Zangezur Copper Molybdenum Combine CJSC

Consolidated financial statements

For the year ended 31 December 2017
together with independent auditor's report

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Independent auditor's report

To the Shareholders of Zangezur Copper Molybdenum Combine CJSC

Opinion

We have audited the consolidated financial statements of Zangezur Copper Molybdenum Combine CJSC and its subsidiary (the Group), which comprise the consolidated statement of financial position as at 31 December 2017, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2017 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of management for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is 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 management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated 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 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 consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ernst & Young CJSC

On behalf of General Director A. Sarkisyan
(by power of attorney dated 1 August 2016)
Partner (Assurance) Eric Hayrapetyan

Yerevan, Armenia

27 April 2018

Consolidated statement of financial position

as at 31 December 2017

'000 AMD	Note	31 December 2017	31 December 2016
Assets			
Property, plant and equipment	14	194,293,704	190,338,358
Stripping activity asset	15	4,090,780	4,090,780
Inventories	19	3,794,527	259,550
Intangible assets		99,040	60,194
Available-for-sale investments	16	928,484	777,159
Prepayments for non-current assets	18	6,724,894	775,190
Exploration and evaluation asset	17	2,438,081	2,438,081
Input VAT		1,142,475	1,334,468
Other non-current assets		51,000	51,000
Non-current assets		**213,562,985**	**200,124,780**
Inventories	19	13,151,871	10,411,163
Prepaid income taxes		-	3,288,389
Other prepaid taxes		2,033,959	2,678,678
Input VAT		548,397	1,070,060
Trade and other receivables	20	13,579,858	2,177,400
Prepayments for current assets	18	8,150,173	4,032,915
Financial assets at fair value through profit or loss	25	-	1,110,243
Cash and cash equivalents	21	5,678,570	4,791,358
Other current assets		1,771	1,933
Current assets		**43,144,599**	**29,562,139**
Total assets		**256,707,584**	**229,686,919**
Equity			
Share capital	22	54,966,680	54,966,680
Retained earnings		36,511,813	25,666,243
Total equity		**91,478,493**	**80,632,923**
Liabilities			
Loans and borrowings	23	49,306,949	68,291,326
Provisions	24	3,136,131	3,890,201
Advances received for provisionally priced sales	27	24,841,042	13,605,223
Deferred tax liabilities	13	15,706,183	15,258,184
Non-current liabilities		**92,990,305**	**101,044,934**
Loans and borrowings	23	22,831,584	25,476,968
Financial liabilities at fair value through profit or loss	25	7,140,890	1,603,900
Provisions	24	553,462	487,447
Advances received for provisionally priced sales	27	13,785,285	7,099,048
Income tax payable	13	4,487,225	-
Royalty payables	28	5,209,644	-
Trade and other payables	26	18,230,696	13,341,699
Current liabilities		**72,238,786**	**48,009,062**
Total liabilities		**165,229,091**	**149,053,996**
Total equity and liabilities		**256,707,584**	**229,686,919**

Signed and authorised for release on behalf of the Management of the Group

ZANGEZUR COPPER MOLYBDENUM COMBINE CJSC
ZCMC

Mger Poloskov
General Director

Vardan Marutyan
Chief Accountant

The accompanying notes 1-34 form an integral part of these consolidated financial statements.

Consolidated statement of profit or loss and other comprehensive income

for the year ended 31 December 2017

'000 AMD	*Note*	*2017*	*2016*
Revenue	5	188,553,245	125,881,686
Cost of sales	6	(98,836,312)	(95,334,924)
Gross profit		**89,716,933**	**30,546,762**
Other income		556,122	784,841
Distribution expenses	7	(10,298,126)	(8,939,951)
Administrative expenses	8	(12,663,417)	(10,298,734)
Donations to social programs	9	(3,481,634)	(2,641,501)
Impairment of exploration and evaluation assets	17	–	(26,436,526)
Other expenses	10	(24,371,698)	(16,706,476)
Operating profit/(loss)		**39,458,180**	**(33,691,585)**
Finance income	11	312,668	18,208
Finance costs	11	(23,664,792)	(15,698,458)
Net foreign exchange gain/(loss)		3,863	(42,924)
Profit/(loss) before income tax		**16,109,919**	**(49,414,759)**
Income tax (expense)/benefit	13	(5,264,349)	8,288,467
Total comprehensive income/(loss) for the year		**10,845,570**	**(41,126,292)**

The accompanying notes 1-34 form an integral part of these consolidated financial statements.

Consolidated statement of changes in equity

for the year ended 31 December 2017

'000 AMD	*Share capital (Note 22)*	*Retained earnings*	*Total equity*
As at 1 January 2016	**54,966,680**	**66,792,535**	**121,759,215**
Total comprehensive loss for the year	–	(41,126,292)	**(41,126,292)**
As at 31 December 2016	**54,966,680**	**25,666,243**	**80,632,923**
Total comprehensive income for the year	–	10,845,570	**10,845,570**
As at 31 December 2017	**54,966,680**	**36,511,813**	**91,478,493**

The accompanying notes 1-34 form an integral part of these consolidated financial statements.

Consolidated statement of cash flows

for the year ended 31 December 2017

'000 AMD	*2017*	*2016*
Operating activities		
Receipts from sales, inclusive of VAT	203,031,277	126,342,971
Payments to suppliers, inclusive of VAT	(112,868,825)	(101,836,272)
Payments to employees, net of personal income tax	(15,884,697)	(13,785,043)
Settlement of financial instruments at fair value through profit or loss	(12,536,523)	2,906,865
(Payments)/receipts for taxes other than on income	(222,198)	6,313,789
Royalty paid	(10,323,209)	(2,635,493)
Donations to social programs	(3,618,069)	(2,683,556)
Banks charges and conversion losses	(214,769)	(257,565)
Other receipts	200,514	147,635
Other payments	(1,010,536)	(636,581)
Net cash from operating activities	**46,552,965**	**13,876,750**
Investing activities		
Expenditure on property, plant and equipment and stripping activity asset	(15,777,426)	(10,026,431)
Proceeds from disposal of property, plant and equipment	44,200	252,884
Interest received	37,980	18,208
Net cash used in investing activities	**(15,695,246)**	**(9,755,339)**
Financing activities		
Proceeds from loans and borrowings	–	11,926,142
Repayments of loans and borrowings	(23,422,190)	(8,810,074)
Interest paid, including related withholding tax	(6,585,458)	(7,343,428)
Net cash used in financing activities	**(30,007,648)**	**(4,227,360)**
Net increase/(decrease) in cash and cash equivalents	**850,071**	**(105,949)**
Cash and cash equivalents at 1 January (Note 21)	4,791,358	4,908,121
Net foreign exchange difference	37,141	(10,814)
Cash and cash equivalents at 31 December (Note 21)	**5,678,570**	**4,791,358**

During 2017 prepayment of income tax of AMD 2,823,965 thousand and AMD 137,000 thousand was set-off with royalty payable and personal income tax payable, respectively (2016: AMD 730,254 thousand with royalty payable). Prepayment of income tax of AMD 168,431 thousand was set-off with fines and penalties and AMD 153,206 thousand was netted with income tax payable.

The accompanying notes 1-34 form an integral part of these consolidated financial statements.

1. Background

a) Corporate information

Zangezur Copper Molybdenum Combine CJSC (the “Company”) and its subsidiary Ler-Ex LLC (the “Subsidiary”), forming the Group (the “Group”), are Armenian closed joint stock company and limited liability company as defined in the Civil Code of the Republic of Armenia. The Company was established as a state-owned enterprise in 1952. It was privatised as a closed joint stock company on 1 January 2005 according to Government decree No 1677-A dated 9 December 2004.

The Company’s registered office and actual location where principal activities are carried is 18 Lernagortzneri Street, Kajaran, Syunik region, Republic of Armenia.

The Group’s principal activity is mining and the production of copper and molybdenum concentrate. Finished goods are sold in the form of copper concentrate and ferro-molybdenum. The Group’s operations are regulated by the License agreements between the Group and the Ministry of Energy Infrastructures and Natural Resources (the “License Agreements”). According to the License Agreements, the Group’s operations are licensed until 2041.

The Group is owned by Cronimet Mining AG (60%), Plant of Pure Iron OJSC (15%) (99.3% ultimately owned by Cronimet Holding GmbH), AMP Holding LLC (12.5%) and Zangezur Mining LLC (12.5%) (the “Shareholders”).

The ultimate parent company of the Group is Cronimet Verwaltungs GmbH, which is controlled by Günter Pilarsky and his family. Related party transactions are disclosed in Note 31.

b) Armenian business environment

Armenia continues economic reforms and development of its legal, tax and regulatory frameworks. The future stability of the Armenian economy is largely dependent upon these reforms and developments and the effectiveness of economic, financial and monetary measures undertaken by the government.

Despite still turbulent global economic environment, Armenia’s GDP growth was still positive. The country recorded significant improvement in trade balance with exports growing 25% year over year while imports showed growth as well. Obviously, stabilization in Eurasian Economic Union had its positive impact on trade volume and inflow of remittances.

Management believes that it is taking appropriate measures to support the sustainability of the Group’s business in the current circumstances.

2. Basis of preparation

a) Overview

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The consolidated financial statements have been prepared under the historical cost convention except as disclosed in the accounting policies below. For example, derivative financial instruments have been measured at fair value.

The presentation of cash flow has been changed since reporting in 2016 consolidated financial statement. The new approach allows better presentation of cash flows for settlements of financial instruments at fair value through profit or loss.

b) Subsidiaries

The following subsidiaries are included in the consolidated financial statements of the Group:

Subsidiary	*Ownership/ voting, %*	*Principal place of business*	*Country of incorporation*	*Nature of activities*
Ler-Ex LLC	100%	Kapan, Armenia	Republic of Armenia	Mining

c) Liquidity position

As at 31 December 2017 the Group’s current liabilities exceeded its current assets by AMD 29,094,187 thousand.

2. Basis of preparation (continued)

c) Liquidity position (continued)

The Management have reviewed the Group's budgeted cash flows and related assumptions including appropriate stress testing of risks (being primarily copper demand and prices). As a result, the Management have a reasonable expectation that the Group has adequate resources to continue its operational existence for the foreseeable future.

The management believes that liquidity gap has a temporary character and will improve with rise in copper and molybdenum prices.

d) Functional and presentation currency

The national currency of the Republic of Armenia is the Armenian Dram ("AMD"), which is the Group companies' functional currency and the currency in which these consolidated financial statements are presented.

Transactions in foreign currencies are initially recorded by the Group at their respective functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date. All differences are taken to the statement of profit or loss and other comprehensive income. Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transaction. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

All financial information is presented in thousands AMD, unless otherwise indicated. The official Central Bank of Armenia (CBA) exchange rates at 31 December 2017 and 31 December 2016 were 484.10 AMD and 483.94 AMD to 1 USD, 580.1 AMD and 512.2 AMD to 1 EUR respectively.

e) Measurement of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible.

Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Further information about the measuring fair values is included in Note 28.

3. Basis of consolidation

The consolidated financial statements comprise the financial statements of Zangezur Copper Molybdenum Combine CJSC and its subsidiary as at 31 December 2017. A subsidiary is an entity controlled by the Group. Control exists when the Group 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. Specifically, the Group controls an investee if, and only if, the Group has all of the following:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee;
- The ability to use its power over the investee to affect its returns.

3. Basis of consolidation (continued)

Generally, there is a presumption that a majority of voting rights results in control. When the Group has less than a majority of the voting, or similar, rights of an investee, it considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement(s) with the other vote holders of the investee;
- Rights arising from other contractual arrangements;
- The Group's voting rights and potential voting rights.

The relevant activities are those which significantly affect the subsidiary's returns. The ability to approve the operating and capital budget of a subsidiary and the ability to appoint key management personnel are decisions that demonstrate that the Group has the existing rights to direct the relevant activities of a subsidiary.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of profit or loss and other comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary. Where the Group's interest is less than 100 per cent, the interest attributable to outside shareholders is reflected in non-controlling interests (NCIs).

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to the NCIs, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest and other components of equity, while any resultant gain or loss is recognised in profit or loss. Any investment retained is recognised at fair value.

4. Significant accounting judgements, estimates and assumptions

a) Use of judgements, estimates and assumptions

The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities at the date of the consolidated financial statements. Estimates and assumptions are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

In particular, the Group has identified a number of areas where significant judgements, estimates and assumptions are required. Further information on each of these areas and how they impact the various accounting policies are described with the associated accounting policy note within the related qualitative and quantitative note as described below.

These include:

Judgements

- Note 34 (k) *Property, plant and equipment – determination of units of production depreciation calculations*;
- Note 34 (k) *Property, plant and equipment – useful lives of property, plant and equipment*;
- Note 34 (n) *Exploration and evaluation assets – recoverability of exploration and evaluation assets*;
- Note 34 (h) *Income tax*;
- Note 10 *Other expenses – royalty estimation*;
- Note 24 *Provisions*.

4. Significant accounting judgements, estimates and assumptions (continued)

a) Use of judgements, estimates and assumptions (continued)

Estimates and assumptions

- Note 4 (c) *Ore reserves – valuation of mineral reserves that are the basis for future cash flow estimates*;
- Note 34 (c) *Revenue – determination of the fair values of the embedded derivatives*;
- Note 28 *Fair values and risk management – fair values of financial instruments*.

b) Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below or in the related accounting policy note (see list above for references). The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market change or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

c) Ore reserves and exploitation license

Ore reserves and mineral resource estimates are estimates of the amount of ore that can be economically and legally extracted from the Group's mining properties. Such reserves and mineral resource estimates and changes to these may impact the Group's reported consolidated financial position and results, in the following way:

- The carrying value of property, plant and equipment, stripping activity asset, exploration and evaluation assets, may be affected due to changes in estimated future cash flows;
- Depreciation and amortisation charges in the statement of profit or loss and other comprehensive income may change where such charges are determined using the UOP method, or where the useful life of the related assets change;
- Capitalised stripping costs recognised in the statement of financial position as either part of property, plant and equipment, other non-current assets or inventory or charged to profit or loss may change due to changes in stripping ratios;
- Provisions for site restoration and environmental provisions may change where reserve estimate changes affect expectations about when such activities will occur and the associated cost of these activities;
- The recognition and carrying value of deferred income tax assets may change due to changes in the judgements regarding the existence of such assets and in estimates of the likely recovery of such assets.

The Group operates under a License which expires in 2041, in accordance with License Agreement No. PV-232 dated 27 November 2012. In preparing these consolidated financial statements management has assumed that the License will be prolonged beyond 2041. This assumption is based on the provisions of the Mining Code which state that the License can be prolonged based on submitted application. Further, the Group obtained JORC compliant mineral resource estimate report NI43-101 as of October 2015, issued by Golder Associates.

The Group held exploration license for mine area located near Hankasar, Syunik region till August 2017.

The Group uses the above estimates in evaluating the timing of site restoration costs, useful lives and impairment of property, plant and equipment, stripping activity asset and exploration and evaluation asset.

5. Revenue

'000 AMD	*2017*	*2016*
Revenue from sale of concentrate	148,586,010	93,492,950
Revenue from sale of ferro-molybdenum	39,716,526	28,987,797
Revenue from sale of sintered molybdenum	–	3,016,815
Revenue from sale of other products	250,709	384,124
	188,553,245	**125,881,686**

5. Revenue (continued)

Revenues from sale of concentrates, ferro-molybdenum and sintered molybdenum:

	2017		*2016*	
	'000 AMD	*Dry metric tonnes*	*'000 AMD*	*Dry metric tonnes*
Copper concentrate	148,586,010	260,646	93,492,950	213,194
Ferro-molybdenum	39,716,526	6,520	28,987,797	6,420
Sintered molybdenum	–	–	3,016,815	399
	188,302,536		**125,497,562**	

At 31 December 2017 the Group had outstanding provisionally priced sales of AMD 27,610,249 thousand consisting of 29,946 dry metric tonnes of copper concentrate, 651 dry metric tonnes of ferro-molybdenum (2016: AMD 21,822,520 thousand consisting of 28,362 dry metric tonnes of copper concentrate and 772 dry metric tonnes of ferro-molybdenum) which had a fair value of approximately AMD 29,969,364 thousand including the embedded derivative (2016: AMD 21,265,263 thousand).

6. Cost of sales

'000 AMD	*2017*	*2016*
Cost of sales of concentrate, ferro-molybdenum and sintered molybdenum	98,576,113	94,963,801
Cost of other sales	260,199	371,123
	98,836,312	**95,334,924**

Cost of sales of concentrates, ferro-molybdenum and sintered molybdenum:

'000 AMD	*2017*	*2016*
Materials	30,172,381	30,575,086
Outsourced services	19,631,776	15,995,354
Electricity and gas	12,117,971	13,572,648
Wages and salaries (Note 11)	14,007,048	12,309,465
Tolling costs	10,906,874	11,653,198
Depreciation	11,302,121	10,453,435
Ecology taxes	55,308	43,570
Other	382,634	361,045
	98,576,113	**94,963,801**

7. Distribution expenses

'000 AMD	*2017*	*2016*
Transportation of copper concentrate	9,158,401	7,511,927
Transportation of molybdenum concentrate	211,742	225,792
Packaging, sorting and maintenance	200,084	452,234
Other	727,899	749,998
	10,298,126	**8,939,951**

Packaging, sorting and maintenance expenses include indirect payroll expenses in amount of AMD 89,959 thousand (2016: AMD 171,098 thousand) (see Note 12). No depreciation expense is included in packaging, sorting and maintenance expenses in 2017 (2016: AMD 72,765 thousand) (see Note 14).

8. Administrative expenses

'000 AMD	*2017*	*2016*
Wages and salaries	4,704,861	3,981,759
Transportation and car maintenance service	1,760,472	1,059,833
Geological studies and research	1,605,603	1,378,908
Audit, consulting and other professional services	951,682	1,336,015
Insurance costs and bank charges	647,538	560,701
Guarantee fee	544,909	–
Office, utility and communication expenses	380,215	189,199
Business trips, trainings, and representative expenses	231,792	151,750
Depreciation and amortization	218,018	91,293
Hedging commission fee	201,664	2,387
Rental expenses	101,049	40,083
Other	1,315,614	1,506,806
	12,663,416	**10,298,734**

Transportation and car maintenance service expenses include indirect payroll expenses in amount of AMD 243,852 thousand (2016: AMD 215,954 thousand) (see Notes 12) and depreciation expenses in amount of AMD 237,747 thousand (2016: AMD 183,392 thousand) (see Note 14).

The presentation of administrative expenses has been changed since reporting in 2016 consolidated financial statements. The new approach allows for more precise presentation of administrative expenses.

9. Donations to social programs

'000 AMD	*2017*	*2016*
Donations in cash	3,412,860	2,509,512
Non-cash donations	68,774	131,989
	3,481,634	**2,641,501**

The Group makes contributions to different social programs and institutions involving the community.

10. Other expenses

'000 AMD	*2017*	*2016*
Royalty expense*	17,842,943	11,212,488
Loss on disposal of property and equipment	1,074,756	592,425
Wages and salaries	1,014,922	917,763
Employee benefits other than salary	840,500	711,098
Fines and penalties	764,647	2,893
Depreciation	630,242	678,009
Taxes other than on income	554,775	441,520
Write-down of inventories	326,910	685,110
Termination benefits	114,182	120,176
Site restoration provision	–	376,673
Write off of prepayments and receivables	–	195,141
Other	1,207,821	773,180
	24,371,698	**16,706,476**

The presentation of other expenses has been changed since reporting in 2016 consolidated financial statements. The new approach allows for more precise presentation of other expenses.

* Royalty expense consists of two components:

- ► Royalty calculated at 4% of revenue of AMD 7,738,382 thousand (2016: AMD 6,191,524 thousand);
- ► Royalty calculated as 12.5% of taxable income of AMD 9,681,602 thousand (2016: AMD 5,020,964 thousand).

Both revenue and taxable income are adjusted as per the guidelines and requirements in the applicable laws and regulations. The Group recognized royalty expense related to prior periods in the amount of AMD 422,959 thousand.

11. Finance income and finance costs

'000 AMD	*2017*	*2016*
Recognised in profit or loss		
Dividend income from Artsakh HEK OJCC (Note 16)	151,325	–
Interest income on receivables	123,363	–
Interest income on bank accounts	37,980	18,208
Finance income	**312,668**	**18,208**
Net loss from financial instruments at fair value through profit or loss	(14,837,967)	(6,971,055)
Interest expense on loans and borrowings	(6,635,138)	(7,682,114)
Interest expense on advances received for provisionally priced sales	(1,740,300)	(791,691)
Other interest expenses	(14,226)	–
Unwinding of discount on site restoration provision and provision for termination benefits	(437,161)	(253,598)
Finance cost	**(23,664,792)**	**(15,698,458)**
Borrowing costs capitalized during the period	(1,667,601)	(1,269,704)

The capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation is 11.6% (2016: 9.5%). The capitalisation rate was estimated as the weighted average of the borrowing costs applicable to the borrowings of the Group that were outstanding during 2017.

Net loss from financial instruments at fair value through profit or loss comprise of realized loss AMD 8,216,127 thousand (2016: loss AMD 1,896,437 thousand) and unrealized loss AMD 6,621,840 thousand (2016: loss AMD 5,074,618 thousand). The amount of cash settled realized loss from financial instruments at fair value through profit or loss for 2017 comprise AMD 12,536,523 thousand (2016: gain in the mount of AMD 2,906,865 thousand).

12. Personnel costs

'000 AMD	*2017*	*2016*
Wages and salaries	21,908,081	18,419,009
Termination benefits	114,183	120,176
Employee benefits other than salary	840,500	711,179
	22,862,764	**19,250,364**

Wages and salaries of AMD 14,007,048 thousand (2016: AMD 12,309,465 thousand) has been charged to cost of sales, AMD 89,959 thousand to distribution expenses (2016: AMD 171,098 thousand), AMD 4,948,713 thousand (2016: AMD 4,197,713 thousand) to administrative expenses, AMD 1,041,923 thousand to other expenses (2016: AMD 917,763 thousand), AMD 413,580 thousand was capitalised on construction in progress (2016: AMD 611,196 thousand), AMD 137,018 thousand was capitalized on finished goods and inventories (2016: AMD 160,342 thousand), AMD 1,172,598 thousand was capitalized on non-current inventories – ore stockpiles (2016: AMD 52,896 thousand).

13. Income tax expense

a) Amounts recognised in profit or loss

The corporate income tax expense comprises:

'000 AMD	*2017*	*2016*
Income tax expense	4,646,217	–
Adjustment of income tax for the previous period	170,133	–
Deferred tax credit – origination and reversal of temporary differences	447,999	(8,288,467)
Income tax expense/(benefit)	**5,264,349**	**(8,288,467)**

Armenian legal entities must file individual tax declarations. In 2017 and 2016, statutory income tax rate for Armenian companies was 20%.

13. Income tax expense (continued)

a) Amounts recognised in profit or loss (continued)

The effective income tax rate differs from the statutory income tax rate. A reconciliation of the income tax expense based on the statutory rate with actual is as follows:

'000 AMD	*2017*	*2016*
Profit/(loss) before income tax	**16,109,919**	**(49,414,759)**
Statutory tax rate	20%	20%
Income tax expense/(benefit) at applicable tax rate	**3,221,984**	**(9,882,952)**
Non-deductible expenses		
Adjustments in respect of current income tax of previous years	170,133	–
Reversal of tax loss carried forward	421,913	–
Non-deductible expenses	2,410,082	1,499,817
Deferred tax assets recognised due to increase of estimated tax base of property, plant and equipment in 2017	(1,038,395)	–
Change in unrecognized deductible temporary differences and tax losses	78,632	94,668
	5,264,349	**(8,288,467)**

b) Movement in temporary differences during the year

Deferred tax assets and liabilities as of 31 December and their movements for the respective years comprise:

	1 January 2016	*Origination and reversal of temporary differences*	*31 December 2016*	*Origination and reversal of temporary differences*	*31 December 2017*
Tax effect of taxable temporary differences					
Tax losses carried forward	1,078,489	2,063,354	3,141,843	(3,141,843)	–
Provision of site restoration	324,698	291,689	616,387	(53,416)	562,971
Inventories	70,496	128,926	199,422	(47,105)	152,317
Financial instruments at fair value through profit or loss	(988,257)	1,086,989	98,732	1,329,446	1,428,178
Deferred tax asset	**485,426**	**3,570,958**	**4,056,384**	**(1,912,918)**	**2,143,466**
Tax effect of taxable temporary differences					
Property, plant and equipment	(17,699,188)	(787,401)	(18,486,589)	1,811,976	(16,674,613)
Loans and borrowings	(1,212,482)	244,037	(968,445)	232,373	(736,072)
Exploration and evaluation asset	(5,378,162)	5,287,305	(90,857)	–	(90,857)
Advances received for provisionally priced sales	257,755	(26,432)	231,323	(432,543)	(201,220)
Trade and other payables	–	–	–	(146,887)	(146,887)
Deferred tax liability	**(24,032,077)**	**4,717,509**	**(19,314,568)**	**1,464,919**	**(17,849,649)**
Net deferred tax liability	**(23,546,651)**	**8,288,467**	**(15,258,184)**	**(447,999)**	**(15,706,183)**

c) Unrecognized deferred tax assets

	1 January 2016	*Origination and reversal of temporary differences*	*31 December 2016*	*Origination and reversal of temporary differences*	*31 December 2017*
Tax losses carried forward	578,721	55,939	634,660	(21,795)	612,865
Property, plant and equipment	405,635	29,827	435,462	(55,059)	380,403
Inventories	–	10,309	10,309	(4,927)	5,382
Provision for site restoration	–	–	–	1,645	1,645
Trade and other payables	569,100	(1,407)	567,693	1,504	569,197
Deferred tax asset	**1,553,456**	**94,668**	**1,648,124**	**(78,632)**	**(1,569,492)**

The deductible temporary differences do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of deductible temporary differences and tax losses of the Subsidiary because it is uncertain whether future taxable profit will be available against which the Subsidiary can utilise the benefits therefrom.

14. Property, plant and equipment

'000 AMD	*Land and buildings*	*Plant and equipment*	*Mining Facilities*	*Fixtures and fittings*	*Construction in progress*	*Total*
Cost						
At 1 January 2016	**56,808,829**	**168,247,755**	**2,245,676**	**710,162**	**58,273,667**	**286,286,089**
Additions	716,533	3,141,927	–	110,907	9,483,018	**13,452,385**
Disposals for the year	(105,705)	(2,296,368)	–	(12,721)	(554,641)	**(2,969,435)**
Transfers	8,727,425	12,424,422	–	–	(21,151,847)	**–**
At 31 December 2016	**66,147,082**	**181,517,736**	**2,245,676**	**808,348**	**46,050,197**	**296,769,039**
At 1 January 2017	**66,147,082**	**181,517,736**	**2,245,676**	**808,348**	**46,050,197**	**296,769,039**
Additions	6,001,451	6,406,525	8,226	114,281	7,382,414	**19,912,897**
Disposals	(768,127)	(3,331,772)	–	(27,484)	(1,393,908)	**(5,521,291)**
Transfers	317,513	1,537,825	–	–	(1,855,338)	**–**
At 31 December 2017	**71,697,919**	**186,130,314**	**2,253,902**	**895,145**	**50,183,365**	**311,160,645**
Depreciation						
At 1 January 2016	**14,180,713**	**82,040,775**	**108,903**	**559,258**	**–**	**96,889,649**
Depreciation charge for the year	1,624,015	10,123,694	29,873	69,727	–	**11,847,309**
Disposals	(40,921)	(2,252,944)	–	(12,412)	–	**(2,306,277)**
At 31 December 2016	**15,763,807**	**89,911,525**	**138,776**	**616,573**	**–**	**106,430,681**
At 1 January 2017	**(15,763,807)**	**(89,911,525)**	**(138,776)**	**(616,573)**	**–**	**(106,430,681)**
Depreciation charge for the year	(1,821,156)	(11,287,046)	(35,680)	(79,562)	–	**(13,223,444)**
Disposals	28,871	2,731,595	–	26,718	–	**2,787,184**
At 31 December 2017	**(17,556,092)**	**(98,466,976)**	**(174,456)**	**(669,417)**	**–**	**(116,866,941)**
Net book value						
At 31 December 2016	**50,383,275**	**91,606,211**	**2,106,900**	**191,775**	**46,050,197**	**190,338,358**
At 31 December 2017	**54,141,827**	**87,663,338**	**2,079,446**	**225,728**	**50,183,365**	**194,293,704**

Depreciation expense of AMD 11,302,121 thousand (2016: AMD 10,453,435 thousand) was charged to cost of sales, nil to distribution expenses (2016: AMD 72,765 thousand), AMD 455,805 thousand (2016: AMD 274,685 thousand) to administrative expenses, AMD 630,242 thousand (2016: AMD 678,009 thousand) to other expenses, AMD 440,116 thousand (2016: AMD 44,920 thousand) was capitalised on non-current inventories – ore stockpiles, AMD 117,079 thousand (2016: AMD 189,694 thousand) was capitalised on construction in progress, AMD 179,538 (2016: AMD 136,166 thousand) thousand was capitalized on finished goods and inventories.

During 2017 wages and salaries of AMD 413,580 thousand were capitalized on construction in progress (2016: AMD 611,196 thousand) (see Note 12).

During 2017 borrowing costs of AMD 1,667,601 thousand (2016: AMD 1,269,704 thousand) were capitalized on construction in progress (see Note 11).

During 2017 changes in estimate of site restoration provision of AMD 519,166 thousand (2016: AMD 933,235 thousand) were capitalized on related property, plant and equipment (see Note 24).

At 31 December 2017 property, plant and equipment with a carrying amount of AMD 57,124,537 thousand are pledged as security for secured bank loans (see Note 23).

At 31 December 2017 the gross book value of fully depreciated property, plant and equipment, which are in use, amounted AMD 43,676,042 thousand (2016: AMD 38,562,844 thousand).

15. Stripping activity asset

In 2014, The Group started intensive stripping activities in Shlorkut site of Kajaran mine from which the extraction of ore is planned in the coming years, and capitalized the pre-production stripping costs as stripping activity asset in the amount of AMD 4,090,780 thousand. No stripping activities were performed in 2017 and 2016.

16. Available-for-sale investments

'000 AMD	*2017*	*2016*
Artsakh HEK OJSC	928,484	777,159
	928,484	**777,159**

At 31 December 2017 the Group's investment in Artsakh HEK OJSC's equity ("AHEK") is 6.18% (2016: 6.18%).

The shares are listed in NASDAQ OMX Armenia. AHEK has announced dividends in the amount of AMD 151,325 thousand for 2014 - 2016 years.

The fair value of investment was determined by using discounted cash flows techniques which is classified as Level 3 in fair value hierarchy, refer to Note 28.

The Group's exposure to credit and interest rate risks related to available-for-sale investments is disclosed in Note 28.

17. Exploration and evaluation asset

'000 AMD	*2017*	*2016*
Exploration license acquired through business combination	500,000	500,000
Other exploration and evaluation costs	1,938,081	1,938,081
	2,438,081	**2,438,081**

Exploration license relates to the mine area located near Hankasar, Syunik region.

Other exploration and evaluation expenditures of AMD 1,938,081 thousand at 31 December 2017 (2016: AMD 1,938,081) related to costs incurred on the exploration and evaluation of potential mineral reserves and included costs for exploratory drilling and explosion performed by outsourced companies.

Following the decline in metal prices, during 2015 the exploration activities were suspended. No exploration works were performed in 2017 and 2016.

Recoverable amount of the exploration and evaluation asset was determined using discounted cash flow method as at 31 December 2016. The cost of exploration and evaluation asset was decreased to its value-in-use. The Group recognized impairment of exploration and evaluation asset in amount of AMD 26,436,526 thousand in 2016. A discount rate of 12.9% was applied for the calculation of value-in-use. No additional impairment was recognized in 2017.

18. Prepayments

'000 AMD	*2017*	*2016*
Prepayments for non-current assets		
Prepayments for property, plant and equipment	6,379,570	450,215
Prepayments for land lease	345,324	324,975
	6,724,894	**775,190**
Prepayments for current assets		
Prepayments for inventory	4,705,034	1,204,176
Other	3,445,139	2,828,739
	8,150,173	**4,032,915**
	14,875,067	**4,808,105**

19. Inventories

'000 AMD	*2017*	*2016*
Spare parts	5,724,135	4,006,391
Raw materials and consumables	4,480,874	3,932,069
Finished goods	1,882,696	1,500,928
Molybdenum concentrate given for processing*	32,271	447,979
Construction materials	123,973	69,420
Other	907,922	454,376
Total current inventories	**13,151,871**	**10,411,163**
Non-current inventories – ore stockpiles**	3,794,527	259,550
Total inventories at the lower of cost and net realizable value	**16,946,398**	**10,670,713**

* The Group has service agreements signed with related parties for processing of molybdenum concentrate to ferro-molybdenum. The ownership during the processing is retained by the Group. The corresponding tolling expense for services received is presented in Note 6.

** Non-current inventories represent low grade ore that cannot be economically processed at current market prices, and is stockpiled with the expectation that it will be processed.

During 2017, AMD 326,910 thousand (2016: AMD 685,110 thousand) was recognized as an expense for inventories carried at net realizable value recognized in other expenses (see Note 10).

Wages and salaries of AMD 137,018 thousand (2016: AMD 160,342) (see Note 12) and depreciation of AMD 179,538 thousand (2016: AMD 136,166 thousand) (see Note 14) are capitalized on the balance of current inventories and finished goods.

Wages and salaries of AMD 1,180,892 thousand (2016: AMD 52,896 thousand) (see Note 12) and depreciation of AMD 440,116 thousand (2016: AMD 44,920 thousand) (see Note 14) are capitalized on the balance of non-current inventories – ore stockpiles.

20. Trade and other receivables

'000 AMD	*2017*	*2016*
Trade receivables – sales of copper concentrate and ferro-molybdenum	11,169,504	618,334
Receivables related to closed derivative transactions	1,010,442	396,794
Trade receivables – sales of other products	509,652	1,030,216
Other receivables	890,260	132,056
Trade and other receivables	**13,579,858**	**2,177,400**

The Group's exposure to credit and currency risks and impairment losses related to trade and other receivables are disclosed in Note 28.

The balance of receivables included embedded derivatives related to provisional pricing features of sales with amount of AMD 2,359,115 thousand as at 31 December 2017 (2016: AMD 557,257 thousand with reverse sign included in advances received for provisionally priced sales).

21. Cash and cash equivalents

'000 AMD	*2017*	*2016*
Bank balances	5,678,228	4,784,916
Cash on hand	342	6,442
Cash and cash equivalents	**5,678,570**	**4,791,358**

The Group's exposure to currency and interest rate risk and a sensitivity analysis for financial assets and liabilities are disclosed in Note 28.

22. Capital and reserves

a) Share capital

Number of shares unless otherwise stated	*Ordinary shares* 2017	*Ordinary shares* 2016
Par value	AMD 20,000	AMD 20,000
On issue at 1 January and 31 December, fully paid	**2,748,334**	**2,748,334**

The holders of ordinary shares are entitled to receive dividends as declared from time to time, and are entitled to one vote per share at meetings of the Group.

As at 31 December 2017 and 2016, 60% of the Group's shares are pledged under a secured bank loan (see Note 23).

b) Dividends

In accordance with Armenian legislation, the Group's distributable reserves are limited to the balance of retained earnings as recorded in the Group's statutory financial statements prepared in accordance with International Financial Reporting Standards, except for restrictions on retained earnings as described below.

The declaration of dividends is restricted per the pre-export facility loan agreement of USD 180,000 thousand from European financial institutions (see Note 23).

23. Loans and borrowings

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, see Note 28.

'000 AMD	*2017*	*2016*
Non-current liabilities		
Secured bank loans and credit lines	42,104,771	63,000,102
Unsecured borrowings from shareholder	7,202,178	5,291,224
	49,306,949	**68,291,326**
Current liabilities		
Secured bank loans and credit lines	22,831,584	25,476,968
	22,831,584	**25,476,968**

In August 2015 the Group received a pre-export facility loan of USD 180,000 thousand from European financial institutions. The loan was partially used to repay the USD 150,000 thousand loan received in 2013 from European financial institutions. The loan is secured by the Group's property, plant and equipment (see Note 14), Group's shares (see Note 22), bank balances and sales agreements with customers, as well as a guarantee from the parent company.

The Group signed a credit line agreement with an Armenian bank in March 2016 with maximum limit of USD 10,000 thousand. As at 31 December 2016 the Group received financing of USD 9,100 thousand (AMD 4,405,310 thousand) under this credit line agreement. The credit line is secured by bank account balances of the Group.

Secured bank loans and credit lines include also overdrafts with two Armenian banks with maximum limits of USD 13,000 thousand (secured by bank account balances and property, plant and equipment of the Group, refer to Note 14) and USD 13,400 thousand (secured by bank account balances of the Group).

Terms and debt repayment schedule

Terms and conditions of outstanding loans were as follows:

'000 AMD	*Currency*	*Nominal interest rate*	*Expected year of maturity*	*31 December 2017 Face value*	*31 December 2017 Carrying amount*	*31 December 2016 Face value*	*31 December 2016 Carrying amount*
Secured bank loan	USD	Libor + 6.5%	2021	59,478,206	55,554,439	78,574,178	73,460,016
Secured bank overdraft	USD	9%	2020	6,522,375	6,522,375	10,580,624	10,580,624
Unsecured borrowing from shareholder	USD	Libor + 4.95%	2021	5,625,994	5,625,994	5,291,224	5,291,224
Secured bank credit line	USD	9%	2019	4,435,725	4,435,725	4,436,430	4,436,430
Total interest-bearing liabilities				**76,062,300**	**72,138,533**	**98,882,456**	**93,768,294**

23. Loans and borrowings (continued)

Terms and debt repayment schedule (continued)

a) Secured bank loan

The balance represents a secured bank loan with a carrying amount of AMD 55,554,439 thousand and contractual maturity.

b) Secured bank overdraft

Balance represents secured revolving overdraft facilities with Armenian banks. The overdraft agreements mature in September 2020 and October 2020. The balances have been disclosed as current liabilities as according to the terms of overdraft agreements, the revolving facilities should be repaid within one year since each withdrawal.

c) Unsecured borrowing from the shareholder

The balance is unsecured borrowing from shareholder with maturity in 2021.

d) Secured bank credit line

Balance represents secured credit line with an Armenian bank.

24. Provisions

'000 AMD	*Provision for site restoration*	*Employee termination benefits*	*Total*
Non-current	2,842,966	1,047,235	**3,890,201**
Current	238,968	248,479	**487,447**
Balance at 1 January	**3,081,934**	**1,295,714**	**4,377,648**
Provision used during the year	(88,156)	(637,204)	**(725,360)**
Changes in estimates	(519,166)	114,182	**(404,984)**
Additional provisions created	8,226	–	**8,226**
Effect of changes in foreign exchange rate	–	(3,098)	**(3,098)**
Unwinding of discount (note 11)	340,246	96,915	**437,161**
Balance at 31 December	**2,823,084**	**866,509**	**3,689,593**
Non-current	2,672,272	463,859	**3,136,131**
Current	150,812	402,650	**553,462**

a) Site restoration

Artsvanik tailing dam

The Group has a constructive obligation to restore contaminated land affected during the use of the tailing dam (Artsvanik dam) for the purpose of mine exploitation and concentrate production. The provision for restoration works of Artsvanik dam constitutes AMD 2,482,002 thousand as at 31 December 2017 (2016: AMD 2,705,260 thousand).

The total amount of the estimated undiscounted cash flows required to settle the obligation is AMD 7,026,800 thousand (2016: AMD 7,562,308 thousand) considering the effect of average forecasted inflation rate of 3.6% (2016: 3.9%) for Armenia. An annual discount rate of 11.1% (2016: 11.8%) was used to discount restoration costs to be made in 15 years' time. The timing of provision has been taken based on the management estimate on when the Group will realize its restoration obligation in respect of existing tailing dam as at 31 December 2017. The discount rate represents the rate for long term Armenian Government bonds.

The provision increased as compared to the amount recognized as at 31 December 2016 due to changes in estimated volume of restoration works, estimated annual discount rate and inflation rate. Changes to the estimated future costs have been dealt with prospectively by recognising an adjustment to the site restoration liability and a corresponding adjustment to the asset to which it relates.

Hankasar tailing dam

The Group has a constructive obligation to restore contaminated land affected during the use of the tailing dam (Hankasar dam) for the purpose of mine exploitation and concentrate production. The provision for restoration works of Hankasar dam constitutes AMD 8,226 thousand as at 31 December 2017.

24. Provisions (continued)

a) Site restoration (continued)

The total amount of the estimated undiscounted cash flows required to settle the obligation is AMD 36,771 thousand (2016: nil) considering the effect of average forecasted inflation rate of 3.57% (2016: nil) for Armenia. An annual discount rate of 10.5% was used to discount restoration costs to be made in 15 years' time. The timing of provision has been taken based on the management estimate on when the Group will realize its restoration obligation in respect of existing tailing dam as at 31 December 2017. The discount rate represents the rate for long term Armenian Government bonds

Mine closure and waste dumps

During 2013, overall site restoration obligations of Armenian mining companies were clarified and enforced legally by the revised Law on Mining. The clarified law introduced a scheme under which the Group is required to make payments to a specified government fund. The calculation of the required payments should be performed according to the formula determined by the Government under a separate legal act. On 11 February 2013 the Government issued a legal act on the method of calculation of payments for a site restoration obligation which needs to be prepared by management and approved by the state authorities.

The volume, timing and costs of restoration works are stipulated in Mine closure plan of the Group. The nature of these restoration activities includes: recultivation of the surface and slopes of the waste dumps, strengthening and recultivation of the open-pit walls, restoration of the drainage system in the area of the dumps, breaking up and covering the roadways connecting the open pit, dumps and plant with a soil and vegetation layer, restoration of all disturbed lands, filling up small borrow pits.

The provision for restoration works related to mine closure and waste dumps constitutes AMD 332,855 thousand as at 31 December 2017 (2016: AMD 376,674).

The total amount of the estimated undiscounted cash flows required to settle the obligation is AMD 2,943,820 thousand. An annual discount rate of 12.3% (2016: 12.6%) was used to discount restoration costs to be made in 25 years' time. The timing of provision has been taken based on the term of existing License Agreement of the Group. The discount rate represents the rate for long term Armenian Government bonds.

b) Employee termination benefits

The provision for termination benefits as at 31 December 2017 relates to the Group's contractual obligation to pay the amount of AMD 940,415 thousand (2016: AMD 1,574,677 thousand) to the former management of the Group on termination of their employment contracts in July 2014. Subsequently these employees were appointed in different new positions within the Group and the payment schedule of termination benefits was deferred until the termination of the current positions.

An annual discount rate of 5.8% (2016: 7.5%) was used to discount the payments to be made in 1-4 years' time based on the management estimate of the timing of the terminations.

25. Financial instruments at fair value through profit or loss

Financial assets at fair value through profit or loss in the amount of AMD 1,110,243 thousand as at 31 December 2016 represented the fair value of call and put options on copper with one counterparty. The options expired in December 2017.

Financial liabilities at fair value through profit or loss of AMD 7,140,890 thousand (2016: 1,603,900) represent the fair value of futures on copper with one counterparty (2016: one counterparty).

The Group's exposure to credit, currency and liquidity risks related to financial instruments at fair value through profit or loss are disclosed in Note 28.

26. Trade and other payables

'000 AMD	*2017*	*2016*
Current trade and other payables		
Payables for acquisition of inventory and property, plant and equipment	11,355,655	4,828,441
Payables for services received	3,532,265	2,685,300
Payables related to closed derivative transactions	1,185,032	4,948,992
Other payables and accrued expenses	2,157,744	878,966
Total trade and other payables	**18,230,696**	**13,341,699**

The Group's exposure to credit and currency risks related to trade and other receivables are disclosed in Note 28. The Group has interest bearing payables in the amount of USD 3.2 million, with annual interest rate of 6%.

Included in other payables and accrued expenses are non-financial liabilities in the amount of AMD 560,073 thousand (2016: AMD 27,791 thousand).

27. Advances received for provisionally priced sales

Included in non-current advances received for provisionally priced sales are advances of AMD 14,361,382 thousand (2016: AMD 13,605,223 thousand) which are subject to set-off against the sales of copper and molybdenum concentrate during 2020-2021. These balances bear interest rate of 1 month USD Libor plus 4.95%.

During January 2017, the Group received a streaming upfront fee in the amount of USD 25 million (AMD 12,148,000 thousand) in connection with copper concentrate offtake streaming contract dated 21 December 2016. As of 31 December 2017 the non-current balance comprised AMD 10,479,660 thousand (2016: nil).

The current advances of AMD 13,785,285 thousand (2016: AMD 7,099,048 thousand) represent advances received for provisionally priced sales to the customers. In general, supplies are made within three months from the date of receiving of advance.

28. Fair values and risk management

a) Fair value measurement procedures

Carrying value versus fair value

Set out below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments, other than those whose carrying amounts are a reasonable approximation of fair value:

	Financial instrument	*Carrying amount*		*Fair value*	
'000 AMD	*classification*	*2017*	*2016*	*2017*	*2016*
Financial liabilities					
Loans and borrowings	Amortised cost	(72,138,533)	(93,758,294)	(76,576,452)	(99,592,392)

Fair value hierarchy

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy.

28. Fair values and risk management (continued)

a) Fair value measurement procedures (continued)

Fair value for trade and other receivables, cash and cash equivalents provided approximates their carrying amount.

'000 AMD	*Fair value measurement using*			
31 December 2017	***Quoted prices in active markets (Level 1)***	***Significant observable inputs (Level 2)***	***Significant unobservable inputs (Level 3)***	***Total***
Assets measured at fair value				
AFS financial assets (Note 16)				
Available-for-sale investments	–	–	928,484	**928,484**
Trade and other receivables				
Derivatives embedded in copper sales contracts	–	1,302,015	–	**1,302,015**
Derivatives embedded in molybdenum sales contracts	–	–	1,057,099	**1,057,099**
Total assets measures at fair value	**–**	**1,302,015**	**1,985,583**	**3,287,598**
Financial liabilities at fair value through profit or loss (Note 25)				
Commodity futures (copper)	(7,140,890)	–	–	**(7,140,890)**
Total	**(7,140,890)**	**–**	**–**	**(7,140,890)**
Liabilities for which fair values are disclosed				
Loans and borrowings	–	–	(76,576,542)	**(76,576,542)**
Total	**–**	**–**	**(76,576,542)**	**(76,576,542)**

'000 AMD	*Fair value measurement using*			
31 December 2016	***Quoted prices in active markets (Level 1)***	***Significant observable inputs (Level 2)***	***Significant unobservable inputs (Level 3)***	***Total***
Assets measured at fair value				
AFS financial assets (Note 16)				
Available-for-sale investments	–	–	777,159	**777,159**
Financial assets at fair value through profit or loss (Note 25)				
Copper collars	–	–	1,110,243	**1,110,243**
Total	**–**	**–**	**1,887,402**	**1,887,402**
Liabilities measured at fair value				
Advances received for provisionally priced sales (Note 27)				
Derivatives embedded in copper sales contracts	–	(476,056)	–	**(476,056)**
Derivatives embedded in molybdenum sales contracts	–	–	(81,201)	**(81,201)**
Financial liabilities at fair value through profit or loss (Note 25)				
Commodity futures (copper)	(1,603,900)	–	–	**(1,603,900)**
Total	**(1,603,900)**	**(476,056)**	**(81,201)**	**(2,161,157)**
Liabilities for which fair values are disclosed				
Loans and borrowings	–	–	(99,592,392)	**(99,592,392)**
Total	**–**	**–**	**(99,592,392)**	**(99,592,392)**

Level 3 Available-for-sale investments

In 2017 and 2016 the shares of AHEK were not actively traded and their fair value was determined using discounted cash flows techniques.

28. Fair values and risk management (continued)

a) Fair value measurement procedures (continued)

Level 3 Copper collars

The following table shows a reconciliation from the beginning balances to the ending balances for fair value measurements of copper collars:

'000 AMD	*2017*	*2016*
Balance at 1 January	**1,110,243**	**4,941,286**
Total loss recognised in profit or loss	(886,758)	(1,636,221)
Settlement	(222,255)	(2,117,331)
Receivable from closed derivative transactions	–	(48,453)
Effect of foreign exchange rate fluctuations	(1,230)	(29,038)
Balance at 31 December	**–**	**1,110,243**

The fair value of financial instruments at fair value through profit or loss was measured using the Black-Scholes model for option pricing.

Level 3 Derivatives embedded in molybdenum sales contracts

Derivatives embedded in sales contracts related to ferro-molybdenum are classified as a Level 3 asset. Because of the lack of observable forward prices for ferro-molybdenum and sintered molybdenum, the fair value of the embedded derivative has been calculated using the latest quoted ferro-molybdenum price as at the balance sheet date, which the Group considers as an approximation to the forward price in view of the short quotation periods for molybdenum contracts.

Description of significant unobservable inputs to valuation

The significant unobservable inputs used in the fair value measurements categorised within Level 3 of the fair value hierarchy, together with a quantitative sensitivity analysis as at 31 December 2017 are as shown below:

	Valuation technique	*Significant unobservable input*	*Input value or range*	*Sensitivity of the input to fair value*
Derivatives embedded in molybdenum sales contracts	Forward pricing model	Molybdenum spot price	25.7 USD/kg	4.27% decrease in Molybdenum spot price would result in a decrease in fair value by AMD 346,848 thousand.
Available-for-sale investments	DCF method	WACC	11%	1% increase in the WACC would result in a decrease in fair value by AMD 227,646 thousand.
Loans and borrowings	DCF method	Market interest rate	5.8%-9.2%	1% increase would result in a decrease in fair value by AMD 2,266,759 thousand.

b) Financial risk management

The Group's principal financial liabilities, other than derivatives, comprise trade and other payables, bank loans and overdrafts, borrowing from the shareholder. The main purpose of these financial instruments is to manage short-term cash flow and raise finance for the Group's capital expenditure programme. The Group's principal financial assets, other than derivatives, comprise available-for-sale investments, trade and other receivables and cash.

The Group has exposure to the following risks from its use of financial instruments:

- Market risk;
- Liquidity risk;
- Credit risk.

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these consolidated financial statements.

28. Fair values and risk management (continued)

b) Financial risk management (continued)

Risk management framework

The Management has overall responsibility for the establishment and oversight of the Group's risk management framework.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

i. Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risks: commodity price risk, interest rate risk and foreign currency risk. Financial instruments affected by market risk include loans and borrowings, cash and cash equivalents, trade receivables, trade payables and derivative financial instruments.

Commodity price risk

The Group is exposed to the risk of fluctuations in prevailing market commodity prices on the mix of mineral products it produces.

The Group's major commodity price exposure is to the prices of copper concentrate, ferro-molybdenum and sintered molybdenum. Forward prices of these commodities at the reporting date affect the fair value of the embedded derivatives in sales contracts.

Commodity price sensitivity

The table below summarises the impact on profit before tax for changes in copper prices on the fair value of derivative financial instruments. The impact on equity is the same as the impact on profit before income tax as these derivative financial instruments have not been designated as hedges and are classified as held-for-trading and are therefore fair valued through profit or loss.

The analysis is based on the assumption that the copper prices move 4.27% with all other variables held constant. Reasonably possible movements in commodity prices were determined based on economic forecasters' expectations.

Increase/(decrease) in copper prices	***Effect on profit before tax for the year ended 31 December 2017 Increase/(decrease)***	***Effect on profit before tax for the year ended 31 December 2016 Increase/(decrease)***
	'000 AMD	***'000 AMD***
Increase 4.27% (2016: 6.40%)	(2,910,742)	(641,079)
Decrease 4.27% (2016: 6.40%)	2,910,742	641,079

Interest rate risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term secured bank loan and unsecured borrowing from shareholder with floating interest rates. As of 31 December 2017 the shares of the borrowings with floating rates in the total amount of the borrowings were 85% (2016: 84%).

Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of raising new loans or borrowings management uses its judgement to decide whether it believes that a fixed or variable rate would be more favorable to the Group over the expected period until maturity.

28. Fair values and risk management (continued)

b) Financial risk management (continued)

Interest rate sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in interest rates, based on the last two years' historical rates and economic forecasters' expectations of the Group's profit before tax through the impact on floating rate loans and borrowings (with all other variables held constant).

Increase/(decrease) in 1month USD LIBOR rate	***Effect on profit before tax for the year ended 31 December 2017 Increase/(decrease)***	***Effect on profit before tax for the year ended 31 December 2016 Increase/(decrease)***
	'000 AMD	***'000 AMD***
Increase 0.70% (2016: 0.60%)	(1,000,058)	(1,433,371)
Decrease 0.08% (2016: 0.08%)	101,427	191,116

Foreign currency sensitivity

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

The Group is exposed to currency risk to the extent that there is a mismatch between currencies in which sales, purchases and borrowings are denominated and the functional currency of the Group. The currency in which these transactions are primarily denominated is USD.

Generally, borrowings are denominated in currencies that match the cash flows generated by the underlying operations of the Group, primarily USD. This provides an economic hedge without a need to enter into derivatives contracts.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group's policy is to ensure that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

Sensitivity analysis

The following table demonstrates the sensitivity to a reasonably possible change in the foreign exchange rate, with all other variables held constant, of the Group's profit before tax due to changes in the carrying value of monetary assets and liabilities at reporting date:

Increase/(decrease) in foreign exchange rate	***Effect on profit before tax for the year ended 31 December 2017 Increase/(decrease)***	***Effect on profit before tax for the year ended 31 December 2016 Increase/(decrease)***
	'000 AMD	***'000 AMD***
USD		
Increase 3.5% (2016: 6%)	(3,370,223)	(5,632,641)
Decrease 3.5% (2016: 6%)	3,370,223	5,632,641
EUR		
Increase 13.7% (2016: 11%)	162,215	(13,326)
Decrease 6.3% (2016: 11%)	(74,599)	13,326

ii. Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

Typically the Group ensures that it has sufficient cash on demand to meet expected operational expenses for a period of 60 days, including the servicing of financial obligations; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters.

28. Fair values and risk management (continued)

b) Financial risk management (continued)

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

Year ended 31 December 2017	*On demand*	*Less than 1 year*	*1-2 years*	*2-5 years*	*Total*
Interest-bearing loans and borrowings	–	23,744,507	18,084,799	47,928,780	**89,758,086**
Accounts payable and accrued liabilities	849,360	19,783,007	–	–	**20,632,367**
Financial liabilities at fair value through profit or loss	–	7,140,890	–	–	**7,140,890**
	849,360	**50,668,404**	**18,084,799**	**47,928,780**	**117,531,343**

Year ended 31 December 2016	*On demand*	*Less than 1 year*	*1-2 years*	*2-5 years*	*Total*
Interest-bearing loans and borrowings	–	26,310,939	15,433,604	78,963,568	**120,708,111**
Accounts payable and accrued liabilities	496,042	12,845,657	–	–	**13,341,699**
Embedded derivatives	–	557,257	–	–	**557,257**
Financial liabilities at fair value through profit or loss	–	1,603,900	–	–	**1,603,900**
	496,042	**41,317,753**	**15,433,604**	**78,963,568**	**136,210,967**

The contractual cash flows of the secured bank loan include the cash flows from transaction costs.

iii. Credit risk

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

The Group does not require collateral in respect of financial assets. Credit evaluations are performed on all counterparties other than related parties, requiring credit over a certain amount.

Exposure to credit risk

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

	Carrying amount	
'000 AMD	*2017*	*2016*
Bank balances	5,678,228	4,784,916
Trade and other receivables	13,579,858	2,177,400
Financial assets at fair value through profit or loss	–	1,110,243
	19,258,086	**8,072,559**

Trade and other receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the demographics of the Group's customer base, including the default risk of the industry and country, in which customers operate, as these factors may have an influence on credit risk, particularly in the current economic circumstances. Approximately 14% (2016: 33%) of the Group's revenue from concentrate, ferro-molybdenum and sintered molybdenum is attributable to sales transactions with related parties.

The rest of the revenue from concentrate is attributable to sales transactions with six (2016: four) customers.

28. Fair values and risk management (continued)

b) Financial risk management (continued)

The maximum exposure to credit risk for trade and other receivables at the reporting date by geographic region was:

	Carrying amount	
'000 AMD	***2017***	***2016***
Domestic	6,266,208	1,347,510
Foreign	7,313,650	829,890
	13,579,858	**2,177,400**

The maximum exposure to credit risk for trade and other receivables at the reporting date by type of customer was:

	Carrying amount	
'000 AMD	***2017***	***2016***
Copper and molybdenum customers	11,288,892	618,334
Other products – other customers	2,290,966	1,559,066
	13,429,858	**2,177,400**

Impairment losses

The aging of trade and other receivables at the reporting date was:

'000 AMD	***Gross 2017***	***Gross 2016***
Not past due	10,687,185	1,073,738
Past due 0-30 days	329,332	11,392
Past due 31-120 days	1,000,323	18,479
Past due 121-365 days	963,366	816,258
Past due more than one year	599,652	257,533
	13,429,858	**2,177,400**

Bank balances

The Group held bank balances of AMD 5,678,228 thousand at 31 December 2017 (2016: AMD 4,784,916 thousand), which represents its maximum credit exposure on these assets. At 31 December 2017 90% of total exposure is held with a BBB+ rated bank by Fitch (2016: 95%). The remaining 10% of total exposure at 31 December 2017 is held with top 8 Armenian banks.

c) Capital management

The Group has no formal policy for capital management but management seeks to maintain a sufficient capital base for meeting the Group's operational and strategic needs. This is achieved with efficient cash management, constant monitoring of Group's revenues and profit, and long-term investment plans mainly financed by the Group's operating cash flows, as well as loans and borrowings. With these measures the Group aims for steady profits growth.

d) Changes in liabilities arising from financing activities

'000 AMD	***Loans and borrowings***
Balance as at 1 January 2016	**89,055,499**
Proceeds from loans and borrowings	11,926,142
Repayment of loans and borrowings	(8,810,074)
Non-cash transactions	8,965,555
Foreign exchange movement	(25,400)
Interest paid, including related withholding tax	(7,343,428)
Balance as at 31 December 2016	**93,768,294**
Proceeds from loans and borrowings	–
Repayment of loans and borrowings	(23,422,190)
Non-cash transactions	8,340,408
Foreign exchange movement	37,479
Interest paid, including related withholding tax	(6,585,458)
Balance as at 31 December 2017	**72,138,533**

29. Contingencies and commitments

a) Insurance

The insurance industry in Armenia is in a developing state and many forms of insurance protection common in other parts of the world are not yet generally available. The Group does not have full coverage for its plant facilities, business interruption, or third party liability in respect of property or environmental damage arising from accidents on Group property or relating to Group operations. Until the Group obtains adequate insurance coverage, there is a risk that the loss or destruction of certain assets could have a material adverse effect on the Group’s operations and financial position.

b) Taxation contingencies

The taxation system in Armenia is relatively new and is characterised by frequent changes in legislation, official pronouncements and court decisions, which are sometimes unclear, contradictory and subject to varying interpretation. Taxes are subject to review and investigation by tax authorities, which have the authority to impose fines and penalties. In the event of a breach of tax legislation, no liabilities for additional taxes, fines or penalties may be imposed by tax authorities once three years have elapsed from the date of the breach.

These circumstances may create tax risks in Armenia that are more significant than in other countries. Management believes that it has provided adequately for tax liabilities based on its interpretations of applicable Armenian tax legislation, official pronouncements and court decisions. However, the interpretations of the relevant authorities could differ and the effect on these consolidated financial statements, if the authorities were successful in enforcing their interpretations, could be significant.

c) Environmental contingencies

The Group is subject to various state laws and regulations that govern emissions of air pollutants; discharges of water pollutants; and generation, handling, storage and disposal of hazardous substances, hazardous wastes and other toxic materials. The Group has not provided for any potential environmental contingency as the management does not consider any environmental contingent liability to be probable in the foreseeable future. However, environmental legislation in Armenia is in the process of development and potential changes in the legislation and its interpretation may give rise to material liabilities in the future.

d) Commitments and other contingencies

Capital commitments

The Group did not have any significant capital commitments at 31 December 2017 (2016: nil).

Operating lease commitments

The Group has entered into leases for land and other properties. There are no restrictions placed upon the lessee by entering into these leases.

Future minimum lease payments under non-cancellable operating leases as at 31 December are, as follows:

’000 AMD	*2017*	*2016*
Within one year	335,884	169,608
After one year but not more than five years	569,199	573,927
More than five years	3,730,152	3,579,298
	4,635,235	**4,322,833**

30. Operational risks

a) Mines

Mines by their nature are subject to many operational risks and factors that are generally outside of the Group’s control and could impact the Group’s business, operating results and cash flows. These operational risks and factors include, but are not limited to (i) unanticipated ground and water conditions and adverse claims to water rights, (ii) geological problems, including earthquakes and other natural disasters, (iii) metallurgical and other processing problems, (iv) the occurrence of unusual weather or operating conditions and other force majeure events, (v) lower than expected ore grades or recovery rates, (vi) accidents, (vii) delays in the receipt of or failure to receive necessary government permits, (viii) the results of litigation, including appeals of agency decisions, (ix) uncertainty of exploration and development, (x) delays in transportation, (xi) labour disputes, (xii) inability to obtain satisfactory insurance coverage, (xiii) unavailability of materials and equipment, (xiv) the failure of equipment or processes to operate in accordance with specifications or expectations, (xv) unanticipated difficulties consolidating acquired operations and obtaining expected synergies and (xvi) the results of financing efforts and financial market conditions.

30. Operational risks (continued)

b) Copper and molybdenum price volatility

The Group's financial performance is heavily dependent on the price of copper, which is affected by many factors beyond the Group's control. Copper is a commodity traded on the London Metal Exchange (LME), the New York Commodity Exchange (COMEX) and the Shanghai Futures Exchange (SHFE). The Group's copper is sold at prices based on those quoted on the LME. The price of copper as reported on this exchange is influenced significantly by numerous factors, including (i) the worldwide balance of copper demand and supply, (ii) rates of global economic growth, trends in industrial production and conditions in the housing and automotive industries, all of which correlate with demand for copper, (iii) economic growth and political conditions in China, which has become the largest consumer of refined copper in the world, and other major developing economies, (iv) speculative investment positions in copper and copper futures, (v) the availability and cost of substitute materials and (vi) currency exchange fluctuations, including the relative strength of the USD. The copper market is volatile and cyclical. During the year ended 31 December 2017, LME monthly average closing spot prices ranged from USD 5,591 to USD 6,825 per ton for copper. The LME spot copper price closed at USD 6,679 per ton on 31 March 2018.

The Group's financial performance is also significantly dependent on the price of molybdenum. Molybdenum is characterized by volatile, cyclical prices, even more so than copper. Molybdenum prices are influenced by numerous factors, including (i) the worldwide balance of molybdenum demand and supply, (ii) rates of global economic growth, especially construction and infrastructure activity that requires significant amounts of steel, (iii) the volume of molybdenum produced as a by-product of copper production, (iv) inventory levels, (v) currency exchange fluctuations, including the relative strength of the USD and (vi) production costs of U.S. and foreign competitors.

Molybdenum demand depends heavily on the global steel industry, which uses the metal as a hardening and corrosion inhibiting agent. Approximately 80 percent of molybdenum production is used in this application. The remainder is used in specialty chemical applications such as catalysts, water treatment agents and lubricants. Approximately 65 percent of global molybdenum production is a by-product of copper mining, which is relatively insensitive to molybdenum prices.

The price of molybdenum was averaging to approximately USD 19,820 per ton during 2017 in comparison with USD 16,263 per ton during 2016. The LME spot price of USD 25,500 per ton of molybdenum was registered on 31 March 2018.

31. Related parties

a) Control relationships

In accordance with Government Decree No 1677-A dated 9 December 2004 the Group was privatised by the state. The ownership structure of the Group is disclosed in Note 1.

b) Transactions with key management personnel

Board of Directors and key management remuneration

Key management received the following remuneration during the year, which is included in personnel costs (see Note 12):

'000 AMD	*2017*	*2016*
Salaries and bonuses		
Short-term employee benefits	1,249,763	1,180,478
Termination benefits	637,203	186,006
	1,886,966	**1,366,484**

The sales to and purchases from related parties are made on terms equivalent to those that prevail in arm's length transactions. There have been no guarantees provided or received for any related party receivables or payables.

31. Related parties (continued)

b) Transactions with key management personnel (continued)

The Group's related party transactions are disclosed below.

i. Revenues

'000 AMD	*Transaction value 2017*	*Transaction value 2016*	*Outstanding balance 2017*	*Outstanding balance 2016*
Sale of molybdenum concentrate, ferro-molybdenum, sintered molybdenum				
Shareholders	(15)	15,524,754	(9,682,000)	(9,715,757)
Entities under common control	15	11,322,017	–	(75,527)
Sale of copper concentrate				
Entities under common control	26,751,096	15,110,913	2,682,154	(4,452,521)
Services provided				
Shareholders	1,744	832	80	60
Interest income				
Entities under common control	123,363	–	123,729	–
	26,876,203	**41,958,516**	**(6,876,037)**	**(14,243,745)**

ii. Expenses

'000 AMD	*Transaction value 2017*	*Transaction value 2016*	*Outstanding balance 2017*	*Outstanding balance 2016*
Purchase of materials				
Shareholders	5,149	5,770	(900)	(876)
Entities under common control	–	1,286	–	(75,660)
Other related parties	3,151,407	3,738,862	(466,144)	(639,196)
Purchase of property, plant and equipment				
Shareholders	327,619	–	(3,892)	–
Entities under common control	28,060	221,445	2,420,500	–
Services received				
Shareholders	12,076,348	12,268,431	(244,792)	(283,632)
Entities under common control	1,514,017	1,360,901	(23,620)	(60,702)
Other related parties	1,808,487	1,872,488	(135,236)	(145,619)
Donations provided				
Other related parties	947,257	659,800	–	–
Entities under common control	145,000	–	–	–
Interest expense on advances received				
Shareholders	660,241	560,394	(1,517,104)	(856,863)
Entities under common control	174,333	162,815	(389,070)	(261,645)
Commission fee				
Entities under common control	201,664	2,387	–	–
	21,039,582	**20,854,579**	**(360,258)**	**(2,324,193)**

All outstanding balances with related parties are to be settled in cash within six months of the reporting date. None of the balances are secured.

Services received from the entities under common control mainly include geological studies and research performed by non-related parties sub-contracted by the related parties.

Other related parties include entities under significant influence of the Board of Directors.

31. Related parties (continued)

b) Transactions with key management personnel (continued)

iii. Loans and borrowings

'000 AMD	*Transaction value 2017*	*Transaction value 2016*	*Outstanding balance 2017*	*Outstanding balance 2016*
Borrowings received				
Shareholders	–	–	(4,841,000)	(4,839,400)
Interest expense on borrowings				
Shareholders	331,878	280,661	(784,995)	(451,824)
	331,878	**280,661**	**(5,625,995)**	**(5,291,224)**

Accrued interest of AMD 68,666 thousand was capitalized on PPE during 2017 (2016: AMD 58,069 thousand).

32. New and amended standards and interpretations

The Group applied, for the first time, certain standards and amendments, which are effective for annual periods beginning on or after 1 January 2017. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective. Several other amendments apply for the first time in 2017, however, they do not impact the annual consolidated financial statements of the, hence, have not been disclosed. The nature and the effect of these changes are disclosed below. Although the new standards and amendments applied for the first time in 2017, they did not have a material impact on the annual consolidated financial statements of the Group. Other than the changes described below, the accounting policies adopted are consistent with those of the previous financial year.

IAS 7 Statement of Cash Flows – Amendments to IAS 7

The amendments require entities to provide disclosure of changes in their liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes (such as foreign exchange gains or losses). The Group has provided the information for both the current and the comparative period in Note 23.

IAS 12 Income Taxes: Recognition of Deferred Tax Assets for Unrealised Losses – Amendments to IAS 12

The amendments clarify that an entity needs to consider whether tax law restricts the sources of taxable profits against which it may make deductions on the reversal of deductible temporary difference related to unrealised losses. Furthermore, the amendments provide guidance on how an entity should determine future taxable profits and explain the circumstances in which taxable profit may include the recovery of some assets for more than their carrying amount.

These amendments do not have any impact on the Group's consolidated financial statements.

Annual improvements 2014-2016 cycle

IFRS 12 Disclosure of Interests in Other Entities – clarification of the scope of the disclosure requirements in IFRS 12

The amendments clarify that the disclosure requirements in IFRS 12, other than those in paragraphs B10-B16, apply to an entity's interest in a subsidiary, a joint venture or an associate (or a portion of its interest in a joint venture or an associate) that is classified (or included in a disposal group that is classified) as held for sale. The amendments are effective from 1 January 2017 and must be applied retrospectively. These amendments do not have any impact on the Group.

Annual improvements 2015-2017 cycle (issued in December 2017)

These improvements are applied for annual reporting periods beginning on or after 1 January 2019 and include:

IAS 12 Income Taxes – income tax consequences of payments on financial instruments classified as equity

These amendments clarify that an entity must recognise all income tax consequences of dividends in profit or loss, other comprehensive income or equity, depending on where the entity recognised the originating transaction or event that generated the distributable profits giving rise to the dividend. Earlier application is permitted and must be disclosed. The amendments must first be applied to income tax consequences of dividends recognised on or after the beginning of the earliest comparative period. Since the Group's current practice is in line with the amendments, the Group does not expect any effect on its consolidated financial statements.

32. New and amended standards and interpretations (continued)

Annual improvements 2015-2017 cycle (issued in December 2017) (continued)

IAS 23 Borrowing Costs – borrowing costs eligible for capitalization

These amendments clarify that, when a qualifying asset is ready for its intended use or sale, and some of the specific borrowing related to that qualifying asset remains outstanding at that point, that borrowing is to be included in the funds that an entity borrows generally. Earlier application is permitted and should be disclosed. The Group does not expect any effect on its consolidated financial statements.

33. Standards issued but not yet effective

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements that the Group reasonably expects will have an impact on its disclosures, financial position or performance when applied at a future date, are disclosed below. The Group intends to adopt these standards when they become effective. Of the other standards and interpretations that are issued, but not yet effective, as these are not expected to impact the Group, they have not been listed.

IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* governs disclosures in relation to changes in accounting policies.

Specifically IAS 8.28 requires the following to be disclosed (unless relief is provided by a transitional provision in the standard):

(a) The title of the IFRS;

(b) When applicable, that the change in accounting policy is made in accordance with its transitional provisions;

(c) The nature of the change in accounting policy;

(d) When applicable, a description of the transitional provisions;

(e) When applicable, the transitional provisions that might have an effect on future periods;

(f) For the current period and each prior period presented, to the extent practicable, the amount of the adjustment:

  (i) For each financial statement line item affected;

  (ii) If IAS 33 *Earnings per Share* applies to the entity, for basic and diluted earnings per share.

(g) The amount of the adjustment relating to periods before those presented, to the extent practicable;

(h) If retrospective application required by paragraph 19(a) or (b) is impracticable for a particular prior period, or for periods before those presented, the circumstances that led to the existence of that condition and a description of how and from when the change in accounting policy has been applied.

IFRS 9 Financial Instruments

In July 2014, the IASB issued the final version of IFRS 9 *Financial Instruments* that replaces IAS 39 and all previous versions of IFRS 9. IFRS 9 brings together all three aspects of the accounting for financial instruments project: classification and measurement, impairment and hedge accounting. IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early application permitted. Except for hedge accounting, retrospective application is required, but the provision of comparative information is not compulsory. For hedge accounting, the requirements are generally applied prospectively, with some limited exceptions.

The Group plans to adopt the new standard on the required effective date and will not restate comparative information.

During 2017, the Group performed a detailed impact assessment of all three aspects of IFRS 9. This assessment is based on currently available information and may be subject to changes arising from further reasonable and supportable information being made available to the Group in 2018 when the Group will adopt IFRS 9. The Group will continue its final assessment during 2018. The Group expects that there will not be significant impact on its statement of financial position or equity from the adoption of IFRS 9, however, there will be some changes to the classification and measurement of trade receivables relating to provisionally priced sales. Refer below for further discussion.

a) Classification and measurement

The Group does not expect a significant impact on its statement of financial position and equity on applying the classification and measurement requirements of IFRS 9. However, there will be some changes impacting trade receivables relating to provisionally priced sales.

33. Standards issued but not yet effective (continued)

IFRS 9 Financial Instruments (continued)

As discussed in more detail in Note 34 (c) and also below within the discussion on the potential impact of IFRS 15, some of the Group's sales of metal in concentrate contain provisional pricing features. Currently, these provisionally priced sales contain an embedded derivative that is separated from the host contract, i.e., the concentrate receivable, for accounting purposes under IAS 39. Accordingly, the embedded derivative, which does not qualify for hedge accounting, is recognised at fair value, with subsequent changes in fair value recognised in the statement of profit or loss and other comprehensive income each period until final settlement, and presented as part of 'Revenue'. The initial estimate of fair value and subsequent changes in fair value over the quotational period ("QP"), and up until final settlement, are estimated by reference to forward market prices.

On adoption of IFRS 9, the embedded derivative will no longer be separated from the concentrate receivables as the receivables are not expected to give rise to cash flows that represent solely payments of principal and interest. Instead, the receivables will be accounted for as one instrument and measured at fair value through profit or loss with subsequent changes in fair value recognised in the statement of profit or loss and other comprehensive income each period until final settlement and presented as part of 'Revenue'. This will mean that the quantum of the fair value movements will be different because the current approach only calculates fair value movements based on changes in the relevant commodity price, whereas under IFRS 9, the fair value of the receivable will not only include commodity price changes, but it will also factor in the impact of credit and interest rates. Refer below to the discussion on the potential impact of IFRS 15 on provisionally priced sales for further information.

Other non-provisionally priced trade receivables are considered to be held to collect contractual cash flows and are expected to give rise to cash flows representing solely payments of principal and interest. The Group analysed the contractual cash flow characteristics of those instruments and concluded that they meet the criteria for amortised cost measurement under IFRS 9. Therefore, reclassification for these instruments is not required.

For other financial assets currently measured at fair value, e.g., derivative financial assets, the group expects to continue to classify and measure these at fair value.

There will be no impact on financial liabilities.

b) Impairment

IFRS 9 requires the Group to now use an expected credit loss model for its trade receivables measured at amortised cost, either on a 12-month or lifetime basis. The Group will apply the simplified approach and record lifetime expected losses on all trade receivables measured at amortised cost. Given the short term nature of these receivables, the Group does not expect these changes will have a significant impact.

c) Hedge accounting

The changes in IFRS 9 relating to hedge accounting will have no impact as the Group does not currently apply hedge accounting.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 was issued in May 2014, and amended in April 2016, and establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

The new revenue standard will supersede all current revenue recognition requirements under IFRS. Either a full retrospective application or a modified retrospective application is required for annual periods beginning on or after 1 January 2018. Early adoption is permitted.

The Group plans to adopt the new standard on the required effective date using the modified retrospective method. During 2016, the Group commenced its preliminary assessment of IFRS 15, which was followed by a more detailed analysis Group is preparing during 2018.

The key issues identified, and the Group's views and perspectives, are set out below. These are based on the Group's current interpretation of IFRS 15 and may be subject to changes as interpretations evolve more generally. Furthermore, the Group is considering and will continue to monitor any further development.

33. Standards issued but not yet effective (continued)

IFRS 15 Revenue from Contracts with Customers (continued)

To date, the Group has identified the following issues that require consideration:

a) Provisionally priced sales

As discussed in Note 34 (c) above, some of the Group's sales of metal in concentrate contain provisional pricing features which are considered to be embedded derivatives. Under IAS 18, revenue is recognised at the estimated fair value of the total consideration received or receivable when the concentrate is delivered, which is usually upon loading material into the railcars. This fair value is based on the most recently determined estimate of metal in concentrate (based on initial assay results) and the average spot price of the metal for previous five working days of the date of shipment and previous one working day of the date of shipment for copper and molybdenum respectively. The initial estimate of the fair value of the embedded derivative and subsequent changes in fair value over, and to the end of, the QP, are estimated by reference to forward market prices. The subsequent changes in fair value are recognised in the statement of profit or loss and other comprehensive income each period until final settlement and presented as part of 'Revenue'. Any subsequent changes arising due to differences between the initial and final assay results are not considered part of the embedded derivative and are adjusted against revenue. These amounts are usually immaterial for the Group.

IFRS 15 will not change the assessment of the existence of embedded derivatives. IFRS 15 states that if a contract is partially within scope of the standard and partially in the scope of another standard, an entity will first apply the separation and measurement requirements of the other standard(s). Therefore, to the extent that provisional pricing features are considered to be in the scope of another standard, they will be outside the scope of IFRS 15 and entities will be required to account for these in accordance with IFRS 9. Any subsequent changes that arise due to differences between initial and final assay will still be considered within the scope of IFRS 15 and will be subject to the constraint on estimates of variable consideration.

Revenue in respect of the host contract will be recognised when control passes to the customer (which has been determined to be the same point in time, i.e., upon loading material into the railcars) and will be measured at the amount the entity expects to be entitled – being the estimate of the price expected to be received at the end of the QP, i.e., using the most recently determined estimate of metal in concentrate (based on initial assay results) and the estimated forward price (which is consistent with current practice). When considering the initial assay estimate, the Group has considered the requirements of IFRS 15 in relation to the constraint on estimates of variable consideration. It will only include amounts in the calculation of revenue where it is highly probable that a significant revenue reversal will not occur when the uncertainty relating to final assay/quality is subsequently resolved, i.e., at the end of the QP. As disclosed above, the assay differences are not usually material to the Group, hence, no change is expected when compared to the current approach. Consequently, at the time the concentrate is loaded on railcars, the Group will recognise a receivable because from that time it considers it has an unconditional right to consideration. This receivable will then be accounted for in accordance with IFRS 9.

As explained above in the discussion on the potential impact of IFRS 9, the embedded derivative will no longer be separated from the host contract, i.e., the concentrate receivable. This is because the existence of the provisional pricing features will mean the concentrate receivable will fail to meet the requirements to be measured at amortised cost. Instead, the entire receivable will be measured at fair value, with subsequent movements being recognised in the statement of profit or loss and other comprehensive income. The requirement to measure the entire receivable at fair value is different from current practice in that the current embedded derivative represents changes in the commodity price, whereas the fair value of the receivable will include the impact of changes in the commodity price, interest rate risk and credit risk. Given the nature of the Group's provisionally priced sales in that they are no more than three months long and are with customers who have a strong credit rating, the Group does not expect this change to have a material impact.

With respect to the presentation of amounts arising from such provisionally priced contracts, IFRS 15 requires "revenue from contracts with customers" to be disclosed separately from other types of revenue. This means that revenue recognized from the initial sale must be separately disclosed in the financial statements from any revenue/income recognised from subsequent movements in the fair value of the related concentrate receivable. As the Group currently discloses movements in the embedded derivative in revenue, this requirement will have impact on it. However, the quantum of the fair value movement may be different as a result of the adoption of IFRS 9. Consistent with current practice, any subsequent changes that arise due to differences between initial and final assay will be recognised as an adjustment to revenue from contracts with customers.

b) Impact of shipping terms

The Group sells a portion of its copper concentrate on CIP Incoterms. This means that the Group is responsible for shipping services after the date at which control of the concentrate passes to the customer i.e. when the concentrate is loaded on railcars. Under IAS 18, these shipping services are currently not considered to represent a separate service, hence, no revenue is allocated to them. Instead, concentrate revenue is recognised in full at the date the concentrate is loaded on railcars, and the costs associated with shipping the goods are considered to be part of distribution costs.

33. Standards issued but not yet effective (continued)

IFRS 15 Revenue from Contracts with Customers (continued)

Under IFRS 15, the provision of shipping services in these types of arrangements will be a distinct service (and therefore a separate performance obligation) to which a portion of the transaction price should be allocated and recognised over time as the shipping services are provided.

The Group is currently assessing the materiality of these types of arrangements to determine the impact. Where material, the impact of this change would be:

- *Deferral of revenue*: Some of the revenue currently recognised when the concentrate is loaded on railcars will be deferred and recognised as the shipping services are subsequently provided; and
- *Disaggregated disclosures*: The revenue allocated to shipping services may need to be disclosed separately from concentrate revenue, either on the face of the statement of profit or loss and other comprehensive income or in the notes.

c) *Other presentation and disclosure requirements*

In addition to the presentation and disclosure requirements for provisionally priced sales discussed above, IFRS 15 contains other presentation and disclosure requirements which are more detailed than the current Standards. The presentation requirements represent a significant change from current practice and will increase the volume of disclosures required in the Group's consolidated financial statements. Many of the disclosure requirements in IFRS 15 are new. In 2017, the Group continues testing appropriate systems, internal controls, policies and procedures necessary to collect and disclose the required information.

IFRS 16 Leases

IFRS 16 was issued in January 2016 and it replaces IAS 17 *Leases*, IFRIC 4 *Determining whether an Arrangement Contains a Lease*, SIC-15 *Operating Leases – Incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g., personal computers) and short-term leases (i.e., leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessees will be also required to remeasure the lease liability upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

Lessor accounting under IFRS 16 is substantially unchanged from today's accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between two types of leases: operating and finance leases.

IFRS 16 also requires lessees and lessors to make more extensive disclosures than under IAS 17.

IFRS 16 is effective for annual periods beginning on or after 1 January 2019. Early application is permitted, but not before an entity applies IFRS 15. A lessee can choose to apply the standard using either a full retrospective or a modified retrospective approach. The standard's transition provisions permit certain reliefs.

In 2017 the Group begins the process of assessing the impact of the leases standard. In 2018 the Group plans to continue to assess the potential effect of IFRS 16 on its consolidated financial statements.

34. Summary of significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements.

a) Business combinations

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest ("NCI") in the acquiree. For each business combination, the Group elects whether to measure the NCI in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition related costs are expensed as incurred and included in administrative expenses.

When the Group acquires a business, it assesses the assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

As part of a business combination, the Group assesses whether there are any operating lease contracts of the acquiree that may be onerous – that is, where the lease premiums being paid on that contract exceed the current market rate for such lease arrangements. Mineral reserves, resources and exploration potential that can be reliably measured are recognised separately in the assessment of fair values on acquisition. Other potential reserves, resources and rights, for which fair values cannot be reliably measured, are not recognized separately, but instead are subsumed in goodwill.

If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition-date fair value, and any resulting gain or loss is recognised in the statement of profit or loss and other comprehensive income. It is then considered in the determination of goodwill.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of IAS 39 is measured at fair value, with changes in fair value recognised either in the statement of profit or loss or as a change to other comprehensive income. If the contingent consideration is not within the scope of IAS 39, it is measured in accordance with the appropriate IFRS. Contingent consideration that is classified as equity is not re-measured, and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost (being the excess of the aggregate of the consideration transferred and the amount recognised for NCI over the fair value of the identifiable net assets acquired and liabilities assumed).

If the fair value of the identifiable net assets acquired is in excess of the aggregate consideration transferred, the Group reassesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date.

If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in statement of profit or loss and other comprehensive income.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units ("CGUs") that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a CGU and part of the operation in that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the disposed operation of and the portion of the CGU retained.

The Group has identified two CGUs which represent the two companies of the Group: Zangezur Copper Molybdenum Combine CJSC and Ler-Ex LLC.

34. Summary of significant accounting policies (continued)

b) Financial instruments – initial recognition and subsequent measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as financial assets at fair value through profit or loss (FVTPL), loans and receivables, held-to-maturity investments, available-for-sale (AFS) financial assets, or derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset.

Purchases or sales of financial assets that require delivery of assets in a timeframe established by regulation or convention in the marketplace (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

The Group's financial assets include cash and cash equivalents, trade and other receivables and derivative financial assets, available-for-sale instruments.

Subsequent measurement

The subsequent measurement of financial assets are classified into four categories:

- Financial assets at FVTPL;
- Loans and receivables;
- AFS financial instruments;
- Held-to-maturity investments – the Group has no held-to-maturity investments.

Financial assets at fair value through profit or loss

Financial assets at FVTPL include financial assets held for trading and financial assets designated upon initial recognition at FVTPL. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments, as defined by IAS 39 *Financial Instruments: Recognition and Measurement*.

Financial assets at FVTPL are carried in the statement of financial position at fair value with net changes in fair value presented as finance costs (negative net changes in fair value) or finance income (positive net changes in fair value) in the statement of profit or loss and other comprehensive income. The Group has not designated any financial assets at FVTPL.

Derivatives embedded in host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at FVTPL. These embedded derivatives are measured at fair value, with changes in fair value recognised in profit or loss. Reassessment occurs only if there is a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or there is a reclassification of a financial asset out of the FVTPL category.

Loans and receivables

This category is the most relevant to the Group. Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method, less impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss and other comprehensive income. The losses arising from impairment are recognised in the statement of profit or loss and other comprehensive income in other expenses.

This category generally applies to trade and other receivables. For more information on receivables, refer to Note 20.

34. Summary of significant accounting policies (continued)

b) Financial instruments – initial recognition and subsequent measurement (continued)

AFS financial assets

AFS financial assets include equity investments. Equity investments classified as AFS are those that are neither classified as held for trading nor designated at fair value through profit or loss.

After initial measurement, AFS financial assets are subsequently measured at fair value with unrealised gains or losses recognised in OCI and credited to the AFS reserve until the investment is derecognised, at which time, the cumulative gain or loss is recognised in other operating income, or the investment is determined to be impaired, when the cumulative loss is reclassified from the AFS reserve to the statement of profit or loss in finance costs.

The Group evaluates whether the ability and intention to sell its AFS financial assets in the near term is still appropriate. When, in rare circumstances, the Group is unable to trade these financial assets due to inactive markets, the Group may elect to reclassify these financial assets if management has the ability and intention to hold the assets for the foreseeable future or until maturity.

For a financial asset reclassified from the AFS category, the fair value at the date of reclassification becomes its new amortised cost and any previous gain or loss on the asset that has been recognised in equity is amortised to profit or loss over the remaining life of the investment using the EIR. Any difference between the new amortised cost and the maturity amount is also amortised over the remaining life of the asset using the EIR. If the asset is subsequently determined to be impaired, then the amount recorded in equity is reclassified to the statement of profit or loss.

Derecognition

A financial asset (or, when applicable, a part of a financial asset or part of a group of similar financial assets) is derecognised when either:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement and either: (a) the Group has transferred substantially all the risks and rewards of the asset; or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a passthrough arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership.

When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability.

The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Impairment of financial assets

The Group assesses at each reporting date whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event') has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include: indications that the debtor, or a group of debtors, is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation, and observable data indicating that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

Financial assets carried at amortised cost

For financial assets carried at amortised cost, the Group first assesses whether impairment exists individually for financial assets that are individually significant or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognised are not included in a collective assessment of impairment.

34. Summary of significant accounting policies (continued)

b) Financial instruments – initial recognition and subsequent measurement (continued)

The amount of any impairment loss identified is measured as the difference between the asset’s carrying amount and the present value of estimated future cash flows (excluding future expected credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial asset’s original EIR.

The carrying amount of the asset is reduced through the use of an allowance account, and the loss is recognized in the statement of profit or loss and other comprehensive income. Interest income (recorded as finance income in the statement of profit or loss and other comprehensive income) continues to be accrued on the reduced carrying amount and is accrued using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Loans together with the associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realised or has been transferred to the Group.

If, in a subsequent year, the amount of the estimated impairment loss increases or decreases because of an event occurring after the impairment was recognised, the previously recognised impairment loss is increased or reduced by adjusting the allowance account. If a write-off is later recovered, the recovery is credited to finance costs in the statement of profit or loss and other comprehensive income.

AFS financial assets

For AFS financial assets, the Group assesses at each reporting date whether there is objective evidence that an investment or a group of investments is impaired.

In the case of equity investments classified as AFS, objective evidence would include a significant or prolonged decline in the fair value of the investment below its cost. ‘Significant’ is evaluated against the original cost of the investment and ‘prolonged’ against the period in which the fair value has been below its original cost. When there is evidence of impairment, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investment previously recognised in the statement of profit or loss – is removed from other comprehensive income (OCI) and recognised in the statement of profit or loss. Impairment losses on equity investments are not reversed through profit or loss; increases in their fair value after impairment are recognised in OCI.

The determination of what is ‘significant’ or ‘prolonged’ requires judgement. In making this judgement, the Group evaluates, among other factors, the duration or extent to which the fair value of an investment is less than its cost.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, trade and other payables or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of interest-bearing loans and borrowings and trade and other payables, net of directly attributable transaction costs.

The Group’s financial liabilities include trade and other payables, interest-bearing loans and borrowings including bank overdrafts, and derivative financial instruments and financial liabilities at FVTPL.

Subsequent measurement

The measurement of financial liabilities depends on their classification as described below.

Financial liabilities at fair value through profit or loss

Financial liabilities at FVTPL include financial liabilities held for trading and financial liabilities designated upon initial recognition as at FVTPL.

Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IAS 39. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the statement of profit or loss and other comprehensive income.

34. Summary of significant accounting policies (continued)

b) Financial instruments – initial recognition and subsequent measurement (continued)

Loans and borrowings and trade and other payables

This is the category most relevant to the Group. After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the statement of profit or loss and other comprehensive income when the liabilities are derecognised, as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit or loss and other comprehensive income.

This category generally applies to interest-bearing loans and borrowings and trade and other payables. For more information, refer to Notes 23 and 26.

Derecognition

A financial liability is derecognised when the associated obligation is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in profit or loss and other comprehensive income.

Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of financial position comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, but exclude any restricted cash. Restricted cash is not available for use by the Group and therefore is not considered highly liquid – for example, cash set aside to cover site restoration obligations.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

Derivative financial instruments

The Group uses derivative financial instruments, such as forward commodity contracts, to hedge its commodity price risks. However, such contracts are not accounted for as designated hedges under IAS 39. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative. Any gains or losses arising from changes in the fair value of derivatives are taken directly to the statement of profit or loss and other comprehensive income.

Commodity contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the Group's expected purchase, sale or usage requirements fall within the exemption from IAS 32 *Financial Instruments: Presentation* and IAS 39, which is known as the 'normal purchase or sale exemption'.

For these contracts and the host part of the contracts containing embedded derivatives, they are accounted for as executory contracts. The Group recognises such contracts in its consolidated consolidated statement of financial position only when one of the parties meets its obligation under the contract to deliver either cash or a non-financial asset. An analysis of fair values of financial instruments and further details as to how they are measured are provided in Note 28.

Current versus non-current classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset is current when it is either:

- Expected to be realized or intended to be sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within 12 months after the reporting period; or
- Cash and cash equivalents unless restricted from being executed or used to settle a liability at least 12 months after the reporting period.

34. Summary of significant accounting policies (continued)

b) Financial instruments – initial recognition and subsequent measurement (continued)

All other assets are classified as non-current.

A liability is current when either:

- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is expected to be settled within 12 months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period.

The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

c) Revenue

Revenue is recognised to the extent it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable, net of discounts, rebates, and sales taxes or duty. The Group has concluded that it is the principal in all of its revenue arrangements since it is the primary obligor in its revenue arrangements, has pricing latitude and is also exposed to inventory and credit risks.

Revenue from the sale of goods is recognised when the significant risks and rewards of ownership have been transferred. This generally occurs upon delivery of goods to the specified location in Yerevan. Revenue is measured at the fair value of the consideration received or receivable.

The following criteria are also applicable to other specific revenue transactions:

Copper and molybdenum in concentrates, ferro-molybdenum and sintered molybdenum sales

Contract terms for the Group's sales of copper in concentrate and molybdenum in concentrates (metal in concentrate), ferro-molybdenum and sintered molybdenum to customers allow for price adjustments based on the market price at the relevant quotation point stipulated in the contract.

These are referred to as provisional pricing arrangements and are such that the selling price for metal in concentrate, ferro-molybdenum and sintered molybdenum is based on prevailing spot prices on a specified future date after shipment to the customer (the quotation period, or QP). Adjustments to the sales price occur based on movements in quoted market prices during the QP. Typically, the future QP is up to two months after the month of shipment.

Sales contracts for metal in concentrate, ferro-molybdenum and sintered molybdenum that have provisional pricing features are considered to contain an embedded derivative, which is required to be separated from the host contract for accounting purposes from the date of shipment. The embedded derivative is the forward contract for which the underlying sale is subsequently adjusted. Revenue is recognised for these commodities at the date of shipment and is based on the most recently determined estimate of metal in concentrate (based on initial assay results) and the average spot price of the metal for previous five working days of the date of shipment and previous one working day of the date of shipment for copper and molybdenum respectively.

The Group's provisionally priced sales contracts contain an embedded derivative that, because it is unrelated to the commodity sale, is required to be separated from the host contract for accounting purposes. The embedded derivative is recorded as a trade receivable or advance received for provisionally priced sales on the statement of financial position with a corresponding adjustment to revenue and marked to market (fair value) through revenue each period with reference to the appropriate commodity forward curve until the date of final settlement.

d) Donations to social programs

To the extent that the Group's contributions to social programs benefit the community at large and are not restricted to the Group's employees, they are recognised as Donations to social programs in profit or loss as incurred.

34. Summary of significant accounting policies (continued)

e) Finance income and costs

The Group's finance income and finance costs include:

- Interest income;
- Interest expense;
- Unwinding of discount on provision for site restoration and provision for termination benefits;
- Net fair value gains/losses on financial instruments through profit and loss.

Interest income or expense is recognised using the effective interest method.

Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

Gain/losses on financial instruments through profit or loss are realized only when cash settlement is made.

f) Foreign currency

Foreign currency translation

Transactions in foreign currencies are initially recorded in the functional currency, converted at the rate of exchange ruling at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated at the functional currency rate of exchange ruling at the reporting date. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the period, adjusted for effective interest and payments during the period, and the amortised cost in foreign currency translated at the exchange rate at the end of the reporting period.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transaction. Foreign currency differences arising in retranslation are recognised in profit or loss.

g) Employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

i. Termination benefits

Termination benefits are expensed when the Group can no longer withdraw the offer of those benefits. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

h) Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognised in profit or loss except to the extent that it relates to items recognised directly in equity or in other comprehensive income.

i. Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from, or paid to, the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax relating to items recognised directly in other comprehensive income or equity is recognized in other comprehensive income or equity and not in profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations where applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

34. Summary of significant accounting policies (continued)

h) Income tax (continued)

ii. Deferred tax

Deferred tax is provided using the balance sheet method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- Where the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit (tax loss).
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled by the parent, investor or venturer and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry-forward of unused tax credits and any unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax credits and unused tax losses can be utilised, except:

- Where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available, against which the temporary differences can be utilized.

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 profit will be available to allow all or part of the deferred income tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that future taxable profit will be available to allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax relating to items recognised in other comprehensive income or equity is recognised in other comprehensive income or equity and not in profit or loss.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognised subsequently if new information about facts and circumstances arises. The adjustment is either treated as a reduction to goodwill (as long as it does not exceed goodwill) if it occurred during the measurement period or if outside the measurement period, it is recognised in the statement of profit or loss and other comprehensive income.

Significant judgements, estimates and assumptions

Judgement is required to determine which arrangements are considered to be a tax on income as opposed to an operating cost. Judgement is also required to determine whether deferred tax assets are recognised in the statement of financial position. Deferred tax assets, including those arising from unutilised tax losses, require the Group to assess the likelihood that the Group will generate sufficient taxable earnings in future periods, in order to utilise recognised deferred tax assets.

Assumptions about the generation of future taxable profits depend on management's estimates of future cash flows. These estimates of future taxable income are based on forecast cash flows from operations (which are impacted by production and sales volumes, commodity prices, reserves, operating costs, closure and site restoration costs, capital expenditure, dividends and other capital management transactions). To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Group to realise the net deferred tax assets recorded at the reporting date could be impacted.

In addition, future changes in tax laws in the jurisdictions in which the Group operates could limit the ability of the Group to obtain tax deductions in future periods.

34. Summary of significant accounting policies (continued)

i) Royalties

In addition to corporate income taxes, the Group's consolidated financial statements also include, and recognize as taxes on income, other types of taxes on net income.

Royalties, resource rent taxes and revenue-based taxes are accounted for under IAS 12 when they have the characteristics of an income tax. This is considered to be the case when they are imposed under government authority and the amount payable is based on taxable income – rather than physical quantities produced or as a percentage of revenue – after adjustment for temporary differences. For such arrangements, current and deferred income tax is provided on the same basis as described above for other forms of taxation. Obligations arising from royalty arrangements and other types of taxes that do not satisfy these criteria are recognised as current provisions and included in other expenses.

Royalties are calculated using rates enacted or substantively enacted at the reporting date. Royalties are recognised in profit or loss annually based on the combination of the revenues and taxable income adjusted as per the guidelines and requirements in the applicable laws and regulations. Royalties consist of two components: royalty calculated at 4% of revenue and royalty calculated as 12.5% of taxable income adjusted as per the guidelines and requirements in the applicable laws and regulations.

Management believes that royalty expense does not represent an income tax as the total revenue factor (a gross measure) is significant in determining the amount of royalty payable. Royalties are treated as other operating expenses.

j) Inventories

Copper and molybdenum in concentrate, metal in circuit and ore stockpiles are physically measured or estimated and valued at the lower of cost or net realisable value. Net realisable value is the estimated future sales price of the product the entity expects to realise when the product is processed and sold, less estimated costs to complete production and bring the product to sale. Where the time value of money is material, these future prices and costs to complete are discounted.

If the ore stockpile is not expected to be processed in 12 months after the reporting date, it is included in non-current assets and the net realisable value is calculated on a discounted cash flow basis. Cost is determined by using the weighted-average method and comprises direct purchase costs and an appropriate portion of fixed and variable overhead costs, including depreciation and amortisation, incurred in converting materials into finished goods, based on the normal production capacity. The allocation of costs between joint products is based on the relative sales value of each product at the completion of production. Separately identifiable costs of conversion of each metal are specifically allocated.

Materials and supplies are valued at the lower of cost or net realisable value. The costs of materials and supplies are based on the first-in first-out principle, and include expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition.

Any provision for obsolescence is determined by reference to specific items of stock. A regular review is undertaken to determine the extent of any provision for obsolescence.

k) Property, plant and equipment

i. Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and impairment losses. The cost of property, plant and equipment at 1 January 2007, the date of transition to IFRSs, was determined by reference to its fair value at that date ("deemed cost").

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

If significant parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and is recognised net within other income/other expenses in profit or loss.

34. Summary of significant accounting policies (continued)

k) Property, plant and equipment (continued)

ii. Subsequent expenditure

The cost of replacing a component of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the component will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced component is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

iii. Depreciation

Items of property, plant and equipment are depreciated from the date that they are installed and are ready for use, or in respect of internally constructed assets, from the date that the asset is completed and ready for use. Depreciation is based on the cost of an asset less its residual value.

For assets used in the production line, depreciation is charged based on the units of production method using the total estimated productivity and the actual extracted and treated ore. For all other assets, depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. Land is not depreciated.

The estimated useful lives of significant items of property, plant and equipment for the current and comparative periods are as follows:

	Units of production method	*Straight-line method*
Buildings		
Mine related workshop buildings and constructions	average capacity from 182 to 303 million tons	
Other buildings		10 to 100 years
Plant and equipment		
Mine related plant and equipment	average capacity from 18 to 352 million tons	
Other plant and equipment		2 to 100 years
Fixtures and fittings		2 to 70 years
Mining facilities		

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

l) Stripping (waste removal) costs

As a part of its mining operations, the Group incurs stripping (waste removal) costs both during the development phase and production phase of its operations. Stripping costs incurred in the development phase of a mine, before the production phase commences (development stripping), are capitalised as part of the cost of constructing the mine and subsequently amortised over its useful life using a units of production (UOP) method. The capitalization of development stripping costs ceases when the mine/component is commissioned and ready for use as intended by management.

Stripping activities undertaken during the production phase of a surface mine (production stripping) are accounted for as set out below. After the commencement of production, further development of the mine may require a phase of unusually high stripping that is similar in nature to development phase stripping.

The cost of such stripping is accounted for in the same way as development stripping (as outlined above).

Production stripping is generally considered to create two benefits, being either the production of inventory or improved access to the ore to be mined in the future. Where the benefits are realised in the form of inventory produced in the period, the production stripping costs are accounted for as part of the cost of producing those inventories. Where the benefits are realised in the form of improved access to ore to be mined in the future, the costs are recognised as a non-current asset, referred to as a ‘stripping activity asset’, if the following criteria are met:

- Future economic benefits (being improved access to the ore body) are probable;
- The component of the ore body for which access will be improved can be accurately identified;
- The costs associated with the improved access can be reliably measured.

If any of the criteria are not met, the production stripping costs are charged to profit or loss as operating costs as they are incurred.

34. Summary of significant accounting policies (continued)

l) Stripping (waste removal) costs (continued)

In identifying components of the ore body, the Group works closely with the mining operations personnel for each mining operation to analyse each of the mine plans. Generally, a component will be a subset of the total ore body, and a mine may have several components. The mine plans, and therefore the identification of components, can vary between mines for a number of reasons. These include, but are not limited to: the type of commodity, the geological characteristics of the ore body, the geographical location, and/or financial considerations. Given the nature of the Group's operations, components are generally either major pushbacks or phases and they generally form part of a larger investment decision which requires board approval.

The stripping activity asset is initially measured at cost, which is the accumulation of costs directly incurred to perform the stripping activity that improves access to the identified component of ore, plus an allocation of directly attributable overhead costs. If incidental operations are occurring at the same time as the production stripping activity, but are not necessary for the production stripping activity to continue as planned, these costs are not included in the cost of the stripping activity asset.

If the costs of the inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. This production measure is calculated for the identified component of the ore body and is used as a benchmark to identify the extent to which the additional activity of creating a future benefit has taken place. The Group uses the expected volume of waste extracted compared with the actual volume for a given volume of ore production of each component.

The stripping activity asset is accounted for as an addition to, or an enhancement of, an existing asset, being the mine asset, and is presented as a separate line in the statement of financial position. This forms part of the total investment in the relevant cash generating unit(s), which is reviewed for impairment if events or changes of circumstances indicate that the carrying value may not be recoverable.

The stripping activity asset is subsequently depreciated using the UOP method over the life of the identified component of the ore body that became more accessible as a result of the stripping activity. Economically recoverable reserves, which comprise proven and probable reserves, are used to determine the expected useful life of the identified component of the ore body. The stripping activity asset is then carried at cost less depreciation and any impairment losses.

m) Intangible assets

i. Software

Software that are acquired by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses.

ii. Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognised in the profit or loss as incurred.

iii. Amortisation

Amortisation is calculated over the cost of the asset, or other amount substituted for cost, less its residual value.

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use since this most closely reflects the expected pattern of consumption of future economic benefits embodied in the asset. The estimated useful lives for the current and comparative periods are as follows:

- Software 10 years.

Amortisation methods, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate.

n) Exploration and evaluation assets

i. Pre-licence costs

Pre-licence costs relate to costs incurred before the Group has obtained legal rights to explore in a specific area. Such costs may include the acquisition of exploration data and the associated costs of analysing that data. These costs are expensed in the period in which they are incurred.

34. Summary of significant accounting policies (continued)

n) Exploration and evaluation assets (continued)

ii. Exploration and evaluation expenditure

Exploration and evaluation (E&E) activity involves the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource.

Exploration and evaluation activity includes:

- Researching and analysing historical exploration data;
- Gathering exploration data through geophysical studies;
- Exploratory drilling and sampling;
- Determining and examining the volume and grade of the resource;
- Surveying transportation and infrastructure requirements;
- Conducting market and finance studies.

License costs paid in connection with a right to explore in an existing exploration area are capitalised and amortised over the term of the permit.

Once the legal right to explore has been acquired, exploration and evaluation expenditure is charged to profit or loss as incurred, unless the Group concludes that a future economic benefit is more likely than not to be realised. These costs include directly attributable employee remuneration, materials and fuel used, surveying costs, drilling costs and payments made to contractors.

In evaluating whether the expenditures meet the criteria to be capitalised, several different sources of information are used. The information that is used to determine the probability of future benefits depends on the extent of exploration and evaluation that has been performed.

E&E expenditure incurred on licenses where a resource has not yet been established is expensed as incurred until sufficient evaluation has occurred in order to establish that the technical feasibility and commercial viability of extracting a mineral resource are demonstrable. Costs expensed during this phase are included in ‘Other expenses’ in the statement of profit or loss and other comprehensive income.

E&E assets acquired in a business combination are initially recognised at fair value, including resources and exploration potential that is considered to represent value beyond proven and probable reserves. Similarly, the costs associated with acquiring an E&E asset (that does not represent a business) are also capitalised. They are subsequently measured at cost less accumulated impairment.

Once commercial reserves are found, E&E assets are tested for impairment and transferred to ‘Mine facilities’ which is a sub-category of ‘Property, plant and equipment’. No amortisation is charged during the E&E phase.

iii. Impairment of E&E assets

E&E assets should be assessed for impairment when facts and circumstances suggest that the carrying amount of an E&E asset may exceed its recoverable amount. Under IFRS 6 one or more of the following facts and circumstances could indicate that an impairment test is required. The list is not intended to be exhaustive:

- The period for which the entity has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- Substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- Exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area; and
- Sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the E&E asset is unlikely to be recovered in full from successful development or by sale.

The Group determined that there is an indication of impairment of exploration and evaluation asset as at 31 December 2017. For details on impairment of E&E asset please see Note 17.

34. Summary of significant accounting policies (continued)

n) Exploration and evaluation assets (continued)

Significant judgements, estimates and assumptions

The application of the Group's accounting policy for E&E expenditure requires judgement to determine whether future economic benefits are likely from either future exploitation or sale, or whether activities have not reached a stage that permits a reasonable assessment of the existence of reserves.

In addition to applying judgement to determine whether future economic benefits are likely to arise from the Group's E&E assets or whether activities have not reached a stage that permits a reasonable assessment of the existence of reserves, the Group has to apply a number of estimates and assumptions. The estimates directly impact when the Group defers E&E expenditure. The deferral policy requires management to make certain estimates and assumptions about future events and circumstances, particularly, whether an economically viable extraction operation can be established. Any such estimates and assumptions may change as new information becomes available. If, after expenditure is capitalised, information becomes available suggesting that the recovery of expenditure is unlikely, the relevant capitalised amount is written off to the statement of profit or loss and other comprehensive income in the period when the new information becomes available.

o) Provisions

i. Site restoration provision

Site restoration costs will be incurred by the Group either while operating, or at the end of the operating life of, the Group's facilities and mine properties. The Group assesses its site restoration provision at each reporting date. The Group recognises a site restoration provision where it has a legal and constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount of obligation can be made. The nature of these restoration activities includes: closing mine, waste sites, tailings dams and related constructions and restoring, reclaiming and revegetating affected areas.

When the liability is initially recognised, the present value of the estimated costs is capitalised by increasing the carrying amount of the related mining assets to the extent that it was incurred as a result of the development/construction of the mine. Costs related to restoration of waste damps and mine closure are provided for at their net present values and recognised in profit or loss.

Changes in the estimated timing of site restoration or changes to the estimated future costs are dealt with prospectively by recognising an adjustment to the site restoration liability and a corresponding adjustment to the asset to which it relates, if the initial estimate was originally recognised as part of an asset measured in accordance with IAS 16, otherwise the change is recognised in profit or loss.

Any reduction in the site restoration liability and, therefore, any deduction from the asset to which it relates, may not exceed the carrying amount of that asset. If it does, any excess over the carrying value is taken immediately to the statement of profit or loss and other comprehensive income.

If the change in estimate results in an increase in the site restoration liability and, therefore, an addition to the carrying value of the asset, the Group considers whether this is an indication of impairment of the asset as a whole, and if so, tests for impairment.

Over time, the discounted liability is increased for the change in present value based on the discount rates that reflect current market assessments and the risks specific to the liability. The periodic unwinding of the discount is recognised in the statement of profit or loss and other comprehensive income as part of finance costs. For closed sites, changes to estimated costs are recognised immediately in the statement of profit or loss and other comprehensive income.