additions	34	45	162	6	130	377
Transfers	(453)	(54)	724	1	(218)	–
Reclassified as held for sale (Note 5)	–	–	(47)	(2)	(12)	(61)
Change in environmental obligations	–	–	2	–	(3)	(1)
Acquisitions (Note 4)	297	291	109	–	19	716
Eliminated on disposal of subsidiary	(4)	(13)	(61)	(2)	(3)	(83)
Disposals and write-offs including fully depleted mines	(24)	–	(140)	(4)	–	(168)
Translation to presentation currency	(39)	(54)	(417)	(10)	(39)	(559)
Balance at 31 December 2018	**466**	**365**	**2,356**	**50**	**150**	**3,387**

	Development assets $m	Exploration assets $m	Mining assets $m	Non-mining assets $m	Capital construction in-progress $m	Total $m
Accumulated depreciation, amortisation						
Balance at 31 December 2016	–	–	(839)	(25)	–	(864)
Charge for the period	–	–	(227)	(5)	–	(232)
Disposals and write-offs including fully depleted mines	–	–	28	–	–	28
Translation to presentation currency	–	–	(43)	(1)	–	(44)
Balance at 31 December 2017	**–**	**–**	**(1,081)**	**(31)**	**–**	**(1,112)**
Charge for the period	–	–	(254)	(5)	–	(259)
Reclassified as held for sale (Note 5)	–	–	20	1	–	21
Eliminated on disposal of subsidiary	–	–	56	2	–	58
Disposals and write-offs including fully depleted mines	–	–	135	1	–	136
Translation to presentation currency	–	–	190	5	–	195
Balance at 31 December 2018	**–**	**–**	**(934)**	**(27)**	**–**	**(961)**
Net book value						
31 December 2017	**655**	**150**	**943**	**30**	**276**	**2,054**
31 December 2018	**466**	**365**	**1,422**	**23**	**150**	**2,426**

Mining assets, exploration and development assets at 31 December 2018 included mineral rights with net book value which amounted to $1,216 million (31 December 2017: $735 million) and capitalised stripping costs with net book value of $76 million (31 December 2017: $50 million). Mineral rights of the Group comprise assets acquired upon acquisition of subsidiaries and asset acquisitions.

No property, plant and equipment was pledged as collateral at 31 December 2018 or at 31 December 2017.

20. Goodwill

Goodwill has been allocated for impairment testing purposes to the following cash-generating units:

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Cost and Accumulated impairment losses		
At 1 January	**18**	**17**
Translation effect	(3)	1
At 31 December	**15**	**18**
Mayskoye	11	13
Dukat	4	5
Total	**15**	**18**

The carrying amount of goodwill is reviewed annually to determine whether it is in excess of its recoverable amount. The recoverable amount of the cash-generating unit is determined based on a fair value less costs to sell calculation. Fair value is based on the application of the Discounted Cash Flow Method (DCF) using post-tax cash flows. The DCF method is attributable to the development of proved and probable reserves. The impairment testing procedure and related assumptions are described in detail in the 'Key sources of estimation uncertainty' section above.

Sensitivity analysis

For Dukat and Mayskoye, management has performed an analysis as to whether a reasonably possible adverse change to any of the key assumptions would lead to impairment.

The following scenarios were considered as reasonably possible and were used for this sensitivity analysis:

- 10% simultaneous decrease in gold and silver prices over the life of mine;
- 10% revaluation in Rouble exchange rates;
- 10% increase in operating expenses over the life of mine; and
- 0.5% increase in the discount rate applied.

Each of the sensitivities above has been determined by assuming that the relevant key assumption moves in isolation, and without regard to potential mine plan changes and other management decisions which would be taken to respond to adverse changes in existing management projections. The scenario of the gold price decreasing by 10% would cause the carrying amount to exceed the aggregate recoverable amount of Mayskoye by $9 million. No other scenarios would result in impairment.

21. Investments in associates and joint ventures

	31 December 2018		31 December 2017	
	Voting power %	**Carrying value $m**	Voting power %	Carrying value $m
Interests in associates and joint ventures				
Proeks LLC	30	2	30	2
South-Verkhoyansk Mining Company JSC (Nezhda)	100	–	17.66	28
GRK Amikan	74.3	–	42.65	7
Prognoz Serebro LLC	100	–	5	5
Aktogai Mys LLC	–	–	50	2
Total		**2**		**44**
Loans forming part of net investment in joint ventures				
JSC South-Verkhoyansk Mining Company (Nezhda)		–		39
Prognoz Serebro LLC		–		13
		–		52
Total investments in associates and joint ventures		**2**		**96**

Prognoz Serebro LLC (Prognoz), South-Verkhoyansk Mining Company JSC (Nezhda) and GRK Amikan LLC were consolidated for the first time during the year ended 31 December 2018 (Note 4).

Aktogai Mys LLC

In June 2015 Polymetal purchased a 25% stake in the company Aktogai Mys LLC (Aktogai) that owns the Dolinnoye exploration licence in Kazakhstan Republic (including part of the intracompany loan) from an unrelated party. In June 2017 Polymetal had acquired an additional 25% interest in the Aktogai for a net consideration of $1 million. The Group determined that Aktogai continues to constitute a joint venture under IFRS 11 *Joint Arrangements* and the investment was accounted for using the equity method since June 2015.

During the year ended 31 December 2018 Polymetal disposed of its entire interest in Aktogai for a total consideration of $17 million, adjusted for the repayment of the outstanding loans, advanced to Aktogai, amounting to $10 million. The total gain on disposal of Aktogai amounts to $5 million.

Proeks LLC

In November 2015 the Group acquired a 24.9% share in a diamond exploration project located in the North-West of the Russian Federation for a cash consideration of $2 million. During the year ended 31 December 2017 the Group has increased its share in Proeks LLC to 30% for a consideration of $1 million. The Group determined that it has significant influence in the entity and the investment is accounted for using the equity method.

	Nezhda	Amikan	Total	Total
	31 December 2018 $m	**31 December 2018 $m**	**31 December 2018 $m**	31 December 2017 $m
Group's share in investment net income/(loss)	(2)	2	–	3
Share of profit recognised for the year less inventories unrealised profit eliminations	(2)	1	(1)	3

22. Inventories

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Inventories expected to be recovered after twelve months		
Ore stock piles	68	86
Consumables and spare parts	27	37
Total non-current inventories	**95**	**123**
Inventories expected to be recovered in the next twelve months		
Copper, gold and silver concentrate	116	103
Ore stock piles	174	144
Work in-process	55	57
Doré	14	13
Metal for refining	9	9
Refined metals	1	2
Total metal inventories	**369**	**328**
Consumables and spare parts	168	186
Total	**537**	**514**

Write-downs of metal inventories to net realisable value

The Group recognised the following (write-downs)/reversals to net realisable value of its metal inventories:

	Year ended 31 December 2018		Year ended 31 December 2017
	Magadan $m	**Total operating segments $m**	Total operating segments $m
Ore stock piles	(9)	(9)	(15)
Ore in heap leach piles	(9)	(9)	(3)
Copper, gold and silver concentrate	(3)	(3)	2
Total	**(21)**	**(21)**	**(16)**

22. Inventories continued

The key assumptions used as at 31 December 2018 in determining net realisable value of inventories (including the commodity price assumptions for long-term stockpiles) were consistent with those used in the goodwill impairment review (Note 20). For short-term metal inventories applicable forward prices as of 31 December 2018 were used.

During the year ended 31 December 2018 the Group provided for obsolete consumables and spare parts inventory in the amount of $2 million (year ended 31 December 2017: write-down of $3 million).

The amount of inventories held at net realisable value at 31 December 2018 is $99 million (31 December 2017: $60 million).

23. Trade receivables and other financial instruments

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Receivables from provisional copper, gold and silver concentrate sales	60	26
Other receivables	22	15
Accounts receivable from related parties (Note 33)	–	8
Less: Allowance for doubtful debts	(3)	(2)
Total trade and other receivables	**79**	**47**
Call option related to the Nezhda acquisition (Note 4)	–	12
Short-term loans provided to related parties (Note 33)	–	7
Short-term loans provided to third parties	2	5
Total other short-term financial instruments	**2**	**24**
Total	**81**	**71**

The average credit period on sales of copper, gold and silver concentrate at 31 December 2018 was 22 days (2017: 20 days). No interest is charged on trade receivables. The Group's doubtful debt relates to its non-trade receivables, which are fully impaired.

24. Cash and cash equivalents

		Year ended	
		31 December 2018 $m	31 December 2017 $m
Bank deposits	– USD	361	11
	– other currencies	7	–
Current bank accounts	– USD	1	2
	– other currencies	10	23
Total		**379**	**36**

Bank deposits as at 31 December 2018 are mainly presented by the USD deposits, bearing an average interest rate of 3% per annum with average maturity at inception of 29 days, and KZT demand deposits bearing an interest rate of 5% (2017: 9% per annum for KZT demand deposits).

25. Borrowings

Borrowings at amortised cost:

	Actual interest rate at			31 December 2018			31 December 2017		
	Type of rate	**31 Dec 2018**	31 Dec 2017	**Current $m**	**Non-current $m**	**Total $m**	Current $m	Non-current $m	Total $m
Secured loans from third parties									
US Dollar denominated	fixed	4.00%	4.10%	64	372	436	–	436	436
Total				**64**	**372**	**436**	**–**	**436**	**436**
Unsecured loans from third parties									
US Dollar denominated	floating	4.35%	3.73%	11	940	951	–	834	834
US Dollar denominated	fixed	4.56%	6.17%	34	470	504	26	152	178
Euro denominated	fixed	2.85%	2.85%	8	–	8	–	8	8
Total				**53**	**1,410**	**1,463**	**26**	**994**	**1,020**
				117	**1,782**	**1,899**	**26**	**1,430**	**1,456**

Bank loans

The Group has a number of borrowing arrangements with various lenders. These borrowings consist of unsecured and secured loans and credit facilities denominated in US Dollars. Where security is provided it is in the form of a pledge of revenue from certain sales agreements.

Movements in borrowings are reconciled as follows:

	1 January $m	Borrowings obtained $m	Repayments of borrowings $m	Borrowings acquired $m	Borrowings disposed $m	Net foreign exchange losses $m	Exchange differences on translating foreign operations $m	Arrangement fee amortisation $m	31 December $m
Year ended 31 December 2017	1,378	3,108	(3,033)	–	–	(14)	14	3	1,456
Year ended 31 December 2018	1,456	1,697	(1,254)	26	(25)	(110)	110	(1)	1,899

At 31 December 2018, the Group had undrawn borrowing facilities of $1,119 million (31 December 2017: $1,361 million), of which $1,069 million is considered committed (31 December 2017: $1,266). The Group complied with its debt covenants throughout 2018 and 2017.

The table below summarises maturities of borrowings:

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Year ended, 31 December 2019	117	26
31 December 2020	263	105
31 December 2021	500	248
31 December 2022	446	513
31 December 2023	469	414
31 December 2024	104	100
31 December 2025	–	50
Total	**1,899**	**1,456**

26. Environmental obligations

Environmental obligations include decommissioning and land restoration costs and are recognised on the basis of existing project business plans as follows:

	31 December 2018 $m	31 December 2017 $m
Opening balance	**39**	**37**
Changes in estimates for the year:		
Change in estimate of environmental obligations (Note 13)	(1)	(4)
Decommissioning liabilities recognised as increase in Property plant and equipment (Note 19)	(1)	3
Rehabilitation expenses	1	–
Effect of unwinding of discount	3	3
Reclassified to discontinued operations	(1)	
Acquired in business combinations (Note 4)	2	–
Disposal of subsidiary (Note 4)	(4)	–
Translation effect	(6)	–
Closing balance	**32**	**39**

The principal assumptions are related to Russian Rouble, Kazakh Tenge and Armenian Dram projected cash flows. The assumptions used for the estimation of environmental obligations were as follows:

	2018	2017
Discount rates	7.23%–10.68%	7.23%–14.67%
Inflation rates	2–4.6%	1.57%–8.5%
Expected mine closure dates	1–34 years	1–34 years

The Group does not hold any assets that are legally restricted for purposes of settling environmental obligations.

27. Trade payables and accrued liabilities

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Trade payables	72	62
Accrued liabilities	39	40
Labour liabilities	12	14
Provision for investment in Special Economic Zone (Note 13)	11	10
Account payable to related parties	–	6
Other payables	12	3
Total	**146**	**135**

In 2018, the average credit period for payables was 28 days (2017: 25 days). There was no interest charged on the outstanding payables balance during the credit period. The Group has financial risk management policies in place, which include budgeting and analysis of cash flows and payment schedules to ensure that all amounts payable are settled within the credit period.

28. Commitments and contingencies

Commitments

Capital commitments

The Group's budgeted capital expenditure commitments as at 31 December 2018 amounted to $87 million (2017: $46 million).

Social and infrastructure commitments

In accordance with a memorandum with East-Kazakhstan Oblast Administration (local Kazakhstan government) the Group participates in financing of certain social and infrastructure development projects of the region. During the year ended 31 December 2018 the Group paid $2 million (2017: $2 million) under this programme and the total social expense commitment as at 31 December 2018 amounts to $26 million (2017: $28 million), payable in the future periods as follows:

	31 December 2018 $m	31 December 2017 $m
Within one year	2	2
From one to five years	20	22
Thereafter	4	4
Total	**26**	**28**

Forward sale commitments

The Group has certain physical gold and silver forward sale commitments which are priced at the prevailing market price, calculated with reference to the LBMA or LME gold price, which are accounted for as executed as the Group expects to and has historically physically delivered into these contracts.

Operating leases: Group as a lessee

During the year ended 31 December 2018 the Group recognised $7 million as operating lease expenses (2017: $7 million).

The land in the Russian Federation and Kazakhstan on which the Group's production facilities are located is owned by the state. The Group leases this land through operating lease agreements, which expire in various years through to 2058.

Future minimum lease payments due under non-cancellable operating lease agreements at the end of the period were as follows:

	31 December 2018 $m	31 December 2017 $m
Within one year	3	3
From one to five years	7	5
Thereafter	2	4
Total	**12**	**12**

Contingencies

Operating environment

Emerging markets such as Russia and Kazakhstan are subject to different risks than more developed markets, including economic, political and social, and legal and legislative risks. Laws and regulations affecting businesses in Russia continue to change rapidly, and tax and regulatory frameworks are subject to varying interpretations. The future economic direction of Russia and Kazakhstan is heavily influenced by the fiscal and monetary policies adopted by the government, together with developments in the legal, regulatory, and political environment.

As a result of the latest round of sanctions imposed by the US on certain Russian companies and individuals during 2018, the Group believes that the level of political risk has increased from medium to high. Sanctions imposed during 2014–2018 have not had any direct influence on the Group's operations. However, there is a risk that further sanctions, if imposed, could impact the Group's ability to operate in Russia, including cost and availability of funding.

Taxation

Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transaction and activity of the companies of the Group may be challenged by the relevant regional and federal authorities and as a result, significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

During 2018 and 2017 the Group has been involved in certain litigation in Russia, Kazakhstan and Armenia. Management has identified a total exposure (covering taxes and related interest and penalties) of $47 million in respect of contingent liabilities (2017: $7 million), including $46 million related to income tax (2017: $5 million).

29. Fair value accounting

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

At 31 December 2018 and 31 December 2017, the Group held the following financial instruments:

	31 December 2018			
	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
Receivables from provisional copper, gold and silver concentrate sales	–	60	–	**60**
Contingent consideration liability	–	–	(54)	**(54)**
	–	**60**	**(54)**	**6**

	31 December 2017			
	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
Receivables from provisional copper, gold and silver concentrate sales	–	26	–	**26**
Call option related to the Nezhda acquisition (Note 4)	–	–	12	**12**
Contingent consideration liability	–	–	(62)	**(62)**
	–	**26**	**(50)**	**(24)**

During the reporting periods, there were no transfers between Level 1 and Level 2.

The carrying values of cash and cash equivalents, trade and other receivables, trade and other payables and short-term debt recorded at amortised cost approximate to their fair values because of the short maturities of these instruments. The estimated fair value of the Group's debt, calculated using the market interest rate available to the Group as at 31 December 2018, is $1,660 million, and the carrying value as at 31 December 2018 is $1,899 million (see Note 25).

Receivables from provisional copper, gold and silver concentrate sales

The fair value of receivables arising from copper, gold and silver concentrate sales contracts that contain provisional pricing mechanisms is determined using the appropriate quoted forward price from the exchange that is the principal active market for the particular metal. As such, these receivables are classified within Level 2 of the fair value hierarchy.

Contingent consideration liabilities

The table below sets out a summary of changes in the fair value of the Group's Level 3 financial liabilities for the year ended 31 December 2018:

	31 December 2018							31 December 2017
	Omolon $m	Kyzyl $m	Lichkvaz $m	Kapan $m	Komar $m	Prognoz $m	Total $m	Total $m
Opening balance	11	12	3	11	25	–	62	76
Additions (Note 4)	–	–	–	–	–	14	14	–
Change in fair value, included in profit or loss	2	(2)	(3)	(2)	(2)	–	(7)	(2)
Unwinding of discount (Note 16)	1	–	–	–	–	–	1	3
Settlement through issue of shares (Note 31)	–	(10)	–	–	–	–	(10)	(10)
Cash settlement	(3)	–	–	(1)	(2)	–	(6)	(5)
Total contingent consideration	**11**	**–**	**–**	**8**	**21**	**14**	**54**	**62**
Less current portion of contingent consideration liability	(4)	–	–	(1)	–	–	(5)	(5)
	7	**–**	**–**	**7**	**21**	**14**	**49**	**57**

Omolon

In 2008, the Group recorded a contingent consideration liability related to the acquisition of 98.1% of the shares in Omolon Gold Mining Company LLC (Omolon). The fair value of the contingent consideration liability was determined using a valuation model which simulates expected production of gold and silver at the Kubaka mine and future gold and silver prices to estimate the future revenues of Omolon. This liability is revalued at each reporting date based on 2% of the life-of-mine revenues with the resulting gain or loss recognised in the consolidated income statement. The liability recognised as at 31 December 2018 is $11 million, including current portion of $4 million.

Kyzyl

During the year ended 31 December 2014 the Group completed the acquisition of Altynalmas Gold Ltd, the holding company for the Kyzyl gold project in Kazakhstan. The fair value of the related contingent consideration liability was estimated using the Monte Carlo model. In May 2018 it was settled by 1,015,113 newly issued Polymetal International shares (Note 31).

Lichkvaz

During the year ended 31 December 2015 the Group completed the acquisition of Lichkvaz CJSC (Lichkvaz), the company owning the Lichkvaz exploration licence in Armenia. The fair value of the related contingent consideration liability was calculated using a valuation model which simulates expected production of metals and future gold, silver and copper prices to estimate future value of the metals in the actually extracted ore. During the year ended 31 December 2018 the Group concluded that the Lichkvaz project is not economically viable and wrote off the related development assets and released the related contingent liability.

Kapan

During the year ended 31 December 2016 the Group completed the acquisition of DPMK, the company owning the Kapan mine and processing plant in Armenia. The seller is entitled to receive a 2% NSR (Net Smelter Return) royalty on future production from the Kapan Gold Mine capped at $25 million. At the 31 December 2018, the fair value of the contingent consideration was estimated at $8 million, including a current portion of $1 million. In January 2019, following the sale of Kapan property (Notes 5 and 35), the Group has agreed with DPMK, to terminate the royalty owed to DPM via a buyout for a cash consideration of $6 million.

Komar

On 1 August 2016 the Group completed the acquisition of Orion Minerals LLP, the holding company for the Komarovskoye Gold Deposit ('Komar') in the Republic of Kazakhstan. The seller is entitled to the contingent consideration that was determined based on the LOM model of the Komarovskoye mine and calculated using Monte Carlo modelling, assuming gold price volatility of 16.68% (2017: 17.02%). At 31 December 2018, the fair value of the contingent consideration was estimated at $21 million.

Prognoz

During the year ended 31 December 2018 the Group completed the acquisition of Prognoz silver property (Note 4). The fair value of the related contingent consideration liabilities was estimated at $14 million. The valuation method and applicable assumptions are described in Note 4. There were no significant changes to the fair value as of 31 December 2018.

Assumptions used in the valuation of Omolon, Kapan and Lichkvaz are consistent with those used in goodwill impairment tests (Note 20), such as long-term metal prices and discount rates. Estimated production volumes are based on life of mine plans and are approved by management as part of the long-term planning process.

30. Risk management activities

Capital management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximising the return to stakeholders through the optimisation of the debt and equity balance. The Group's overall strategy is to provide value to stakeholders by maintaining an optimal short-term and long-term capital structure, reducing cost of capital, and to safeguard the ability to support the operating requirements on an ongoing basis, continuing the exploration and development activities.

The capital structure of the Group consists of net debt (borrowings as detailed in Note 25 offset by cash and cash equivalents and bank balances as detailed in Note 24) and equity of the Group comprising the Stated Capital account, reserves and retained earnings.

The Group's committed borrowings are subject to certain financial covenants. Compliance with covenants is reviewed on a semi-annual basis and the Group's Board is satisfied with forecast compliance with covenants on those borrowings.

The Group's Board reviews the capital structure of the Group on a semi-annual basis. As part of this review, the Board considers the cost of capital and the risks associated with each class of capital.

30. Risk management activities continued

Major categories of financial instruments

The Group's principal financial liabilities comprise borrowings, derivatives, trade and other payables. The Group has various financial assets such as accounts receivable, loans advanced and cash and cash equivalents.

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Financial assets		
Financial assets at FVTPL		
Receivables from provisional copper, gold and silver concentrate sales (Note 23)	60	26
Call option related to the Nezhda acquisition (Note 4)	–	12
Financial assets at amortised cost		
Cash and cash equivalents (Note 24)	379	36
Trade and other receivables (Note 23)	21	33
Non-current loans and receivables (Note 23)	6	15
Total financial assets	**466**	**122**
Financial liabilities		
Financial liabilities at FVTPL		
Contingent consideration liability (Note 29)	54	62
Financial liabilities at amortised cost		
Borrowings (Note 25)	1,899	1,456
Trade and other payables (Note 27)	87	81
Total financial liabilities	**2,040**	**1,599**

Trade and other payables exclude employee benefits and social security.

The main risks arising from the Group's financial instruments are foreign currency and commodity price risk, interest rate, credit and liquidity risks.

At the end of the reporting period, there are no significant concentrations of credit risk for receivables designated at FVTPL. The carrying amount reflected above represents the Group's maximum exposure to credit risk for such receivables.

Presented below is a summary of the Group's accounts receivable with embedded derivative recorded on the consolidated balance sheet at fair value.

		Year ended	
	Consolidated balance sheet location	**31 December 2018 $m**	31 December 2017 $m
Receivable from provisional copper, gold and silver concentrate sales	Accounts receivable	60	26

		Year ended	
	Location of gain/(loss) recorded in profit or loss	**31 December 2018 $m**	31 December 2017 $m
Receivable from provisional copper, gold and silver concentrate sales	Revenue	5	2

Foreign currency and commodity price risk

In the normal course of business the Group enters into transactions for the sale of its commodities, denominated in US Dollars. In addition, the Group has assets and liabilities in a number of different currencies (primarily Russian Rouble and Kazakh Tenge). As a result, the Group is subject to transaction and translation exposure from fluctuations in foreign currency exchange rates.

The Group does not currently use derivative instruments to hedge its exposure to foreign currency risk.

The carrying amounts of monetary assets and liabilities denominated in foreign currencies other than functional currencies of the individual Group entities at 31 December 2018 and 31 December 2017 were as follows:

	Assets		Liabilities	
	31 December 2018 $m	31 December 2017 $m	**31 December 2018 $m**	31 December 2017 $m
US Dollar	356	53	792	400
Euro	–	2	9	11
Total	**356**	**55**	**801**	**411**

US dollar denominated assets and liabilities disclosed above exclude balances outstanding held in Polymetal International plc and its intermediate holding companies, where the functional currency is the US dollar ($) as described in Note 2.

Currency risk is monitored on a monthly basis by performing a sensitivity analysis of foreign currency positions in order to verify that potential losses are at an acceptable level.

The table below details the Group's sensitivity to changes in exchange rates by 10% which is the sensitivity rate used by the Group for internal analysis. The analysis was applied to monetary items denominated in respective currencies at the reporting dates.

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Profit or loss (RUB to US Dollar)	(24)	(15)
Profit or loss (KZT to US Dollar)	(20)	(20)

Provisionally priced sales

Under a long-established practice prevalent in the industry, copper, gold and silver concentrate sales are provisionally priced at the time of shipment. The provisional prices are finalised in a contractually specified future period (generally one to three months) primarily based on quoted LBMA or LME prices. Sales subject to final pricing are generally settled in a subsequent month. The forward price is a major determinant of recorded revenue.

Interest rate risk

The Group is exposed to interest rate risk because entities in the Group borrow funds at both fixed and floating interest rates. The risk is managed by the Group by maintaining an appropriate mix between fixed and floating rate borrowings. The Group does not currently hedge its exposure to interest rate risk.

The Group's exposure to interest rates on financial assets and financial liabilities is detailed in the liquidity risk section of this note.

For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole period. A 100 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 100 basis points higher/lower and all other variables were held constant, the Group's profit for the year ended 31 December 2018 would have decreased/increased by $7 million (2017: $9 million). This is mainly attributable to the Group's exposure to interest rates on its variable rate borrowings.

The Group's sensitivity to interest rates has increased during the current period mainly due to the increase in variable rate debt instruments.

Credit risk

Credit risk is the risk that a customer may default or not meet its obligations to the Group on a timely basis, leading to financial losses to the Group. The Group's financial instruments that are potentially exposed to concentration of credit risk consist primarily of cash and cash equivalents and loans and receivables.

Trade accounts receivable at 31 December 2018 and 31 December 2017 are represented by provisional copper, gold and silver concentrate sales transactions. A significant portion of the Group's trade accounts receivable is due from reputable export trading companies. With regard to other loans and receivables the procedures of accepting a new customer include checks by a security department and responsible on-site management for business reputation, licences and certification, creditworthiness and liquidity. Generally, the Group does not require any collateral to be pledged in connection with its investments in the above financial instruments. Credit limits for the Group as a whole are not set up.

30. Risk management activities continued

The credit risk on liquid funds is limited because the counterparties are banks with high credit ratings assigned by international credit-rating agencies. The major financial assets at the balance sheet date other than trade accounts receivable presented in Note 24 are cash and cash equivalents at 31 December 2018 of $379 million (2017: $36 million).

Liquidity risk

Liquidity risk is the risk that the Group will not be able to settle its liabilities as they fall due.

The Group's liquidity position is carefully monitored and managed. The Group manages liquidity risk by maintaining detailed budgeting, cash forecasting processes and matching the maturity profiles of financial assets and liabilities to help ensure that it has adequate cash available to meet its payment obligations.

The following table details the Group's remaining contractual maturity for its financial liabilities with agreed repayment periods. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate curves at the end of the reporting period. The contractual maturity is based on the earliest date on which the Group may be required to pay.

Presented below is the maturity profile of the Group's financial liabilities as at 31 December 2018:

	Less than 3 months	3–12 months	1–5 years	More than 5 years	31 December 2018 $m Total	31 December 2017 $m Total
Borrowings	34	169	1,866	107	2,176	1,669
Accounts payable and accrued expenses	64	23	–	–	87	81
Contingent consideration liabilities (Note 29)	2	6	26	34	68	75
Total	**100**	**198**	**1,892**	**141**	**2,331**	**1,825**

31. Stated capital account and retained earnings

As at 31 December 2018, the Company's issued share capital consisted of 469,368,309 ordinary shares (2017: 430,115,480 ordinary shares) of no par value, each carrying one vote. The Company does not hold any shares in treasury (2017: none). The ordinary shares reflect 100% of the total issued share capital of the Company.

The movements in the stated capital account in the year were as follows:

	Stated capital account number of shares	Stated capital account $m
Balance at 31 December 2016	**428,262,338**	**2,010**
Issue of shares for Tarutin	893,575	10
Issue of shares for Primorskoye contingent consideration	815,348	10
Issue of shares in accordance with Deferred Share Awards plan	144,219	1
Balance at 31 December 2017	**430,115,480**	**2,031**
Share issue for Prognoz	20,459,668	200
Share issue for Kyzyl deferred consideration	1,015,113	10
Share issue for Amikan	2,456,049	22
Share issue for Nezhda	13,486,579	136
Share issue for Saum	834,055	6
Issue of shares in accordance with DSA and LTIP plans	1,001,365	9
Balance at 31 December 2018	**469,368,309**	**2,414**

In September 2018 the Group increased its interest in Saum Mining Company LLC (the licence holder for the Saum polymetallic deposit with resources of 435 Koz of gold equivalent at 9.7 g/t by 20% (from 80% to 100%). The Group purchased the additional 20% from an unrelated party for a consideration of $6 million, payable through the issue of 834,055 new Polymetal International plc shares. The Group has previously determined that Saum meets the definition of a subsidiary and therefore it was consolidated from the date of the 80% share acquisition. The increase in interest in Saum was recognised as an acquisition of the non-controlling interest and recognised as an interest within equity. As of the acquisition date and during the years ended 31 December 2018 and 31 December 2017 Saum did not give rise to a significant non-controlling interest to be presented within equity, income statement and statement of comprehensive income.

Reserves available for distribution to shareholders are based on the available cash in the Company under Jersey law. As Russian, Kazakh and Armenian legislation identifies the basis of distribution of the dividends as accumulated profit, the ability to distribute cash up to the Company from the Russian, Kazakh and Armenian operating companies will be based on the statutory historical information of each stand-alone entity. Statutory financial statements in the Russian Federation are prepared in accordance with Russian accounting standards which differ from IFRS, while Kazakhstan and Armenia have adopted IFRS from 1 January 2006 and 1 January 2011, respectively. Also, current legislation and other statutory regulations dealing with distribution rights are open to legal interpretation; consequently, actual distributable reserves may differ from the amount of accumulated profit in accordance with statutory financial statements. However, the Group has unremitted accumulated retained earnings of approximately $2.5 billion (2017: $2.7 billion), which if remitted without restrictions would fund the Group's anticipated dividends for a number of years, after allowing for related tax payments.

As of 31 December 2018 the Group subsidiaries' reserves available for distribution based on local accounting standards amount to $2,459 million (2017: $2,737 million).

Weighted average number of shares: Diluted earnings per share

Both basic and diluted earnings per share were calculated by dividing profit for the year attributable to equity holders of the parent by the weighted average number of outstanding common shares before/after dilution respectively. The calculation of the weighted average number of outstanding common shares after dilution is as follows:

	Year ended 31 December 2018	Year ended 31 December 2017
Weighted average number of outstanding common shares	449,016,966	429,880,907
Dilutive effect of share appreciation plan	1,497,087	5,830,775
Weighted average number of outstanding common shares after dilution	**450,514,052**	**435,711,682**

There were no adjustments required to earnings for the purposes of calculating the diluted earnings per share during the year ended 31 December 2018 (year ended 31 December 2018: nil).

At 31 December 2018 the outstanding LTIP awards issued under 2015–2016 tranches represent dilutive potential ordinary shares with respect to earnings per share from continuing operations as these are in the money as of reporting date (31 December 2017: the outstanding LTIP awards issued under 2014–2017 tranches represent dilutive potential ordinary shares).

The awards issued under management bonus deferral award plan are dilutive as of 31 December 2018 and 31 December 2017 being contingently issued shares and are included in the calculation of diluted EPS based on the weighted average number of shares that would be issuable if the end of the reporting period were the end of the contingency period.

32. Share-based payments

For the year ended 31 December 2018, share-based compensation in the amount of $12 million including $1 million of management bonus deferral award (2017: $10 million and $1 million, respectively) was recognised in general, administrative and selling expenses in the consolidated income statement (Note 12). As of reporting date the unrecognised share-based compensation expense related to non-vested equity-settled stock appreciated rights is detailed as follows:

	31 December 2018			31 December 2017	
	Number of option granted shares	**Expected amortisation period years**	**Unrecognised share-based compensation expense $m**	Expected amortisation period years	Unrecognised share-based compensation expense $m
Tranche 2014	2,567,977	–	–	0.3	1
Tranche 2015	2,636,366	0.3	1	1.3	3
Tranche 2016	2,039,787	1.3	3	2.3	6
Tranche 2017	2,070,002	2.3	8	3.3	12
Tranche 2018	2,549,754	3.3	9	N/A	N/A
			21		**22**

32. Share-based payments continued

During the year ended 31 December 2018 a total amount of 1,001,365 shares were released and issued in accordance with the management bonus plan deferral award and the long-term incentive plan (2017: 144,219 shares under the management bonus plan deferral award were released and issued in accordance with the plan 110,850). The assumptions used in the calculation and fair value of one award, calculated based on those assumptions, are set out in the table below:

	Tranche 2014	Tranche 2015	Tranche 2016	Tranche 2017	Tranche 2018
Risk free rate	1.60%	1.17%	1.11%	1.60%	2.49%
Expected volatility	46.14%	43.70%	42.05%	41.65%	34.03%
Constant correlation	34.49%	30.86%	32.32%	34.49%	33.70%
Expected life, years	4	4	4	4	4
Share price at the date of grant (USD)	13.3	8.2	10.3	13.3	10.2
Fair value of one award (USD)	3.2	3.8	4.6	6.9	4.0

Dividend yield is not incorporated into the calculation of the fair value of the awards, as dividend equivalents will be received on vested shares, reflecting the value of dividends, which have been paid during the period from the grant date to the vesting date.

33. Related parties

Related parties are considered to include shareholders, affiliates, associates, joint ventures and entities under common ownership and control with the Group and members of key management personnel.

During the year ended 31 December 2018 the Group has for the first time consolidated its interest in its joint ventures Prognoz and Nezhda and the associate GRK Amikan (Notes 4 and 21).

The transactions with the related parties are presented by purchases of ore from GRK Amikan and sales of machinery and equipment to Nezhda and Prognoz up to the dates when control was achieved.

The loans outstanding as of 31 December 2017 were represented by loans advanced to Nezhda and Prognoz, consolidated by 31 December 2018, and Aktogai Mys LLC, which was disposed of during the year ended 31 December 2018 (Note 21).

Details of transactions between the Group and other related parties are disclosed below:

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Transactions with related parties		
Purchases of ore from equity method investments	22	38
Other sales recognised in other operating expenses, net	15	12

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Balances outstanding as of the end of the reporting period		
Loans accounted for as a part of net investment in joint venture	–	52
Short-term loans provided to equity method investments	–	8
Long-term loans provided to equity method investments	–	6
Accounts receivable from equity method investments	–	8
Interest receivable from equity method investments	–	2
Accounts payable to equity method investments	–	7
	–	**83**

The remuneration of directors and other members of key management personnel during the periods was as follows:

	Year ended	
	31 December 2018 $m	31 December 2017 $m
Share-based payments	3	2
Short-term benefits of Board members	2	2
Short-term employee benefits	3	2
	8	**6**

As of 31 December 2018 the share of non-controlling interest in Amikan GRK (Note 4) amounting to the $5 million was held by a related party.

34. Notes to the consolidated statement of cash flows

	Note	Year ended	
		31 December 2018 $m	31 December 2017 $m
Profit before tax		426	443
Adjustments for:			
Depreciation and depletion recognised in the statement of comprehensive income		186	214
Write-down of exploration assets and construction in progress	19	24	3
Write-down of metal inventories to net realisable value	22	21	16
Write-down of non-metal inventories to net realisable value	22	2	3
Additional tax chargers/fines/penalties		(2)	(8)
Provision for investment in Special Economic Zone		11	12
Share-based compensation	12, 32	12	10
Finance costs	16	71	63
Finance income		(8)	(4)
Loss on disposal of property, plant and equipment	13	–	1
Rehabilitation expenses		1	–
Change in contingent consideration liabilities	29	(7)	(2)
Share of loss of associates and joint ventures	21	1	(3)
Foreign exchange gain		40	10
Change in estimate of environmental obligations		(1)	(4)
Loss on disposal of subsidiaries, net		54	–
Revaluation of initial share on business combination		(41)	–
Other non-cash expenses		6	4
Movements in working capital			
Increase in inventories		(150)	(35)
Increase in VAT receivable		(19)	(31)
(Increase)/Decrease in trade and other receivables		(24)	14
Increase in prepayments to suppliers		(34)	(6)
Increase/(Decrease) in trade and other payables		123	(20)
Increase in other taxes payable		3	10
Cash generated from operations		**695**	**690**
Interest paid		(74)	(63)
Interest received		4	1
Income tax paid		(112)	(95)
Net cash generated by operating activities		**513**	**533**

Significant non-cash transactions during the year ended 31 December 2018 represent the issuance of 38,251,464 shares for several business combinations and other transactions (Note 31) (2017: the issuance of shares to settle the Primorskoye contingent consideration of $10 million and the issuance of shares to acquire Tarutin non-controlling interest of $10 million).

Cash flows related to exploration amounted to $43 million for the year ended 31 December 2018 (2017: $33 million). During the year ended 31 December 2017, the capital expenditure related to the new projects, increasing the operating capacity amounts to $146 million (2017: $173 million).

35. Subsequent events

On 30 January 2018 the Group completed the previously announced sale of Kapan to Chaarat Gold Holdings Limited.

The total consideration payable for Kapan is $55 million, subject to post-closing working capital adjustments. Of the total consideration, $10 million was settled in Chaarat's 2021 Convertible Notes. The remaining $45 million is payable in cash, of which $5 million was received by Polymetal in November 2018 as an advance payment and $40 million was received on 1 February 2019 following the execution of certain settlement procedures associated with Chaarat's syndicated acquisition financing facility.

Simultaneously, with the completion of the sale, Polymetal has agreed with Dundee Precious Metals ('DPM'), the previous owners of the asset, to terminate the royalty owed to DPM via a buyout for a cash consideration of $5.5 million.