Middle-East Journal of Scientific Research 22 (6): 916-923, 2014 ISSN 1990-9233 © IDOSI Publications, 2014 DOI: 10.5829/idosi.mejsr.2014.22.06.1336

# Financial Instruments Transformation and Elimination in Accordance with International Financial Reporting Standards

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**Abstract:** This paper presents a unified methodology of transformation and elimination of financial instruments in accordance with International Financial Reporting Standards (IFRS) in SAP R3 environment. SAP R3 is a module that allows creating a single chart of consolidation accounts, defining a hierarchy of consolidated companies, collecting data on-line and loading it from external systems, recalculating rates, automating reconciliation and exception in-group turnovers, debt consolidation, equity and generating consolidated reports. The proposed method can be used by subsidiaries of energy companies in form of public companies who are involved in the preparation of transformed statements in accordance with International Financial Reporting Standards (IFRS). In addition to the lack of a unified methodology of transformation and elimination of financial instruments, problems caused by report in introduction of IFRS 9 "Financial Instruments" to 2015 are discussed. The article also provides a rationale for the transformation amendments of elimination of the financial result caused by disposal of investments and amendments to repel investment using the equity method in the consolidated (consolidated) financial statements. Transformation amendments have been shown necessary in two systems: International Financial Reporting Standards (IFRS).

Key words: Financial instruments • Investments • Discounting • Evaluation methods • Derivatives • Transformation • Elimination

## **INTRODUCTION**

Financial instruments - the most difficult part of modern international accounting and one of the unregulated aspects of Russian accounting standards. That is why the reasoning techniques of transformation and elimination of financial instruments is relevant to the current phase of development of accounting and reporting of energy companies. The most voluminous in content and the most discussed IFRS standards relate namely financial instruments and investment instruments [1].

Until 01.01.2013 there were four international standards for financial instruments: IFRS 32, IFRS 39, IFRS and IFRS 9 [2]. But with the beginning of the global financial crisis, the accounting for financial instruments became the subject No 1" in the IFRS and other

international public institutions (such as the Association of Accountants and Auditors). It revealed numerous methodological problems caused by conflicting objectives laying in the essential nature of the standards' development [3].

It should be noted that the need for accounting reform in Russia, no one is in doubt, but its specific areas have been the subject of intense debate [4].

Various theoretical and practical aspects of IFRS and the preparation of the transition to IFRS disclose foreign authors [5, 6, 7].

In [8] examined the application of the IFRS standards IFRS 1, IFRS 7, IFRS 9 in practice and analyzed issues of interpretation of certain provisions of these standards.

In [9] conducted a study on the transition to IFRS and the main problems of their use in European countries such as Great Britain, Spain.

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However, at the present time, not publications that would sum up experience and provide guidance on methodological tools of reporting under IFRS energy companies in relation to the Russian practice.

**Classification of Financial Instruments According with International Financial Reporting Standards:** Financial instruments are classified into two main types.

- Debt financial instruments are investments which give the investor a right to receive in the future from the investee company:
- A fixed payment equal to the amount of the investment
- And the variable part equal to the percentage that investee company pays for the right to use the investment.

The main type of debt instruments - bonds, notes, loans.

• Equity instruments – investments in share capital by acquiring the shares of the share capital, so the investor receives a certain portion of the profits of the investee company (for example - in the form of dividends). The main type of equity instruments - stocks.

Depending on the duration of the period of repayment, financial instruments can be short-term (repayment period <1 year) and long-term financial instruments (repayment period> 1 year).

In accordance with IFRS (in accounting) all financial instruments of the company (equity and debt) should be divided into three groups:

• Held-to-maturity (HTM) - securities, which the company holds to maturity. Early sale of securities belonging to this class is possible only in extraordinary cases (outflow of investors, for example).

This group includes long-term and short-term debt financial instruments (bonds and notes). HTM are measured at amortized cost, which is equal to the book value and relative to the difference between the declared rate debt obligation and the market rate of this obligation, which for the maturity of the obligation is gradually charged to financial result. In the Russian financial practice the interest (percentage) to debt investments held to maturity is not equal to the market one. Refinancing rate can be chosen as market interest. Thus, there is a difference between the refinancing rate and the declared interest which is equal to premium (if the refinance rate is less than the declared percent) or discount (if refinancing rate exceeds the declared percentage), which is then amortized. In accordance with IFRS the effective interest rate is used for the amortization of the premium or discount. The effective interest rate is used for liabilities with similar terms. Amortization of premiums or discounts is shown in the profit and loss statement (section - "Other incomes and expenses").

- Trading securities (TS) securities that are bought and held principally for resale in the near future. Sale usually means a permanent or implemented from time to time purchase or sale. These securities are typically used for profit in the period of short-term changes in price. Recognition of income and expenses for change of market value of TS is recognized in the income statement. This class of securities generally includes short-term financial instruments. TS are measured at fair value. It is defined as the amount at which two independent partners wishing to make a transaction, conduct transactions on purchase and sale of financial instruments.
- Available-for-sale (AFS) investments that are not related to TS and HTM. AFS investment are measured at fair value [10].

When purchasing, TS or AFS securities are reported at cost, which includes the cost of the security and other costs for its purchase (taxes, broker fee and t. D.).

At the end of each year, the carrying value of the AFS and TS securities is compared to their market value. If the carrying amount (net of the provision for impairment losses) exceeds the market value, a provision is created for impairment of securities. Then the amount of the excess is credited to the account "Provision for impairment of investments (balance)."

Temporary change in fair value of AFS and TS securities is considered as non-operating income / expenses (Unrealized holding gain and loss) and is taken into account for:

• TS in the statement of profit and loss: Other incomes (expenses) and Allowance for impairment of securities (Balance).

 AFS in other comprehensive income: Gross income. Non-operating incomes (expenses) and Allowance for impairment of securities (Balance).

Provision for impairment of financial instruments is the "evaluation reserve" because it is based on an accountant estimates and judgments. Evaluation reserve is formed only if it can be reasonably determined. For financial HTM instruments (bonds and notes) the reserve is not calculated.

**The Procedure for Calculating Reserves:** For financial instruments traded on the securities market (marketable securities):

- The carrying value of financial instruments balances' to securities at the end of the reporting period, compared with their fair (market) value, which is taken from the stock exchange quotations, financial publications in periodicals at the end of the reporting period;
- The size of reserve on listed securities is determined as the difference between the fair value and the carrying (book) value of these financial instruments.

For all other financial instruments that are not traded on the securities market:

### **Equity Instruments:**

- To calculate the reserve for impairment of unquoted equity instruments it is necessary to involve the Department of Property and Corporate Governance, which keeps records and analysis of the financial health of the investee;
- The size of reserve for unquoted securities is determined as the excess of the investment cost in the investor's net assets over the cost of the company;
- Litigation with the companies investment objects should be accounted when calculating the size of a reserve. The information is obtained in the legal department;
- If there is a high probability that the investment will lose their "value", for example, because of the bankruptcy of the company, the reserve is made for the entire amount of the investment;

 In case if an investee does not pay dividends on its shares, i.e. does not bring economic benefits to its investor, does not provide information about its activities, then the reserve is made for impairment of unquoted equity instruments.

## **Debt Financial Instruments:**

• The size of reserve on investments in unlisted securities is determined based on the information on department of the property and the corporate governance on realizable value of these investments.

The magnitude of the required reserves for each of the investment should be determined taking into account the opinion of the head of department of ownership and corporate governance on the advisability of further investor participation in the shareholders of the investee.

The reserve is not created for the derivatives in consolidation unit.

Reserve evaluation is made at the end of each reporting period.

Dividends, interests earned on TS and AFS investments are realized incomes and are shown in the profit and loss statement (section - "Other incomes and expenses").

Impairment is considered only in relation to long-term investments - held to maturity (HTM) and other investments (AFS).

If the decline in the market value of the securities (AFS and HTM) is other than temporary, the carrying value of the securities is written down to market value. Loss on write-off period is reflected in the costs.

According to the impairment test, the following indicators are the basis to decide whether that decline in market value is other than temporary:

- Fair market value is significantly lower than the cost of the security;
- Decline in market value of securities are a matter of specific adverse conditions that affect this financial investment;
- Decline in market value of securities caused by the specific conditions encountered in industry or geographic region;
- Management company at the same time has neither the capacity nor the intention to hold an investment for a long period of time sufficient for the occurrence of favorable conditions for overcoming the existing decline in market value of the investment;

- Decline in market value of securities is observed over a long period;
- Debt securities brought to a lower category by a rating agency;
- The financial state of the issuer of the security has deteriorated;
- Value of dividends associated with these investments was reduced, or payment of dividends has been completely discontinued, or expected interest payments on debt securities have not been produced.

IFRSs do not determine the period during which the decline in market value ceases to be temporary since it depends on the characteristics of the business companies.

If the decline in value is not temporary, the cost of the investment should be written down to fair value (new cost), the amount of write-offs should be considered as a realized loss and included in the determination of the financial result of the reporting period (see "Other incomes / expenses"): Loss impairment of financial instruments and "Long-term financial instruments" articles.

Further increase market value of securities does not change its carrying value:

- Further increase in the value of AFS securities is recorded as other income / loss in equity (as a part of the full profit (comprehensive income));
- Further increase in the value of HTM securities is accounted as "other gains / losses" in the income statement.

Further decline in the market value of AFS securities is recorded as other income / loss in equity, as a component of comprehensive income. Further decline in the value of TS securities is recorded as other income / loss in the income statement. Financial investments sorted by groups are presented in Table 1.

If any of the components of the financial instruments (HTM, AFS, TS) is significant (more than 10% of total investments), it shall be disclosed in the financial statements.

In accordance with IFRS, cash transactions for the purchase and sale of financial investments belonging to the TS group, are reflected in the "Operations". Operations on purchase and sale of financial investments related to AFS and HTM group are reflected in the "Investment activities". In Table 2, we give a rough classification of the financial instruments accounted by energy companies.

**Restrictions on the Transformation of Financial Instruments:** With the transformation of the financial instruments in accordance to IFRS, the following restrictions apply.

- Transactions are not done for the full write-off of financial instruments, but the reserves are charged;
- For calculating the amortized cost of securities held to maturity (HTM) the refinancing rate (at the end of the reporting period) is used as the effective interest rate;
- Reserve calculation is performed only for external (outside the consolidation perimeter) issuers (investment objects) [11].

Reserve (for impairment losses of financial instruments) forming rules in energy companies are subject to the general rules of formation of the reserve of the IFRS as described above. Use Form "Statistical position to explaining" (item 0009141000 "Market value of financial instruments "). Table 3 shows the formation of the financial instruments by positions.

To form the balance sheet data are taken in rubles from the Russian Accounting Code in the forms "Investments in shares", "Other investments", "Investments in shares - amount", "Other investments amount", "Bills - assets", "Statistical position to be explained."

Table 4 shows the structure of the balance sheet and how the position titles correspond to the forms of data collected.

The reserve for impairment of financial instruments, calculated in accordance with Russian Accounting Standards (RAS 19/02 "Investments"), automatically eliminated in the transformation module SAP R3. Balance article on the reserve for financial instruments is formed exclusively as a result of the manual transformative transactions in the unit of currency.

Consolidation and transformation module SAP R3 - a module allowing to create a unified chart of consolidation accounts, define a hierarchy of consolidated companies, to collect data on-line and load data from external systems, recalculate rates, automate reconciliation and exception of in-group turnovers, debt consolidation, equity and generate consolidated reports.

## Middle-East J. Sci. Res., 22 (6): 916-923, 2014

Table 1: Summary table of financial investments accounting for groups

Features	TS	AFS	HTM
Types of financial investments by groups	Debt and equity	Debt and equity	Debt
Cost when registering	Purchase price + direct costs for the purchase		
Carrying value at the end of the reporting period	Fair value		Amortized cost
Reserve for impairment	Reserve is formed by comparing the book		Not formed
	value to the market value		
Accounting transaction on the formation of reserves	Included in the non-operating	Included in other	Not performed
	income/expenses	comprehensive cost/	
		income	
Other than temporary impairment of financial instruments	Not performed	Carrying value is written down to fair value at	
		the expense of other income / expenses	
		(impairment loss on investment). Further	
		recovery of the carrying value is not performed.	
In balance sheet	Circulating balance sheet (current) assets	Current/non-current	Non-current assets.
		assets	If maturing within
			1 year - current assets

Table 2: Rough classification of financial instruments of energy companies

Form and position	Financial instrument
Form "Investments in shares"	
0001140100	Investments in subsidiaries
5801010100	Shares of subsidiaries
0001140200	Investments in affiliated companies
5801020100	Shares of associates
0001140300	Investments in other entities
5801030100	Shares of other unlisted organizations
5801030101	Shares of other listed organizations
5801130100	Shares of other organizations (companies) within a group
0001259901	Short shares Êðàòêîñðî÷íûå àêöèè è ïàè
5801030200	Short shares of other unlisted organizations
5801030201	Short shares of listed other organizations
Form "Loans"	
0001140400	Loans issued to companies > 12 months
5802010100	Debt, loans to domestic partners
5802030100	Debt, loans to other organizations
5892010100	Difference when excluding internal balance (Long-term loans)
0001250100	Loans issued to companies <12 months
5802010200	Short-term loans granted to domestic partners
5802030200	Short-term loans granted to other organizations
5802110200	Short-term repurchase transactions with affiliated companies
5802130200	Short-term repurchase transactions with external companies
5892010200	Difference when excluding internal balance
Form "Other investments"	
0001149901	Long-term bonds
5803010100	Bonds of internal partners
5803030100	Bonds of other organizations - non-offered
5803030101	Bonds of other organizations - offered
5803030102	Government and municipal bonds
0001149903	Contributions to joint ventures
0001149999	Other long-term financial instruments
5806010100	Other long-term investments in domestic partners

#### Middle-East J. Sci. Res., 22 (6): 916-923, 2014

Table 2: Continued	
5806030100	Other long-term investments in other organizations
0001259902	Short-term bonds
5803010200	Bonds of internal partners
5803030200	Bonds of other organizations
5803030202	Government and municipal bonds
0001259905	Short term assignment agreement
5807010200	Short-term assignment agreement of internal debtors
5807030200	Short-term assignment agreement of external debtors
0001259906	Certificates of deposit
5808010200	Certificates of deposit of domestic banks
5808030200	Certificates of deposit of external banks
0001259999	Other short-term financial instruments
5806010200	Other short-term financial investments in domestic partners
5806030200	Other short-term investments in other organizations
Form 'Bills - Assets"	
0001149902	Long-term notes
5804010100	The debt, bills of domestic partners
5804030100	The debt, bills of other organizations - not-offered
5804030101	The debt, bills of other organizations - offered
0001259903	Short-term bills
5804010200	Short-term bills of internal partners
5804030200	Short-term bills of other organizations

Table 3: Formation of financial instruments by positions

Form	Type of investment	Position
Investments in shares	Shares of other organizations - listed	5801030101
	Shares of other organizations - unlisted	5801030100
Other financial investments	Bond investments of other organizations - offered	5803030101
	Bonds of other organizations - not offered	5803030100
	Other long-term investments in other organizations	5806030100
Bills (assets)	Long-term bills of other organizations - offered	5804030101
	Long-term bills of other organizations - not offered	5804030100
	Bills - external > 1 year	6202030100

**The Need for Transformational Amendments:** The need for transformational investments amendment arises from the fact that SAP R3 does not automatically eliminate the financial result on disposals of financial instruments to the RAS. Previously they (in previous reporting periods) were reserved in accordance with the requirements of the standard.

Transformational amendments to repel investment using the equity method of consolidated statements are partially automated in the module of transformation and consolidation SAP R3. Need for additional amendments manually may occur due to a lack of information about the associates, investments EC that should be reflected in the reporting period by means of the equity method. In this case, a report "Dynamics of results" is made on the basis of the financial result. Then a standard automatic transaction is made to repel investment using the equity method: "Capitalized income, reflecting the profit of associate" and "Shares and stocks of associates" articles. If as a result of this transaction the balance of the account "Shares and shares of affiliated companies' becomes negative, the manual adjusting transaction is made in correspondence with the position (score by RAS) 58" Investments ", which is reflected in the composition of loans given to the associate.

During reporting on income from dividends received from associates, a manual amendment is made to curtail the income received from dividends with the amount of the investment: "Dividends" and "Shares and stocks of affiliated companies".

When the investment account reaches a zero balance, the use of the equity method ceases. The fact that further losses will not affect the profits of the associate is reflected in reports. If later the object of investment becomes profitable again, share in its profits is ignored (for reporting) as long as it does not compensate the losses previously ignored. Only after that the application of the equity method can be resumed.

	Hierarchy of IFRS	RAS
Position No	Position title	Form
Balance sheet item "Lo	ng-term financial instruments"	
1001150000	Investments in stocks and shares	
1001151000	Investments in subsidiaries	Investments in shares and stocks
1001152000	Investments in affiliated companies	Investments in shares and stocks
1001153000	Investments in other entities	Investments in shares and stocks
I001154000	Reserve for impairment of investments in equity	Investments in shares and stocks
1001160000	Debt and other financial instruments	
1001161000	Financial instruments that are ready for implementation	Other investments
I001161100	Long-term bills	Bills – assets
I001162000	Financial instruments held to maturity	Other investments
1001162100	Loans to organizations> 12 months.	Granted loans
1001162200	Long-term bonds	Other investments
1001162300	Contributions to joint activities	Other investments
1001163000	Other financial instruments	Other investments
I001163100	Long-term assignment agreements	Other investments
I001163900	Other long-term financial instruments	Other investments
Balance sheet item "Sh	ort-term financial instruments"	
1001250000	Short-term financial instruments	
1001251000	Debt financial instruments	Granted loans
1001251100	Loans granted to companies <12 months	Granted loans
1001251200	Short-term bonds	Other investments
1001252000	Equity instruments	Investments in shares and stocks
1001253000	Securities held-to-maturity	Not used
1001254000	Securities that are ready for implementation	Not used
I001254100	Short-term bills	Bills - assets
1001255000	Securities purchased for resale	Not used
1001256000	Other short-term financial instruments	Other investments
1001256100	Short-term assignment agreements	Other investments
1001256200	Certificates of deposit	Other investments
1001256900	Other short-term financial instruments	Other investments

Table 4: Article's structure and appropriate forms of collected data

There are, however, some conditions under which the losses of the associate will be reflected in the financial statements:

- Some investors may act as guarantor in respect of payables of associate or investments of other investors in the associate, or undertakes to compensate the losses of creditors, or agrees to finance the continuity of the associate. In this case, the investor assumes all risks associated with the insolvency of the associate and therefore the application of the equity method is considered to be acceptable as a pure credit balance on the account of the investor's investment in the associate will actually reflect the real commitment of the investor.
- If the investments in associates include both ordinary shares and other investments / loans given to the associate, debentures, then, in this case, the value of other investments should be adjusted taking

into account the losses of the associate under the equity method. This rule reflects the logical investor risks in case of bankruptcy of the associate, the interests of the shareholders of ordinary shares will be considered the last, in front of them - the interests of the shareholders on the preferred shares and so on - until the debts of associates who have the highest priority in relation to the assets of the associate in case of its liquidation.

## CONCLUSION

The studied technique of transformation and elimination of financial instruments in accordance with IFRS in SAP R3 environment is applied to "historic" financial instruments, i.e. those that have been taken for accounting under RAS in previous periods and already present on the balance of the consolidation units (under RAS) at the beginning of the reporting period.

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