Zangezur Copper Molybdenum Combine CJSC

Consolidated financial statements

For the year ended 31 December 2018
together with independent auditor's report

Contents

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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 2018, 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 2018 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.

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

29 April 2019

Consolidated statement of financial position

as at 31 December 2018

'000 AMD	*Note*	*31 December 2018*	*31 December 2017*
Assets			
Property, plant and equipment	14	209,084,432	194,293,704
Stripping activity asset	15	4,090,780	4,090,780
Inventories	20	12,469,763	3,794,527
Intangible assets		408,203	99,040
Investments at fair value through profit or loss	16	877,159	–
Available-for-sale investments	16	–	928,484
Prepayments for non-current assets	18	3,352,442	6,724,894
Loans given	19	5,573,313	–
Exploration and evaluation asset	17	–	2,438,081
Input VAT		944,875	1,142,475
Other non-current assets		51,000	51,000
Non-current assets		**236,851,967**	**213,562,985**
Inventories	20	20,431,684	13,151,871
Other prepaid taxes		392,188	492,486
Input VAT		3,396,316	1,541,473
Deferred VAT		525,279	548,397
Trade and other receivables	21	9,600,820	13,579,858
Prepayments for current assets	18	6,805,004	8,150,173
Loans given	19	3,341,837	–
Financial assets at fair value through profit or loss	26	254,868	–
Cash and cash equivalents	22	525,227	5,678,570
Other current assets		1,611	1,771
Current assets		**45,274,834**	**43,144,599**
Total assets		**282,126,801**	**256,707,584**
Equity			
Share capital	23	54,966,680	54,966,680
Retained earnings		51,016,078	36,511,813
Total equity		**105,982,758**	**91,478,493**
Liabilities			
Loans and borrowings	24	23,757,102	49,306,949
Provisions	25	3,236,671	3,136,131
Finance lease	28	2,138,218	–
Advances received for provisionally priced sales, contract liabilities	29	39,157,288	24,841,042
Deferred tax liabilities	13	12,978,254	15,706,183
Non-current liabilities		**81,267,533**	**92,990,305**
Loans and borrowings	24	43,591,519	22,831,584
Financial liabilities at fair value through profit or loss	26	–	7,140,890
Provisions	25	406,804	553,462
Finance lease	28	927,246	–
Advances received for provisionally priced sales, contract liabilities	29	22,809,090	13,785,285
Income tax payable	13	-	4,487,225
Royalty payables		1,939,170	5,209,644
Trade and other payables	27	25,202,681	18,230,696
Current liabilities		**94,876,510**	**72,238,786**
Total liabilities		**176,144,043**	**165,229,091**
Total equity and liabilities		**282,126,801**	**256,707,584**

Signed and authorised for release on behalf of the Management of the Group on 29 April 2019

Mger Poloskov
General Director

Vardan Marutyan
Chief Accountant

The accompanying notes 1-37 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 2018

'000 AMD	*Note*	*2018*	*2017*
Revenue	5	199,900,935	188,553,245
Cost of sales	6	(103,087,295)	(98,836,312)
Gross profit		**96,813,640**	**89,716,933**
Other income		1,333,215	556,122
Distribution expenses	7	(10,252,977)	(10,298,126)
Administrative expenses	8	(14,339,312)	(12,663,416)
Donations to social programs	9	(7,900,100)	(3,481,634)
Other expenses	10	(32,353,872)	(24,371,698)
Operating profit		**33,300,594**	**39,458,181**
Allowance for expected credit loss	19,21	(394,771)	–
Finance income	11	3,673,928	312,668
Finance cost	11	(12,395,745)	(23,664,792)
Net foreign exchange gain		88,079	3,862
Profit before income tax		**24,272,085**	**16,109,919**
Income tax expense	13	(8,733,843)	(5,264,349)
Total comprehensive income for the year		**15,538,242**	**10,845,570**

The accompanying notes 1-37 form an integral part of these consolidated financial statements.

Consolidated statement of changes in equity

for the year ended 31 December 2018

'000 AMD	*Share capital (Note 23)*	*Retained earnings*	*Total equity*
As at 1 January 2017	**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**
Balance at 1 January 2018	**54,966,680**	**36,511,813**	**91,478,493**
Impact of adopting IFRS 9 (Note 34)	–	(383,902)	**(383,902)**
Impact of adopting IFRS 15 (Note 34)	–	(650,075)	**(650,075)**
Restated opening balance	**54,966,680**	**35,477,836**	**90,444,516**
Total comprehensive income for the year	–	15,538,242	**15,538,242**
As at 31 December 2018	**54,966,680**	**51,016,078**	**105,982,758**

The accompanying notes 1-37 form an integral part of these consolidated financial statements.

Consolidated statement of cash flows
for the year ended 31 December 2018

'000 AMD	*2018*	*2017*
Operating activities		
Receipts from sales, inclusive of VAT	218,298,208	203,031,277
Payments to suppliers, inclusive of VAT	(124,965,235)	(112,868,825)
Payments to employees, net of personal income tax	(20,463,853)	(15,884,697)
Settlement of financial instruments at fair value through profit or loss	(4,563,573)	(12,536,523)
Income tax paid*	(15,690,502)	–
Payments for taxes other than on income	(5,240,781)	(222,198)
Royalty paid	(12,970,001)	(10,323,209)
Donations to social programs	(5,433,720)	(3,618,069)
Interest paid on long-term advances received	(2,434,340)	–
Banks charges and conversion losses	(1,214,734)	(214,769)
Other receipts	1,859,844	200,514
Other payments	(3,156,122)	(1,010,536)
Net cash from operating activities	**24,025,191**	**46,552,965**
Investing activities		
Expenditure on property, plant and equipment and stripping activity asset	(18,654,085)	(15,777,426)
Proceeds from disposal of property, plant and equipment	1,599	44,200
Loans provided	(797,326)	–
Interest received	48,985	37,980
Income from Artsakh HEK shares	117,115	–
Net cash used in investing activities	**(19,283,712)**	**(15,695,246)**
Financing activities		
Proceeds from loans and borrowings	212,025,762	–
Repayments of loans and borrowings	(215,820,449)	(23,422,190)
Interest paid, including related withholding tax	(5,523,837)	(6,585,458)
Net cash used in financing activities	**(9,318,524)**	**(30,007,648)**
Net (decrease)/increase in cash and cash equivalents	**(4,577,045)**	**850,071**
Cash and cash equivalents at 1 January (Note 22)	5,678,570	4,791,358
Net foreign exchange difference	(576,298)	37,141
Cash and cash equivalents at 31 December (Note 22)	**525,227**	**5,678,570**

* 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. 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 in 2017.

The accompanying notes 1-37 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 33.

Publicly available financial information is produced by the Group's parent company.

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.

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.

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 2018 the Group's current liabilities exceeded its current assets by AMD 49,601,676 thousand.

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.

2. Basis of preparation (continued)

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 2018 and 31 December 2017 were 483.75 AMD and 484.10 AMD to 1 USD, 553.65 AMD and 580.1 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 30.

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 2018. 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.

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.

3. Basis of consolidation (continued)

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 judgments, estimates and assumptions

a) Use of judgments, estimates and assumptions

The preparation of the Group's consolidated financial statements requires management to make judgments, 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 judgments, 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:

Judgments, estimates and assumptions

- Note 15 "Stripping activity asset";
- Note 2 (d) "Functional currency";
- Note 37 (b) "Recognition of revenue";
- Note 37 (g) "Income tax";
- Note 10 "Other expenses" − royalty estimation.
- Note 4 (b) "Ore reserves" − valuation of mineral reserves that are the basis for future cash flow estimates;
- Exploration and evaluation expenditure;
- Note 37 (k) "Property, plant and equipment" − determination of units of production depreciation calculations;
- Note 37 (k) "Property, plant and equipment" − useful lives of property, plant and equipment;
- Note 25 (a) "Provisions";
- Note 37 (a) "Recoverability of assets";
- Note 37 (j) "Inventories";
- Note 30 "Financial instruments and risk management" − fair values of financial instruments;
- Note 21 "Trade and other receivables" – impairment of trade and other receivables.

There were no changes in the accounting policies or management estimates during 2018.

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

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.

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 judgments 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 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	*2018*	*2017*
Revenue from sale of copper concentrate	134,067,520	146,189,567
Revenue from sale of ferro-molybdenum	60,090,531	39,716,526
Revenue from freight/shipping services of copper concentrate	3,552,742	2,396,443
Revenue from provided stripping services	2,086,000	−
Revenue from sale of other products	104,142	250,709
	199,900,935	**188,553,245**

Revenues from sale of concentrates and ferro-molybdenum:

	2018		*2017*	
	'000 AMD	*Dry metric tonnes*	*'000 AMD*	*Dry metric tonnes*
Copper concentrate	134,067,520	242,871	146,189,567	260,646
Ferro-molybdenum	60,090,531	6,980	39,716,526	6,520
	194,158,051		**185,906,093**	

All revenue from copper concentrate and ferro-molybdenum is recognised at a point in time when control transfers (Note 34) and revenue from freight/shipping services is recognised over time as the services are provided.

5. Revenue (continued)

At 31 December 2018 the Group had outstanding provisionally priced sales of AMD 22,805,390 thousand consisting of 18,561 dry metric tonnes of copper concentrate, 893 dry metric tonnes of ferro-molybdenum (2017: AMD 27,610,249 thousand consisting of 29,946 dry metric tonnes of copper concentrate and 651 dry metric tonnes of ferro-molybdenum) which had a fair value of approximately AMD 22,336,268 thousand (2017: AMD 29,969,364 thousand).

6. Cost of sales

'000 AMD	*2018*	*2017*
Cost of sales of copper concentrate and ferro-molybdenum	102,210,290	98,576,113
Cost of provided stripping services	649,266	–
Cost of other sales	227,739	260,199
	103,087,295	**98,836,312**

Cost of sales of copper concentrates and ferro-molybdenum:

'000 AMD	*2018*	*2017*
Materials	30,510,915	30,172,381
Outsourced services	19,831,873	19,631,776
Wages and salaries	17,312,329	14,007,048
Tolling costs	13,230,281	10,906,874
Depreciation	10,555,435	11,302,121
Electricity and gas	10,386,107	12,117,971
Ecology taxes	49,483	55,308
Other	333,867	382,634
	102,210,290	**98,576,113**

Cost of provided stripping services expenses include indirect payroll expenses in the amount of AMD 115,000 thousand (2017: nil) (see Note 12) and depreciation expenses in the amount of AMD 63,334 thousand (2017: nil) (see Note 14).

7. Distribution expenses

'000 AMD	*2018*	*2017*
Transportation of copper concentrate	8,877,543	9,158,401
Transportation of molybdenum concentrate	241,862	211,742
Packaging, sorting and maintenance	224,982	200,084
Other	908,590	727,899
	10,252,977	**10,298,126**

Packaging, sorting and maintenance expenses include indirect payroll expenses in the amount of AMD 122,207 thousand (2017: AMD 89,959 thousand) (see Note 12). There is no depreciation expense included in packaging, sorting and maintenance expenses in 2018 (2017: nil) (see Note 14).

8. Administrative expenses

'000 AMD	*2018*	*2017*
Wages and salaries	5,115,737	4,704,861
Transportation and car maintenance	2,254,118	1,760,472
Audit, consulting and other professional services	1,715,438	951,682
Geological studies and research	1,397,077	1,605,603
Insurance cost and bank charges	723,494	647,538
Rental expenses	455,623	101,049
Office, utility and communication expenses	431,466	380,215
Business trips, trainings, and representative expenses	383,224	231,792
Depreciation and amortization	341,093	218,018
Hedging commission fee	161,354	201,664
Guarantee expense	25,827	544,909
Other	1,334,861	1,315,613
	14,339,312	**12,663,416**

8. Administrative expenses (continued)

Transportation and car maintenance service expenses include indirect payroll expenses in the amount of AMD 559,481 thousand (2017: AMD 243,852 thousand) (see Notes 12) and depreciation expenses in the amount of AMD 324,706 thousand (2017: AMD 237,787 thousand) (see Note 14).

9. Donations to social programs

'000 AMD	*2018*	*2017*
Donations in cash	5,203,683	3,412,860
Non-cash donations	2,696,417	68,774
	7,900,100	**3,481,634**

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

10. Other expenses

'000 AMD	*2018*	*2017*
Royalty expense*	20,566,081	17,842,943
Wages and salaries	2,462,701	1,014,922
Impairment of exploration and evaluation assets	2,438,081	–
Impairment of mining facilities	1,845,992	–
Write off of prepayments and receivables	1,190,513	–
Employee benefits other than salary	804,819	840,500
Taxes other than on income	730,620	554,775
Depreciation	569,711	630,242
Loss on disposal of property and equipment	525,496	1,074,756
Rental expenses	507,000	–
Write-down of inventories	332,343	326,910
Site restoration provision	230,740	–
Fines and penalties	10,299	764,647
Termination benefits	–	114,182
Other	139,476	1,207,821
	32,353,872	**24,371,698**

* Royalty expense consists of two components:

- Royalty calculated at 4% of revenue of AMD 8,703,905 thousand (2017: AMD 7,738,382 thousand);
- Royalty calculated as 12.5% of taxable income of AMD 11,862,176 thousand (2017: AMD 9,681,602 thousand).

Both revenue and taxable income are adjusted as per the guidelines and requirements in the applicable laws and regulations.

In 2017 the Group recognized royalty expense related to prior periods in the amount of AMD 422,959 thousand.

11. Finance income and finance cost

'000 AMD	*2018*	*2017*
Recognised in profit or loss		
Net gain from financial instruments at fair value through profit or loss	3,093,339	–
Interest income from loans given	465,810	123,363
Dividend income from Artsakh HEK OJSC (Note 16)	65,793	151,325
Interest income on bank accounts	48,986	37,980
Finance income	**3,673,928**	**312,668**
Interest expense on loans and borrowings	(10,163,140)	(6,635,138)
Interest expense on advances received for provisionally priced sales	(1,570,299)	(1,740,300)
Unwinding of discount on site restoration provision and provision for termination benefits	(332,407)	(437,161)
Net loss from financial instruments at fair value through profit or loss	–	(14,837,967)
Other interest expenses	(329,899)	(14,226)
Finance cost	**(12,395,745)**	**(23,664,792)**
Borrowing costs capitalized during the period	(586,972)	(1,667,601)

11. Finance income and finance cost (continued)

The capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation is 12.72% (2017: 11.60%). The capitalization rate was estimated as the weighted average of the borrowing costs applicable to the borrowings of the Group that were outstanding during 2018.

Net gain from financial instruments at fair value through profit or loss comprise of realized loss AMD 4,390,165 thousand (2017: loss AMD 8,216,127 thousand) and unrealized gain AMD 7,483,504 thousand (2017: loss AMD 6,621,840 thousand).

12. Personnel costs

'000 AMD	*2018*	*2017*
Wages and salaries	29,280,293	21,908,081
Employee benefits other than salary (Note 10)	804,819	840,500
Termination benefits (Note 25)	−	114,183
	30,085,112	**22,862,764**

Wages and salaries in the amount of AMD 17,427,329 thousand were charged to cost of sales (2017: AMD 14,007,048 thousand), AMD 122,207 thousand to distribution expenses (2017: AMD 89,959 thousand), AMD 5,675,218 thousand to administrative expenses (2017: AMD 4,948,713 thousand), AMD 2,462,701 thousand to other expenses (2017: AMD 1,014,922 thousand), AMD 1,158,131 thousand was capitalized on construction in progress (2017: AMD 413,580 thousand), AMD 627,293 thousand was capitalized on finished goods and inventories (2017: AMD 137,018 thousand), AMD 1,683,754 thousand was capitalized on non-current inventories − ore stockpiles (2017: AMD 1,180,892 thousand), AMD 123,660 thousand (2017: AMD 115,949 thousand) were included in provided digging services.

13. Income tax expense

a) Amounts recognised in profit or loss

The corporate income tax expense comprises:

'000 AMD	*2018*	*2017*
Income tax expense	11,203,277	4,646,217
Adjustment of income tax for the previous period	−	170,133
Deferred tax credit – origination and reversal of temporary differences	(2,469,434)	447,999
Income tax expense	**8,733,843**	**5,264,349**

Armenian legal entities must file individual tax declarations. In 2018 and 2017, statutory income tax rate for Armenian companies was 20%.

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	*2018*	*2017*
Profit before income tax	**24,272,085**	**16,109,919**
Statutory tax rate	20%	20%
Income tax expense at applicable tax rate	**4,854,417**	**3,221,984**
Non-deductible expenses		
Change in tax base of property, plant and equipment due to tax legislation changes	(1,285,782)	−
Correction of tax base of advances received due to change in tax legislation	180,709	−
Deferred tax assets recognised due to increase of estimated tax base of property, plant and equipment in 2018	−	(1,038,395)
Adjustments in respect of current income tax of previous years	−	170,133
Reversal of tax loss carried forward	−	421,913
Change in unrecognized deductible temporary differences and tax losses	76,389	78,632
Other non-deductible expenses	4,908,110	2,410,082
	8,733,843	**5,264,349**

13. Income tax expense (continued)

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 2017	*Origination and reversal of temporary differences*	*31 December 2017*	*Restatement of opening balances*	*Origination and reversal of temporary differences*	*31 December 2018*
Tax effect of taxable temporary differences						
Inventories	199,422	(47,105)	152,317	–	123,833	276,150
Trade and other receivables	–	–	–	258,494	(114,399)	144,095
Prepayments for current assets	–	–	–	–	44,397	44,397
Loans given	–	–	–	–	35,500	35,500
Provision of site restoration	616,387	(53,416)	562,971	–	22,569	585,540
Trade and other payables	–	(146,887)	(146,887)	–	681,784	534,897
Deferred tax asset	**815,809**	**(247,408)**	**568,401**	**258,494**	**793,684**	**1,620,579**
Tax effect of taxable temporary differences						
Property, plant and equipment	(18,486,589)	1,811,976	(16,674,613)	–	2,221,183	(14,453,430)
Exploration and evaluation asset	(90,857)	–	(90,857)	–	90,857	–
Advances received for provisionally prices sales	231,323	(432,543)	(201,220)	–	201,220	–
Loans and borrowings	(968,445)	232,373	(736,072)	–	641,643	(94,429)
Financial assets at fair value through profit or loss	98,732	1,329,446	1,428,178	–	(1,479,152)	(50,974)
Deferred tax liability	**(19,215,836)**	**2,941,252**	**(16,274,584)**	**–**	**1,675,751**	**(14,598,833)**
Net deferred tax liability	**(18,400,027)**	**2,693,844**	**(15,706,183)**	**258,494**	**2,469,435**	**(12,978,254)**

c) Unrecognized deferred tax assets

	1 January 2017	*Origination and reversal of temporary differences*	*31 December 2017*	*Origination and reversal of temporary differences*	*31 December 2018*
Tax losses carried forward	634,660	(21,795)	612,865	(503,373)	109,492
Property, plant and equipment	334,949	(55,059)	279,890	383,798	663,688
Inventories	10,309	(4,927)	5,382	(1,145)	4,237
Provision for site restoration	–	1,645	1,645	44,330	45,975
Deferred tax asset	**979,918**	**(80,136)**	**899,782**	**(76,390)**	**823,392**
Unrecognized deferred tax			**(899,782)**		**(823,392)**

The deductible temporary differences do not expire under current tax legislation. Deferred tax assets have not been recognized 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 utilize 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 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 for the year	(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**
At 1 January 2018	**71,697,919**	**186,130,314**	**2,253,902**	**895,145**	**50,183,365**	**311,160,645**
Additions	887,204	17,596,807	−	231,868	15,486,791	**34,202,670**
Disposals	(2,449,303)	(2,121,754)	−	(66,541)	(1,102,039)	**(5,739,637)**
Impairment	−	−	(1,991,730)	−	−	**(1,991,730)**
Transfers	2,242,422	3,655,813	−	−	(5,898,235)	**−**
At 31 December 2018	**72,378,242**	**205,261,180**	**262,172**	**1,060,472**	**58,669,882**	**337,631,948**
Depreciation						
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)**
At 1 January 2018	**(17,556,092)**	**(98,466,976)**	**(174,456)**	**(669,417)**	**−**	**(116,866,941)**
Depreciation charge for the year	(2,043,938)	(11,554,918)	(35,769)	(116,564)	−	**(13,751,189)**
Disposals	240,005	1,632,307	−	52,564	−	**1,924,876**
Impairment	−	−	145,738	−	−	**145,738**
At 31 December 2018	**(19,360,025)**	**(108,389,587)**	**(64,487)**	**(733,417)**	**−**	**(128,547,516)**
Net book value						
At 31 December 2017	**54,141,827**	**87,663,338**	**2,079,446**	**225,728**	**50,183,365**	**194,293,704**
At 31 December 2018	**53,018,217**	**96,871,593**	**197,685**	**327,055**	**58,669,882**	**209,084,432**

Depreciation expense in the amount of AMD 10,618,769 thousand (2017: AMD 11,302,121 thousand) was charged to cost of sales, nil to distribution expenses in 2018 (2017: nil), AMD 665,799 thousand (2017: AMD 455,765 thousand) to administrative expenses, AMD 569,711 thousand (2017: AMD 630,242 thousand) to other expenses, AMD 1,004,989 thousand (2017: AMD 440,116 thousand) was capitalised on non-current inventories – ore stockpiles, AMD 509,035 thousand (2017: AMD 117,079 thousand) was capitalised on construction in progress, AMD 383,409 thousand (2017: AMD 179,538 thousand) thousand was capitalized on finished goods and inventories.

During 2018 wages and salaries of AMD 1,158,131 thousand were capitalized on construction in progress (2017: AMD 413,580 thousand) (see Note 12).

During 2018 borrowing costs of AMD 586,972 thousand (2017: AMD 1,667,601 thousand) were capitalized on construction in progress (see Note 11).

During 2018 changes in estimate of site restoration provision of AMD 585,909 thousand (2017: AMD 519,166 thousand) were capitalized on related property, plant and equipment (see Note 25).

At 31 December 2018 property, plant and equipment with a carrying amount of AMD 56,701,055 thousand are pledged as security for secured bank loans (see Note 24).

The carrying value of machinery held under finance leases at 31 December 2018 was AMD 3,162,178 thousand (2017: nil) (see Note 28).

At 31 December 2018 the gross book value of fully depreciated property, plant and equipment, which are in use, amounted AMD 56,705,110 thousand (2017: AMD 42,633,886 thousand).

Starting from December 2013 the Subsidiary stopped exploitation activities due to the actual grade of copper and molybdenum extracted being significantly lower than that stated in the exploitation license leading to negative margin on operations.

The Subsidiary has suspended the production process and exploration works in the area near Hankasar mine. In 2018 the Management of the Subsidiary decided to close the mine and concentrate its operation of providing services to the Company. Based on this decision Subsidiary has impaired mining facilities in the amount of AMD 1,845,992 thousand (2017: nil).

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 2018 and 2017.

16. Investments at fair value through profit or loss and available-for-sale investments

'000 AMD	*2018*	*2017*
Investments at fair value through profit or loss		
Artsakh HEK OJSC	877,159	–
	877,159	**–**

'000 AMD	*2018*	*2017*
Available-for-sale investements		
Artsakh HEK OJSC	–	928,484
	–	**928,484**

At 31 December 2018 the Group's investment in Artsakh HEK OJSC's equity ("AHEK") is 6.18% (2017: 6.18%).

The shares are listed in Armenia Stock Exchange OJSC.

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 30.

The Group's exposure to credit and interest rate risks related to investments at fair value through profit or loss is disclosed in Note 30.

17. Exploration and evaluation asset

Exploration and evaluation expenditure relates to costs incurred on the exploration and evaluation of potential mineral reserves. The Group has suspended the production process and exploration works in the area near Hankasar mine and based on Management's decision exploration and evaluation assets in the amount of AMD 2,438,081 thousand were impaired in 2018 (see Note 10).

18. Prepayments

'000 AMD	*2018*	*2017*
Prepayments for non-current assets		
Prepayments for property, plant and equipment	2,864,177	6,379,570
Prepayments for land lease	488,265	345,324
	3,352,442	**6,724,894**
Prepayments for current assets		
Prepayments for inventory	4,174,620	4,705,034
Prepayments for services	2,131,129	3,157,429
Other	499,255	287,710
	6,805,004	**8,150,173**
	10,157,446	**14,875,067**

19. Loans given

In January 2018 the Group concluded an agreement with its parent company on providing loans with total amount of USD 19,231 thousand, with an interest rate at 1m USD-LIBOR+4.95% per annum and with maturity in January 2021. The total carrying amount of the loans given as at 31 December 2018 is AMD 8,915,150 thousand.

The Group's exposure to currency and interest rate risk and a sensitivity analysis for financial assets and liabilities are disclosed in Note 30.

Loans given are classified at Stage 1 for expected credit loss measurement purposes. There have been no transfers between the stages during 2018. The calculated expected credit loss on loans given is AMD 177,498 thousand in 2018, (2017: nil).

20. Inventories

'000 AMD	*2018*	*2017*
Spare parts	8,309,876	5,724,135
Raw materials and consumables	4,984,650	4,480,874
Finished goods	2,676,212	1,882,696
Molybdenum concentrate given for processing*	2,540,296	32,271
Construction materials	218,382	123,973
Other	1,702,268	907,922
Total current inventories	**20,431,684**	**13,151,871**
Non-current inventories – ore stockpiles**	12,469,763	3,794,527
Total inventories at the lower of cost and net realizable value	**32,901,447**	**16,946,398**

* 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 2018 AMD 332,343 thousand (2017: AMD 326,910 thousand) was recognised as a write-down expense for inventories carried at net realisable value in other expenses (see Note 10).

Wages and salaries of AMD 627,293 thousand (2017: AMD 137,018 thousand) (see Note 12) and depreciation of AMD 383,409 thousand (2017: AMD 179,538 thousand) (see Note 14) are capitalized on the balance of current inventories and finished goods.

Wages and salaries of AMD 1,683,754 thousand (2017: AMD 1,180,892 thousand) (see Note 12) and depreciation of AMD 1,004,989 thousand (2017: AMD 440,116 thousand) are capitalized on the balance of non-current inventories − ore stockpiles (see Note 14).

21. Trade and other receivables

'000 AMD	*2018*	*2017*
Trade receivables (not subject to provisional pricing) – amortised cost	8,816,361	1,021,612
Trade receivables (subject to provisional pricing) – fair value	923,451	11,133,866
Other receivables	558,158	1,424,380
Trade and other receivables	**10,297,970**	**13,579,858**
Allowance for expected credit losses	(697,150)	–
Total trade and other receivables	**9,600,820**	**13,579,858**

Trade receivables (not subject to provisional pricing) are non-interest-bearing and are generally on terms of up to 1 year.

Trade receivables (subject to provisional pricing) are non-interest bearing, but as discussed in Note 34, are exposed to future commodity price movements over the quotational period (QP) and, hence, fail the "solely payments of principal and interest" (SPPI) test and are measured at fair value up until the date of settlement. These trade receivables are initially measured at the amount which the Group expects to be entitled, being the estimate of the price expected to be received at the end of the QP. Approximately 90% of the provisional invoice (based on the provisional price (calculated as the average price in the week prior to delivery for copper and the average price in the month prior to delivery for molybdenum)) is received in cash when the goods are loaded onto the ship, which reduces the initial receivable recognised under IFRS 15. The QPs can range between one and two months post shipment and final payment is due between 30-60 days from the end of the QP. Refer Note 30 for details of fair value disclosures.

Set out below is the movements in the allowance for expected credit losses of trade receivables (not subject to provisional pricing):

'000 AMD	*2018*
At 1 January 2018	**(479,877)**
New assets originated	(525,087)
Repaid amount	301,573
Amounts written-off	6,241
At 31 December 2018	**(697,150)**

21. Trade and other receivables (continued)

Set out below is the information about the credit risk exposure on the Group's trade receivables (not subject to provisional pricing).

'000 AMD	*Less than 3 months*	*3-6 months*	*6-9 months*	*9-12 months*	*More than 1 year*	*Total*
31 December 2018						
Gross carrying amount	2,113,143	864,726	2,975,557	2,368,474	1,052,619	**9,374,519**
Expected credit loss	(95,322)	(27,665)	(117,761)	(40,083)	(416,319)	**(697,150)**
Net carrying amount	**2,017,821**	**837,061**	**2,857,796**	**2,328,391**	**636,300**	**8,677,369**

'000 AMD	*Less than 3 months*	*3-6 months*	*6-9 months*	*9-12 months*	*More than 1 year*	*Total*
1 January 2018						
Gross carrying amount	733,364	52,720	107,149	1,071,439	481,320	**2,445,992**
Expected credit loss	(13,854)	(1,986)	(1,760)	(61,087)	(401,190)	**(479,877)**
Net carrying amount	**719,510**	**50,734**	**105,389**	**1,010,352**	**80,130**	**1,966,115**

The table below shows the expected credit loss charges on trade receivables (not subject to provisional pricing) recorded in the statement of comprehensive income for the year ended 31 December 2018:

Trade receivables (not subject to provisional pricing)	*Stage 1 AMD'000*	*Stage 2 AMD'000*	*Stage 3 AMD'000*	*Total AMD'000*
Expected credit loss charges as at 1 January 2018	17,600	74,991	387,286	**479,877**
Expected credit loss charges as at 31 December 2018	240,748	69,116	387,286	**697,150**

22. Cash and cash equivalents

'000 AMD	*2018*	*2017*
Bank balances	525,217	5,678,228
Cash on hand	10	342
Cash and cash equivalents	**525,227**	**5,678,570**

The Group's exposure to currency and interest rate risk and a sensitivity analysis for financial assets and liabilities are disclosed in Note 30.

23. Capital and reserves

a) Share capital

	Ordinary shares	
Number of shares unless otherwise stated	***2018***	***2017***
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.

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.

24. 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 30.

'000 AMD	*2018*	*2017*
Non-current liabilities		
Secured bank loans and credit lines/overdrafts	23,757,102	43,680,955
Unsecured borrowings from shareholder/overdrafts	–	5,625,994
	23,757,102	**49,306,949**
Current liabilities		
Secured bank loans and credit lines	16,950,204	22,831,584
Unsecured loans from other organizations	26,641,315	–
	43,591,519	**22,831,584**

The Group signed a credit line agreement with an Armenian bank in March 2016 with maximum limit of USD 10,000 thousand, which expires in 2020. During 2018, the agreement was amended, as a result the maximum limit was decreased to USD 8,000 thousand. As at 31 December 2018 the outstanding balance under this credit line agreement is nil (2017: AMD 4,405,310 thousand). The credit line is secured by bank account balances of the Group and lands.

Secured bank loans include two loan agreements signed in 2018 with Armenian banks with maturity dates in June 2019 and April 2023 and outstanding balances in the amount of AMD 6,332,864 thousand and AMD 23,757,102 thousand respectively.

Loans and borrowing include also secured bank revolving overdraft facilities with two Armenian banks with maximum limits of USD 13,000 thousand and USD 13,400 thousand. As at 31 December 2018 the outstanding balances are AMD 5,713,241 thousand (2017: AMD 2,983,154 thousand) and AMD 4,914,099 thousand (2017: AMD 3,539,221 thousand) respectively. The overdraft agreements mature in September 2020 and October 2020. The balances as at 31 December 2018 have been classified as current according to the terms of overdraft agreements, the revolving facilities should be repaid within one year since each withdrawal.

Secured bank loans and overdrafts are from the same Armenian banks and are secured by bank account balances and property, plant and equipment of the Group and by bank account balances of the Group and lands respectively (see Note 14).

Terms and debt repayment schedule

Terms and conditions of outstanding loans were as follows:

'000 AMD	*Currency*	*Nominal interest rate*	*Year of maturity*	*Face value*	*Carrying amount*
31 December 2018					
Secured Bank loans	USD	9%	2019-2023	30,552,113	30,079,966
Secured bank overdrafts	USD	9%	2020	10,627,340	10,627,340
Unsecured loans from non-financial organizations	USD	8%-10%	2019-2023	26,641,314	26,641,315
Total interest-bearing liabilities				**67,820,767**	**67,348,621**

'000 AMD	*Currency*	*Nominal interest rate*	*Year of maturity*	*Face value*	*Carrying amount*
31 December 2017					
Secured bank loan	USD	Libor + 6.5%	2021	59,478,206	55,554,439
Secured bank overdrafts	USD	9%	2020	6,522,375	6,522,375
Unsecured borrowing from shareholder	USD	Libor + 4.95%	2021	5,625,994	5,625,994
Secured bank credit line	USD	9%	2019	4,435,725	4,435,725
Total interest-bearing liabilities				**76,062,300**	**72,138,533**

25. Provisions

'000 AMD	*Provision for site restoration*	*Employee termination benefits*	*Total*
Non-current	2,672,272	463,859	**3,136,131**
Current	150,812	402,650	**553,462**
Balance at 1 January 2018	**2,823,084**	**866,509**	**3,689,593**
Provision used during the year	(743,452)	(411,668)	**(1,155,120)**
Changes in estimates	585,909	(38,261)	**547,648**
Additional provisions created (Note 10)	230,740	–	**230,740**
Effect of changes in foreign exchange rate	–	(1,793)	**(1,793)**
Unwinding of discount (Note 11)	270,384	62,023	**332,407**
Balance at 31 December 2018	**3,166,665**	**476,810**	**3,643,475**
Non-current	3,050,170	186,501	**3,236,671**
Current	116,495	290,309	**406,804**

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 2,487,446 thousand as at 31 December 2018 (2017: AMD 2,482,003 thousand).

The total amount of the estimated undiscounted cash flows required to settle the obligation is AMD 7,786,792 thousand (2017: AMD 7,026,800 thousand) considering the effect of average forecasted inflation rate of 3.57% (2017: 3.57%) for Armenia. An annual discount rate of 10.10% (2017: 11.10%) 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 2018. 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 2017 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 238,966 thousand as at 31 December 2018 (31 December 2017: AMD 8,226).

The total amount of the estimated undiscounted cash flows required to settle the obligation is AMD 266,585 thousand (2017: AMD 36,771) considering the effect of average forecasted inflation rate of 3.88% (2017: 3.57%) for Armenia. An annual discount rate of 7.4% (2017: 10.5%) was used to discount restoration costs to be made in 3 years' time from 2022 to 2025. 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 2018. 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 440,253 thousand as at 31 December 2018 (2017: AMD 332,855 thousand).

25. Provisions (continued)

a) Site restoration (continued)

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 10.70% (2017: 12.30%) was used to discount restoration costs to be made in 24 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 2018 relates to the Group's contractual obligation to pay the amount of AMD 751,902 thousand (2017: AMD 940,415 thousand) to the former management of the Group on termination of their employment contracts in July 2014.

An annual discount rate of 8.62% (2017: 5.80%) was used to discount the payments to be made in 1-3 years' time based on the management estimate of the timing of the terminations.

26. Financial instruments at fair value through profit or loss

Financial assets at fair value through profit or loss of AMD 254,868 thousand (2017: financial liabilities at fair value through profit or loss of AMD 7,140,890 thousand) represent the fair value of futures on copper with one counterparty (2017: 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 30.

27. Trade and other payables

'000 AMD	*2018*	*2017*
Current trade and other payables		
Payables for acquisition of inventory and property, plant and equipment	18,073,421	11,355,655
Payables for services received	4,490,433	3,532,265
Payables related to closed derivative transactions	–	1,185,032
Fair value revaluation from provisionally priced sales	740,593	–
Other payables and accrued expenses	1,898,234	2,157,744
Total trade and other payables	**25,202,681**	**18,230,696**

The Group's exposure to credit and currency risks related to trade and other payables are disclosed in Note 30. The Group has interest bearing payables in the amount of USD 2.1 million, with annual interest rate of 6%.

Included in other payables and accrued expenses are non-financial liabilities in the amount of AMD 44,024 thousand (2017: AMD 560,073 thousand).

28. Finance lease

The Group has finance lease contracts for various items of machinery. The Group's obligations under finance leases are secured by the lessor's title to the leased assets. Future minimum lease payments under finance lease together with the present value of the net minimum lease payments are, as follows:

	2018	
'000 AMD	*Undiscounted minimal lease payments*	*Present value*
After one year and not more than five years	800,579	717,857
More than five years	2,956,207	2,347,607
Total minimum lease payments	**3,756,786**	**3,065,464**
Less amounts representing finance charges	(691,322)	–
Present value of minimum lease payments	**3,065,464**	**3,065,464**

29. Advances received for provisionally priced sales, contract liabilities

Included in non-current advances received for provisionally priced sales are advances of AMD 9,735,810 thousand (2017: AMD 14,361,382 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 2016 and 2017 the Group concluded two copper concentrate offtake streaming contracts with prepayment amounts of USD 25 mln and USD 50 mln respectively. According to these two contract terms the Group is obliged to sell 150,000 and 480,000 wet metric tonnes of concentrate during the years 2017-2031 and 2018-2041 respectively with discounted price. As of 31 December 2018 the non-current balance comprised AMD 29,421,478 thousand (2017: AMD 10,479,660 thousand).

Non-current	***2018***	***2017***
Streaming contracts	29,421,478	10,479,660
Non-current advances received for PP sales	9,735,810	14,361,382
	39,157,288	**24,841,042**

Current	***2018***	***2017***
Current advances received for PP sales	20,529,702	12,165,858
Streaming contracts	1,814,063	806,833
Contract liability*	465,325	812,594
	22,809,090	**13,785,285**

* The opening balance of contract liabilities at 1 January 2018 was AMD 812,594 thousand. The movement in contract liabilities from one period to the next depends on the value of deferred revenue relating to freight/shipping services that are still in the process of being provided at period end, i.e., because a shipment of copper concentrate subject to CIP Incoterms is still on the way at period end.

30. 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***	***2018***	***2017***	***2018***	***2017***
Financial liabilities					
Loans and borrowings	Amortised cost	67,348,621	72,138,533	67,348,621	76,576,452

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.

30. Fair values and risk management (continued)

a) Fair value measurement procedures (continued)

Fair value for loans given, trade and other receivables, cash and cash equivalents, loans and borrowings received approximates their carrying amount as at 31 December 2018.

	Fair value measurement using			
'000 AMD	***Quoted prices in active markets (Level 1)***	***Significant observable inputs (Level 2)***	***Significant unobservable inputs (Level 3)***	***Total***
31 December 2018				
Assets measured at fair value				
Investments at fair value through profit or loss (Note 16)				
Investments at fair value through profit or loss	–	–	877,159	**877,159**
Trade and other receivables				
Trade receivables (subject to provisional pricing) – fair value (Copper)	–	923,451	–	**923,451**
Financial assets at fair value through profit or loss (Note 26)				
Commodity futures (copper)	254,868	–	–	**254,868**
Total	**254,868**	**923,451**	**877,159**	**2,055,478**

Fair value for trade and other receivables and cash and cash equivalents approximates their carrying amount as at 31 December 2017.

	Fair value measurement using			
'000 AMD	***Quoted prices in active markets (Level 1)***	***Significant observable inputs (Level 2)***	***Significant unobservable inputs (Level 3)***	***Total***
31 December 2017				
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	**–**	**1,302,015**	**1,985,583**	**3,287,598**
Financial liabilities at fair value through profit or loss (Note 26)				
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 (Note 24)	–	–	(72,138,533)	**(72,138,533)**
Total	**–**	**–**	**(72,138,533)**	**(72,138,533)**

Level 3 Investments at fair value through profit or loss and available-for-sale investments

In 2018 and 2017 the shares of AHEK were not actively traded and their fair value was determined using discounted cash flows techniques.

30. Fair values and risk management (continued)

a) Fair value measurement procedures (continued)

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 2018 are as shown below:

	Valuation technique	*Significant unobservable input*	*Input value or range*	*Sensitivity of the input to fair value*
Investments at fair value through profit or loss	DCF method	WACC	11%	1% increase in the WACC would result in a decrease in fair value by AMD 227,646 thousand.

The Group's principal financial liabilities, other than derivatives, comprise trade and other payables, loans and borrowings. 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 investments at fair value through profit or loss, trade and other receivables, loans given and cash and cash equivalents.

b) Financial risk management

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.

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, loans given, trade receivables and trade payables.

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 and ferro-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 and provisionally priced sales. The impact on equity is the same as the impact on profit before income tax. 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.

30. Fair values and risk management (continued)

b) Financial risk management (continued)

The analysis is based on the assumption that the copper prices move 8.14% 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 2018 increase/(decrease)*	*Effect on profit before tax for the year ended 31 December 2017 increase/(decrease)*
	'000 AMD	*'000 AMD*
Increase 8.14% (2017: 4.27%)	1,290,348	(2,910,742)
Decrease 8.14% (2017: 4.27%)	(1,290,348)	2,910,742

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. As of 31 December 2018 there were no shares of the loans and borrowings with floating rates (2017: share of loans and borrowings received with floating rate – 85%).

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 judgment to decide whether it believes that a fixed or variable rate would be more favorable to the Group over the expected period until maturity.

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 given and interest payables from long-term advances received (with all other variables held constant).

Increase/(decrease) in 1month USD LIBOR rate	*Effect on profit before tax for the year ended 31 December 2018 increase/(decrease)*	*Effect on profit before tax for the year ended 31 December 2017 increase/(decrease)*
	'000 AMD	*'000 AMD*
Increase 0.50% (2017: 0.70%)	(88,835)	(1,000,058)
Decrease 0.15% (2017: 0.08%)	26,650	101,427

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, loans and 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.

30. Fair values and risk management (continued)

b) Financial risk management (continued)

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 2018 increase/(decrease)*	*Effect on profit before tax for the year ended 31 December 2017 increase/(decrease)*
	'000 AMD	*'000 AMD*
USD		
Increase 3.5% (2017: 3.5%)	(452,478)	(3,370,223)
Decrease 3.5% (2017: 3.5%)	452,478	3,370,223
EUR		
Increase 8.0% (2017: 13.7%)	(28,284)	162,215
Decrease 8.0% (2017: 6.3%)	28,284	(74,599)

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.

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

Year ended 31 December 18	*On demand*	*Less than 1 year*	*1-2 years*	*2-5 years*	*Total*
Interest-bearing loans and borrowings	−	51,226,586	7,026,206	14,439,810	**72,692,602**
Accounts payable and accrued liabilities	1,039,030	24,051,637	−	−	**25,090,667**
Finance lease	−	800,579	871,462	2,084,745	**3,756,786**
	1,039,030	**76,078,802**	**7,897,668**	**16,524,555**	**101,540,055**

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**

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.

30. Fair values and risk management (continued)

b) Financial risk management (continued)

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	***2018***	***2017***
Bank balances	525,217	5,678,228
Trade and other receivables	9,600,820	13,579,858
Loans given	8,915,150	–
Financial assets at fair value through profit or loss	254,868	–
	19,296,055	**19,258,086**

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 32.05% (2017: 14.00%) 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 five (2017: six) customers.

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

	Carrying amount	
'000 AMD	***2018***	***2017***
Domestic	6,320,555	6,266,208
Foreign	3,280,265	7,313,650
	9,600,820	**13,579,858**

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

	Carrying amount	
'000 AMD	***2018***	***2017***
Copper and molybdenum customers	923,451	11,133,866
Other products – other customers	8,677,369	2,445,992
	9,600,820	**13,579,858**

Bank balances

The Group held bank balances of AMD 525,217 thousand at 31 December 2018 (2017: AMD 5,678,228 thousand), which represents its maximum credit exposure on these assets. At 31 December 2018 96% of total exposure is held with two B+ rated Armenian banks by Fitch (2017: 90%). The remaining 4% of total exposure at 31 December 2018 is held with top 3 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.

30. Fair values and risk management (continued)

d) Changes in liabilities arising from financing activities

'000 AMD	*Loans and borrowings*
Balance as at 1 January 2017	**93,768,294**
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**
Proceeds from loans and borrowings	212,025,762
Repayment of loans and borrowings	(215,820,449)
Non-cash transactions	9,948,741
Non-cash repayment of loan and interest through set-off	(5,121,365)
Foreign exchange movement	(298,764)
Interest paid	(5,523,837)
Balance as at 31 December 2018	**67,348,621**

31. 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.

31. Contingencies and commitments (continued)

d) Commitments and other contingencies

Capital commitments

The Group did not have any significant capital commitments at 31 December 2018 (2017: nil).

Financial guarantees

In 2018 the Group provided financial guarantees to non-related companies in total amount of USD 54,762,694 or AMD 26,491,453 thousand (2017: nil), the guarantee contracts mature until July of 2019. The ECL calculated for the guarantees is not significant.

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	*2018*	*2017*
Within one year	1,494,138	335,884
After one year but not more than five years	5,516,491	569,199
More than five years	3,872,061	3,730,152
	10,882,690	**4,635,235**

32. 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.

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 2018, LME monthly average closing spot prices ranged from USD 6,020 to USD 7,080 per ton for copper. The LME spot copper price closed at USD 6,485 per ton on 31 March 2019.

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.

32. Operational risks (continued)

b) Copper and molybdenum price volatility (continued)

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 28,997 per ton during 2018 in comparison with USD 19,820 per ton during 2017. The LME spot price of USD 29,250 per ton of molybdenum was registered on 31 March 2019.

33. 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	*2018*	*2017*
Salaries and bonuses		
Short-term employee benefits	1,019,721	1,249,763
Termination benefits (Note 25)	411,668	637,203
	1,431,389	**1,886,966**

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.

The Group's related party transactions are disclosed below.

i. Revenues

'000 AMD	*Transaction value 2018*	*Transaction value 2017*	*Outstanding balance 2018*	*Outstanding balance 2017*
Sale of molybdenum concentrate and ferro-molybdenum				
Shareholders	36,047,178	(15)	(9,912,825)	(9,682,000)
Entities under common control	22,993,851	15	(43,195)	–
Sale of copper concentrate				
Entities under common control	4,162,430	26,751,096	–	2,682,154
Services provided				
Shareholders	800	1,744	80	80
Other related parties	–	–	2,006,186	–
Interest income				
Entities under common control	–	123,363	–	123,729
Other income				
Shareholder	11,249	–	–	–
	63,215,508	**26,876,203**	**(7,949,754)**	**(6,876,037)**

33. Related parties (continued)

b) Transactions with key management personnel (continued)

ii. Expenses

'000 AMD	*Transaction value 2018*	*Transaction value 2017*	*Outstanding balance 2018*	*Outstanding balance 2017*
Purchase of materials				
Shareholders	985,670	5,149	(767,378)	(900)
Entities under common control	70,103	–	–	–
Other related parties	–	3,151,407	–	(466,144)
Purchase of property, plant and equipment				
Shareholders	2,245	327,619	–	(3,892)
Entities under common control	118,412	28,060	–	2,420,500
Services received				
Shareholders	8,325,036	12,076,348	(632,433)	(244,792)
Entities under common control	1,828,602	1,514,017	(8,463)	(23,620)
Other related parties	–	1,808,487	–	(135,236)
Donations provided				
Other related parties	4,378,051	947,257	–	–
Entities under common control	180,000	145,000	–	–
Interest expense on advances received				
Shareholders	724,514	660,241	(60,812)	(1,517,104)
Entities under common control	–	174,333	–	(389,070)
Commission fee				
Entities under common control	161,354	201,664	–	–
	16,773,987	**21,039,582**	**(1,469,086)**	**(360,258)**

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.

iii. Loans and borrowings

'000 AMD	*Transaction value 2018*	*Transaction value 2017*	*Outstanding balance 2018*	*Outstanding balance 2017*
Loans given				
Shareholders	8,600,777	–	8,626,218	–
Interest income on loans given				
Shareholders	465,810	–	466,431	–
Loans and borrowings received				
Shareholders	–	–	–	(4,841,000)
Interest expense on loans and borrowings				
Shareholders	(194,511)	331,878	–	(784,995)
	8,872,076	**331,878**	**9,092,649**	**(5,625,995)**

34. Changes in accounting policies and disclosures

New and amended standards and interpretations

The Group applied IFRS 15 and IFRS 9 for the first time from 1 January 2018. The nature and effect of these changes as a result of the adoption of these new standards are described below. Other than the changes described below, the accounting policies adopted are consistent with those of the previous financial year.

Several other amendments and interpretations applied for the first time in 2018, but did not have an impact on the consolidated financial statements of the Group and, hence, have not been disclosed. The Group has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 and its related amendments supersede IAS 11 *Construction Contracts*, IAS 18 *Revenue and Related Interpretations*. It applies to all revenue arising from contracts with its customers and became effective for annual periods beginning on or after 1 January 2018. IFRS 15 establishes a five-step model to account for revenue arising from contracts with customers. It requires revenue to be recognised when (or as) control of a good or service transfers to a customer 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.

IFRS 15 requires entities to exercise judgment, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard requires enhanced and extensive disclosures about revenue to help investors better understand the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

The Group adopted IFRS 15 using the modified retrospective method of adoption and has not restated comparative information. Therefore, the comparative information for 2017 is reported under IAS 18 and is not comparable to the information presented for 2018. Differences arising from the adoption of IFRS 15 have been recognised directly in retained earnings as of 1 January 2018 and are disclosed below.

Overall impact

The Group’s revenue from contracts with customers comprises three main streams being the sale of copper and molybdenum in concentrate and ferro-molybdenum. The Group undertook a comprehensive analysis of the impact of the new revenue standard based on a review of the contractual terms of its principal revenue streams with the primary focus being to understand whether the timing and amount of revenue recognised could differ under IFRS 15. For all of the Group’s revenue streams, except for some metal in concentrate sales sold under Carriage and Insurance Paid (CIP Incoterms) to Main Chinese port (see “Freight/shipping services” commentary below for further discussion), the nature and timing of satisfaction of the performance obligations, and, hence, the amount and timing of revenue recognised under IFRS 15, is the same as that under IAS 18. There were some differences noted in relation to the CIP arrangements that resulted in some adjustments to the opening balances with the impact on the retained earnings. See Note 37 below for the Group’s IFRS 15 revenue recognition accounting policies.

Impact on statement of profit or loss

Copper and molybdenum concentrate (metal in concentrate) sales: there were no changes identified with respect to the timing of revenue recognition in relation to metal in concentrate, as control transfers to customers at the date of shipment, which is consistent with the point in time when risks and rewards passed under IAS 18. There were some reclassification changes arising from metal in concentrate sales that have provisional pricing terms.

However, there has been a change in the amount of revenue recognised for some metal in concentrate sales sold under CIP Incoterms where the Group provides freight/shipping services. This is because these services are now considered to represent separate performance obligations which are satisfied at a different point in time from the metal in concentrate. Therefore, some of the transaction price that was previously all allocated to the metal in concentrate under IAS 18 is now required to be allocated to these new performance obligations under IFRS 15. This freight/shipping revenue has been disclosed separately. Disaggregated revenue disclosures are provided at Note 5.

Provisionally priced commodity sales: as discussed in Note 37 below, some of the Group’s sales of metal in concentrate to customers contain terms which allow for price adjustments based on the market price at the end of a quotational period (QP) stipulated in the contract – these are referred to as “provisionally priced sales”. Under previous accounting standards (IAS 18 *Revenue* and IAS 39 *Financial Instruments: Recognition and Measurement*), provisionally priced sales were considered to contain an embedded derivative (ED), which was required to be separated from the host contract for accounting purposes from the date of shipment. Revenue was initially recognised for these arrangements at the date of shipment (which was when the risks and rewards passed) and was based on the most recently determined estimate of metal in concentrate (based on initial assay results) and the estimated forward price that the entity expected to receive at the end of the QP, determined at the date of shipment. Subsequent changes in the fair value of the provisionally priced sales were recognised ED and were presented as revenue corrections.

34. Changes in accounting policies and disclosures (continued)

New and amended standards and interpretations (continued)

Under IFRS 15, the accounting for this revenue will remain unchanged in that revenue will be recognised when control passes to the customer (which will continue to be the date of shipment) and will be measured at the amount to which the Group expects to be entitled. This will be the estimate of the price expected to be received at the end of the QP, i.e. the forward price. IFRS 9 does not prohibit showing such movements as an adjustment to revenue.

Freight/shipping services: as noted above, a small proportion of the Group's metal in concentrate sales are sold under CIP Incoterm, whereby the Group is responsible for providing freight/shipping services after the date that it transfers control of the metal in concentrate to the customer. Under IAS 18, freight/shipping services were not accounted for as separate services. Instead, all of the revenue relating to the sale was recognised at the date of loading and presented as metal in concentrate revenue. Under IFRS 15, it has been concluded that the provision of these services represents separate performance obligations and the Group acts as principal.

As a result, under IFRS 15, a portion of the transaction price is now required to be allocated to these performance obligations and will be recognised over time, on a gross basis, as the services are provided. In some instances, the Group receives a portion of the transaction price in cash for each shipment at or near the date of shipment under a provisional invoice. Given this, a portion of the transaction price relating to these freight/shipping services is received in advance of the Group providing these services. Such amounts have been recognised as a contract liability upon receipt under IFRS 15 and are then recognised as revenue over time as the services are provided.

Given the nature of the Group's commodity shipping profile, most of these services are completed in the same reporting period that control of the underlying metal in concentrate passes to the customer with a small percentage of shipments subject to these Incoterms being on the way over a reporting period end. Also, freight/shipping revenue has been separately disclosed. Disaggregated revenue disclosures are provided at Note 5. Refer below for a summary of the impact of these changes on the statement of profit or loss and other comprehensive income and the statement of financial position.

Other impacts

The change did not have a material impact on other comprehensive income for the year. There was no net impact on the statement of cash flows.

Summary of impact of change due to freight and shipping:

Statement of financial position (1 January 2018 and 31 December 2017):

AMD'000	*Retained earnings*
Retained earnings	
Closing balance under IAS 18 (31 December 2017)	**34,663,659**
Revenue deferral under IFRS 15*	(812,594)
Deferred tax in relation to the above	162,519
Restated opening balance under IFRS 15 (1 January 2018)	**34,013,584**
Total change in equity due to adopting IFRS 15	**650,075**

* This relates to the deferral of AMD 812,594 thousand of revenue as at 31 December 2017 for freight/shipping services which were provided in 2018 and, hence, was recognised as revenue in 2018.

We changed the presentation of revenue from contracts with customers, to comply with the requirements of IFRS 15 and made the following disaggregation adjustment (see Note 5):

Revenue	*31 December 2017*	*Disaggregation adjustment*	*31 December 2017*
Copper concentrate	148,586,010	(2,396,443)	146,189,567
Ferro-molybdenum	39,716,526	–	39,716,526
Freight/shipping services copper concentrate	–	2,396,443	2,396,443
	188,302,536	**–**	**188,302,536**

34. Changes in accounting policies and disclosures (continued)

New and amended standards and interpretations (continued)

IFRS 9 Financial Instruments

IFRS 9 Financial Instruments replaces IAS 39 *Financial Instruments: Recognition and Measurement* for annual periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting.

The Group has applied IFRS 9 retrospectively, with the initial application date of 1 January 2018. The Group has not restated comparative information for 2017 for financial instruments in the scope of IFRS 9. Therefore, the comparative information for 2017 is reported under IAS 39 and is not comparable to the information presented for 2018. Differences arising from the adoption of IFRS 9 have been recognised directly in retained earnings as of 1 January 2018 and are disclosed below.

(a) Classification and measurement

Under IFRS 9, there is a change in the classification and measurement requirements relating to financial assets. Previously, there were four categories of financial assets: loans and receivables, fair value through profit or loss, held to maturity and available for sale. Under IFRS 9, financial assets are either classified as amortised cost, fair value through profit or loss or fair value through other comprehensive income.

For debt instruments, the classification is based on two criteria: the Group's business model for managing the assets; and whether the instruments' contractual cash flows represent 'solely payments of principal and interest' (SPPI) on the principal amount outstanding. A financial asset can only be measured at amortised cost if both of the following are satisfied:

- Business model: the objective of the business model is to hold the financial asset for the collection of the contractual cash flows;
- Contractual cash flows: the contractual cash flows under the instrument relate solely to payments of principal and interest.

The assessment of the Group's business model was made as of the date of initial application, 1 January 2018, and then applied retrospectively to those financial assets that were not derecognised before 1 January 2018. The assessment of whether contractual cash flows on debt instruments are SPPI was made based on the facts and circumstances as at the initial recognition of the assets.

The classification and measurement requirements of IFRS 9 did not have a significant impact on the Group other than to change the presentation of balances relating to provisionally priced sales.

Financial assets

The Group continued measuring at fair value all financial assets previously held at fair value under IAS 39. The following are the changes in the classification of the Group's financial assets:

- Trade receivables (not subject to provisional pricing), Other current financial assets (i.e., Other receivables and Loans to joint arrangements) previously classified as Loans and receivables: these were assessed as being held to collect contractual cash flows and give rise to cash flows representing SPPI. These are now classified and measured as Debt instruments at amortised cost.
- Trade receivables (subject to provisional pricing) and Quotational period derivatives: prior to the adoption of IFRS 9, the exposure of provisionally priced sales to commodity price movements over the QP, previously led to embedded derivatives (QP derivatives) being separated from the host trade receivable and accounted for separately. Under IFRS 9, embedded derivatives are no longer separated from financial assets. Instead, the exposure of the trade receivable to future commodity price movements will cause the trade receivable to fail the SPPI test. Therefore, the entire receivable is now required to be 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. The Group presents such fair value changes as revenue adjustment. There was an immaterial impact on the statement of financial performance and the statement of profit or loss and other comprehensive income arising from this change. The key impact was on presentation and disclosure, including the IFRS 13 *Fair Value Measurement* disclosures see Note 30.

34. Changes in accounting policies and disclosures (continued)

New and amended standards and interpretations (continued)

In summary, upon the adoption of IFRS 9, the Group had the following required or elected reclassifications for financial assets:

AMD'000	*IAS 39 measurement Category*	*IAS 39 measurement Amount*	*Reclas-sifications*	*Re-measurement ECL*	*IFRS 9 Amount*	*IFRS 9 Category*
Financial assets						
From: available-for-sale financial assets	AFS[1]	877,159	(877,159)	–	N/A	N/A
To: investments at fair value through profit or loss		–	877,159	–	877,159	FVTPL
Trade and other receivables	L&R[2]	2,445,992	–	(479,877)	1,966,115	Amortised cost
Total assets		**3,323,151**	**–**	**(479,877)**	**2,843,274**	

1. AFS: Available-for-sale.
2. L&R: Loans and receivables.

The impact of transition to IFRS 9 on retained earnings is as follows:

AMD'000	*Retained earnings*
Retained earnings	
Closing balance under IAS 39 (31 December 2017)	**36,511,813**
Recognition of IFRS 9 ECLs including those measured at FVOCI	(479,877)
Deferred tax in relation to the above	95,975
Restated opening balance under IFRS 9 (1 January 2018)	**36,127,911**
Total change in equity due to adopting IFRS 9	**383,902**

The following table reconciles the aggregate opening credit loss allowances under IAS 39 to the ECL allowances under IFRS 9.

AMD'000	*Credit loss allowance under IAS 39 at 31 December 2017*	*Re-measurement*	*ECL under IFRS 9 at 1 January 2018*
Impairment allowance for			
Trade and other receivables	–	479,877	479,877
	–	**479,877**	**479,877**

Financial liabilities

The Group has not designated any financial liabilities as at fair value through profit or loss. There are no changes in classification and measurement for the Group's financial liabilities.

Other impacts

The change did not have material impact on the Group's statement of cash flows.

(b) Impairment

The adoption of IFRS 9 has changed the Group's accounting for impairment losses for financial assets by replacing IAS 39's incurred loss approach with a forward-looking expected credit loss (ECL) approach. IFRS 9 requires the Group to recognise an allowance for ECLs for all debt instruments not held at fair value through profit or loss and contract assets in the scope of IFRS 15. For the respective disclosures of the impact of IFRS 9 on calculation of ECL please see the Note 21.

35. Events after the reporting period

From January to April 2019 the Group repaid secured loans to Armenian banks in the amount of USD 18,587 thousand (AMD 9,064,657 thousand) including interest repayments.

In March 2019 the Group entered into a secured loan agreement and received a loan in the amount of USD 70,000 thousand (AMD 34,022,955 thousand). The loan matures in January 2022.

In March 2019 the Group repaid unsecured loans from non-financial organizations in the amount of USD 34,830 thousand (AMD 17,015,479 thousand).

36. 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 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.

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.

Transition to IFRS 16

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. The Group plans to adopt IFRS 16 using the modified retrospective approach, which means it will apply the standard from 1 January 2019, the cumulative impact of adoption will be recognised as at 1 January 2019 and comparatives will not be restated. The Group will elect to use the exemptions proposed by the standard on lease contracts for which the lease terms ends within 12 months as of the date of initial application, and lease contracts for which the underlying asset is of low-value.

In 2018, the Group continued to progress its detailed impact assessment and implementation project of IFRS 16. Much of the early part of 2018 was spent focusing on reviewing contracts, aggregating data to support the evaluation of the accounting impacts and identifying where key policy decisions were required. The Group will implement a new lease accounting system which will be used for the majority of the Group's leases. Work is currently underway to configure the system, to gather and load the data required and to test the system. Further work on process improvements and reaching conclusions on the Group's accounting interpretations is continuing. In addition, the Group is aware that implementation activities of other corporates continues and practical application of the new standard will continue to develop and emerge. Given this, the Group will closely monitor these developments and assess whether there is any impact on the positions taken.

36. Standards issued but not yet effective (continued)

IFRS 16 Leases (continued)

Impact on the statement of financial position (increase/(decrease)) as at 1 January 2019:

	'000 AMD
Assets	
Property, plant and equipment (right-of-use assets)	6,385,108
Liabilities	
Lease liabilities	(6,385,108)
Net impact on equity	–

Net impact on equity

Work completed by the Group to date indicates the new leases standard is expected to have a material effect on the Group's financial statements as it will significantly increase the Group's recognised assets and liabilities (as described above). In addition, compared with the existing accounting for operating leases, the classification and timing of expenses will be impacted which will lead to some improvement in the Group's operating profit, while its interest expense will increase. This is due to the change in the accounting for expenses of leases that were classified as operating leases under IAS 17. In addition, the classification between cash flow from operating activities and cash flow from financing activities will also change. Many commonly used financial ratios and performance metrics for the Group, using existing definitions, will also be impacted including net debt, gearing, EBITDA, unit costs and operating cash flows.

The Group's existing operating leases will be the main source of leases under the new standard. Information on the Group's operating lease commitments under IAS 17 *Leases* (undiscounted) is disclosed in Note 31 Commitments – operating lease commitments – Group as lessee.

IFRIC Interpretation 23 Uncertainty over Income Tax Treatment

The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 and does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- Whether an entity considers uncertain tax treatments separately;
- The assumptions an entity makes about the examination of tax treatments by taxation authorities;
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates;
- How an entity considers changes in facts and circumstances.

An entity has to determine whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments. The approach that better predicts the resolution of the uncertainty should be followed. The interpretation is effective for annual reporting periods beginning on or after 1 January 2019, but certain transition reliefs are available. The Group will apply the interpretation from its effective date. Since the Group operates in a complex multinational tax environment, applying the Interpretation may affect its consolidated financial statements. In addition, the Group may need to establish processes and procedures to obtain information that is necessary to apply the Interpretation on a timely basis.

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

These improvements include:

IFRS 3 Business Combinations

The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation.

An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2019, with early application permitted. These amendments will apply to future business combinations of the Group.

36. Standards issued but not yet effective (continued)

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

IAS 12 Income Taxes

The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognises the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognised those past transactions or events.

An entity applies those amendments for annual reporting periods beginning on or after 1 January 2019, early application is permitted. When an entity first applies those amendments, it applies them to the 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 these amendments, the Group does not expect any effect on its consolidated financial statements.

IAS 23 Borrowing Costs

The amendments clarify that an entity treats as part of general borrowings any borrowing originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete.

An entity applies those amendments to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. An entity applies those amendments for annual reporting periods beginning on or after 1 January 2019, with early application permitted. Since the Group's current practice is in line with these amendments, the Group does not expect any effect on its consolidated financial statements.

37. 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).

37. Summary of significant accounting policies (continued)

a) Business combinations (continued)

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.

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, and subsequently measured at amortised cost, fair value through OCI, or fair value through profit or loss.

The classification of financial assets at initial recognition that are debt instruments depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient for contracts that have a maturity of one year or less, are measured at the transaction price determined under IFRS 15.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

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

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at amortised cost (debt instruments);
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments);
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments);
- Financial assets at fair value through profit or loss.

37. Summary of significant accounting policies (continued)

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

Financial assets at amortised cost (debt instruments)

This category is the most relevant to the Group. The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Interest received is recognised as part of finance income in the statement of profit or loss and other comprehensive income. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Group's financial assets at amortised cost include trade and other receivables (not subject to provisional pricing), cash and cash equivalents, and loans given. Refer below to 'Financial assets at fair value through profit or loss' for a discussion of trade receivables (subject to provisional pricing).

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, e.g., derivative instruments, financial assets designated upon initial recognition at fair value through profit or loss, e.g., debt or equity instruments, or financial assets mandatorily required to be measured at fair value, i.e., where they fail the SPPI test. 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. Financial assets with cash flows that do not pass the SPPI test are required to be classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in profit or loss.

A derivative embedded in a hybrid contract with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

As IFRS 9 now has the SPPI test for financial assets, the requirements relating to the separation of embedded derivatives is no longer needed for financial assets. An embedded derivative will often make a financial asset fail the SPPI test thereby requiring the instrument to be measured at fair value through profit or loss in its entirety. This is applicable to the Group's trade receivables (subject to provisional pricing). These receivables relate to sales contracts where the selling price is determined after delivery to the customer, based on the market price at the relevant QP stipulated in the contract. This exposure to the commodity price causes such trade receivables to fail the SPPI test. As a result, these receivables are measured at fair value through profit or loss from the date of recognition of the corresponding sale, with subsequent movements being recognised adjustment to revenue in the statement of profit or loss and other comprehensive income.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- 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.

37. Summary of significant accounting policies (continued)

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

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through 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 its 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.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

Further disclosures relating to impairment of financial assets are also provided in the following notes:

- Disclosure of significant assumptions (Note 21);
- Trade and other receivables (Note 21).

The Group recognises an allowance for ECLs for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original EIR. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables (not subject to provisional pricing) and other receivables due in less than 12 months, the Group applies the simplified approach in calculating ECLs, as permitted by IFRS 9. Therefore, the Group tracks changes in credit risk and calculates ECLs based on sectoral PD per Moody's. For any other financial assets carried at amortised cost (which are due in more than 12 months), the ECL is based on the 12-month ECL. The 12-month ECL is the proportion of lifetime ECLs that results from default events on a financial instrument that are possible within 12 months after the reporting date. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment including forward-looking information.

The Group considers a financial asset in default when contractual payments are 1 year past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows and usually occurs when past due for more than one year and not subject to enforcement activity.

At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Refer Note 30 and Note 21 for further discussion on impairment assessments of financial assets.

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, 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 loans and borrowings and payables, net of directly attributable transaction costs. The Group's financial liabilities include trade and other payables and loans and

37. Summary of significant accounting policies (continued)

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

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 fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. 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.

Loans and borrowings and trade and other payables

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 Note 24 and Note 27.

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.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

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.

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.

37. Summary of significant accounting policies (continued)

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

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 30.

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.

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 from contracts with customers

The Group is principally engaged in the business of producing copper/molibdenym concentrate and in some instances, provides freight/shipping services. Revenue from contracts with customers is recognized when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

The Group has generally concluded that it is the principal in its revenue contracts because it typically controls the goods or services before transferring them to the customer.

Contract balances

Contract assets

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration that is conditional. The Group does not have any contract assets as performance and a right to consideration occurs within a short period of time and all rights to consideration are unconditional.

Trade receivables

A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

37. Summary of significant accounting policies (continued)

c) Revenue from contracts with customers (continued)

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

From time to time, the Group recognises contract liabilities in relation to some metal in concentrate sales which are sold under CIP Incoterms, whereby a portion of the cash may be received from the customer before the freight/shipping services are provided. See Note 29 for further details of contract liabilities.

Copper/molybdenum in concentrate (metal in concentrate) sales

The majority of the Group's sales of metal in concentrate allow for price adjustments based on the market price at the end of the relevant QP stipulated in the contract. These are referred to as provisional pricing arrangements and are such that the selling price for metal in concentrate is based on prevailing spot prices on a specified future date after shipment to the customer. Adjustments to the sales price occur based on movements in quoted market prices up to the end of the QP. The period between provisional invoicing and the end of the QP can be between one and three months.

Revenue is recognised when control passes to the customer, which occurs at a point in time when the metal in concentrate is physically transferred onto a vessel, train, conveyor or other delivery mechanism. The revenue is measured at the amount to which the Group expects to be entitled, being the estimate of the price expected to be received at the end of the QP, i.e., the forward price, and a corresponding trade receivable is recognised. For those arrangements subject to CIP shipping terms, a portion of the transaction price is allocated to the separate freight/shipping services provided.

For these provisional pricing arrangements, any future changes that occur over the QP are embedded within the provisionally priced trade receivables and are, therefore, within the scope of IFRS 9 and not within the scope of IFRS 15. Given the exposure to the commodity price, these provisionally priced trade receivables will fail the cash flow characteristics test within IFRS 9 and will be required to be measured at fair value through profit or loss up from initial recognition and until the date of settlement. These subsequent changes in fair value are recognised in the statement of profit or loss and other comprehensive income each period and presented as revenue adjustment. Changes in fair value over, and until the end of, the QP, are estimated by reference to updated forward market prices for gold and copper as well as taking into account relevant other fair value considerations as set out in IFRS 13, including interest rate and credit risk adjustments.

Freight/shipping services

As noted above, a proportion of the Group's metal in concentrate sales are sold under CIP Incoterms, whereby the Group is responsible for providing freight/shipping services (as principal) after the date that the Group transfers control of the metal in concentrate to its customers. The Group, therefore, has separate performance obligations for freight/shipping services which are provided solely to facilitate sale of the commodities it produces.

Other Incoterms commonly used by the Group are CPT, FCA, where the Group has no responsibility for freight or insurance once control of the products has passed at the loading port in Yerevan, and Delivered at Place (DAP) where control of the goods passes when the product is delivered to the agreed destination. For arrangements which have these Incoterms, the only performance obligations are the provision of the product at the point where control passes.

For CIP arrangements, the transaction price (as determined above) is allocated to the metal in concentrate and freight/shipping services using the relative stand-alone selling price method. Under these arrangements, a portion of consideration may be received from the customer in cash at, or around, the date of shipment under a provisional invoice. Therefore, some of the upfront consideration that relates to the freight/shipping services yet to be provided, is deferred. It is then recognised as revenue upon completion of the Group's performance obligation. The costs associated with these freight/shipping services are also recognised upon completion of the Group's performance obligation.

Payment of the freight/shipping costs may occur in advance of the services being provided (and is therefore recognised as a contract liability). The final portion is paid once the services have been completed. The period of time between receipt of these upfront amounts and the satisfaction of the freight/shipping services is usually up to four months. Given the quantum of these amounts and the short time frame between receipt of cash and satisfaction of the performance obligation, the Group has applied the practical expedient to not adjust the promised consideration for the effects of a significant financing component as the period between the transfer of the promised good or service to a customer and when the customer pays for that good or service is one year or less.

37. Summary of significant accounting policies (continued)

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.

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.

37. 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.

37. 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.

37. 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		25 years

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.

37. Summary of significant accounting policies (continued)

l) Stripping (waste removal) costs (continued)

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.

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.

37. Summary of significant accounting policies (continued)

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.

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.

37. Summary of significant accounting policies (continued)

n) Exploration and evaluation assets (continued)

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.

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.

p) Leases

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset (or assets) and the arrangement conveys a right to use the asset (or assets), even if that asset is (or those assets are) not explicitly specified in an arrangement.

Group as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

37. Summary of significant accounting policies (continued)

p) Leases (continued)

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the statement of profit or loss.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

An operating lease is a lease other than a finance lease. Operating lease payments are recognised as an operating expense in the statement of profit or loss on a straight-line basis over the lease term.

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.