T.E.I. OF THESSALONICA
MANAGEMENT AND ECONOMY SCHOOL
ACCOUNTANCY DEPARTMENT

DIPLOMATIC WORKMANSHIP

MANAGEMENT OF FIXED ASSETS ACCORDING TO INTERNATIONAL ACCOUNTING STANDARDS

PROFESSOR:
STUDENTS:
Giouris Theodoros

Marmaras Anastasios
Liolios Menelaos
Giannatselis Vasilios

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INTRODUCTION

1. GENERALLY

The present age is characterized by an effort of unification of various countries' societies. These societies are composed of differences. There is an effort to struggle against these differences. That is epicentered to things like lifestyle which has began to be formed to a specific way, converged to a concrete direction for all of the industrialized / developed – at least – countries, the confrontation of some situations which takes for granted the cooperation between countries, their economies etc.

All the things above – and more – are results of an effort which has not started recently and is promoted methodically. We talk about globalization which brought the unification of different countries' structures. The biggest attention was especially given on economies of countries, so much, that we can surely say that there are no economic borders today.

The collapsing of these economic borders had as a result the restructuring of national economies' parameters, in order to converge to the various standards which international organizations putted.

As we mentioned, globalization, (of capitalist economic system), tried to unite the economies of countries. Accounting, as an important sector of economic science, couldn't stay out of that development. There were accounting boards which established some standards acceptable from all of the involved countries.

The introduction above does not have big relation with the subject of this workmanship. It was written in order to make an easier passage to the real subject which is International Accounting Standards (I.A.S.). The reason that we started writing about globalization is because I.A.S. is a characteristic example of globalization.

2. INTERNATIONAL ACCOUNTING STANDARDS

2.1 Generally

International Accounting Standards (I.A.S.) is the answer of Accounting to the challenge of globalization. Indeed, these standards establish principles and rules that are compatible to the special characteristics of globalization like:

- The rapid evolution of technology.
- The appearance of new business activities.
- The cross border activation of many companies etc.

I.A.S. constitutes the codification of accounting principles, rules and policies which accountants must follow at the preparation of financial statements. They are focused at the most basic subjects and they are not so complicated in order to be putted in practice from all the countries.

The responsibility of publishing of standards has the International Accounting Standards Committee (I.A.S.C.) which was set up on 1973. Its purpose is to bring the global harmonization to I.A.S.

The purpose of I.A.S. is the fair presentation of economic events of a company in a set of financial statements, in order to be easy for the user of these statements to form a clear perception for the real economic condition, possibilities and perspectives of company.[1]

The advantages and disadvantages of I.A.S. are:

Advantages:

- Users of financial statements will have uniform and

1 Malakos Panagiotis. Economist – Lawyer.
Magazine E7. 2002.

comparative information for all the companies and they will be able to make right economic decisions.

- Multinational companies will economize time and expenses because it will not be necessary to prepare financial statements in each country, which they have works, with different regulations and standards.
- Developing countries will economize time and expenses because it will not be necessary to prepare and publish their own standards.

Disadvantages:

- Maybe some standards are not relative or applicable in some countries because of social, economic or other differences.
- Different purpose of Accounting and financial statements in each country. The main aim of financial statements in some countries is to give information to government for tax purposes while in other countries the main aim is to give information to various categories of users in order to make economic decisions.

The establishment of International Accounting Standards constitutes an important progress for the science of Accounting because I.A.S. renews and upgrades the role of Accounting to the wider sector of Economy.

The importance of I.A.S. appears from the fact that European Union (E.U.) recognized their role to converging of international accounting regulations and procedures and suggested their adoption from the public listed companies in stock exchanges of E.U. from 1 January 2005.

2.2 International Accounting Standards in force

There are 34 I.A.S. in force as follows:

I.A.S. 1* Presentation of financial statements.

I.A.S. 2* Inventories.

I.A.S. 7 Cash flow statements.

I.A.S. 8* Net profit or net loss of period. Fundamental errors and changes in accounting policies.

I.A.S. 10* Events after the balance sheet date.

I.A.S. 11 Construction contracts.

I.A.S. 12 Income taxes.

I.A.S. 14 Segment reporting.

I.A.S. 15 Information reflecting the effects on changing prices.

I.A.S. 16* Property, plant and equipment.

I.A.S. 17* Leases.

I.A.S. 18 Revenue.

I.A.S. 19 Employee benefits.

I.A.S. 20 Accounting for government grants and disclosure of government assistance.

I.A.S. 21* The effects of changes in foreign exchange rates.

I.A.S. 22 Business combinations.

I.A.S. 23 Borrowing cost.

I.A.S. 24* Related parts disclosures.

I.A.S. 26 Accounting and reporting by retirement benefit plans.

I.A.S. 27* Consolidated financial statements and accounting for investment in subsidiaries.

I.A.S. 28* Accounting for investments in affiliated companies.

I.A.S. 29 Financial reporting in hyperinflationary economies.

I.A.S. 30 Disclosures in the financial statements at banks and similar financial institutes.

I.A.S. 31* Financial reporting of interests in joint ventures.

I.A.S. 32 Financial instruments: Disclosure and Presentation.

I.A.S. 33* Earnings per share.

I.A.S. 34 Interim financial reporting.

I.A.S. 35 Discontinuing operations.

I.A.S. 36 Impairment of assets.

I.A.S. 37 Provisions, contingent liabilities and contingent assets.

I.A.S. 38 Intangible assets.

I.A.S. 39 Financial instruments: Recognition and Measurement.

I.A.S. 40[1] Investment property.

I.A.S. 41 Agriculture.

These are the Standards in force today. On March 2001, International Accounting Standards Committee decided that every Standard, which will issue in the future, will be named as International Financial Reporting Standard (I.F.R.S.).

Apart from I.A.S., there are the Interpretations, which are published from the Standing Interpretation Committee and they concern concrete Standards. These Interpretations are published on subjects, which are covered from I.A.S. Their usage is to make clearer some things when there is obscure or there is a subject that requires clarification. Also, apart from Interpretations, there are published some temporary regulations for subjects that are not covered from I.A.S. but they need direct arrangement.

After that nominal quotation of I.A.S. we must talk about the specific subject of this workmanship. We will write down the Standards which concern the fixed assets of companies. We will "talk"

1 The numbers of Standards do not follow a serial line. This is because some standards have been abolished or incorporated in other Standards.

Also, the asterisks declare that the Standard was republished on December 2003, in improved form, which will be adopted from European Union.

about their presentation in the financial statements and their accounting handling according to I.A.S.

Before that we will write some general information (way of preparation and models) for the financial statements which are recognized from I.A.S. and we will compare them with the financial statements according to Greek Accounting Principles.

CHAPTER 1

INTERNATIONAL ACCOUNTING STANDARD 1.
PRESENTATION OF FINANCIAL STATEMENTS

The financial statements that are prepared and published according to I.A.S. are:

- Balance sheet.
- Income Statement.
- Statement of changes in equity.
- Cash flow statement.
- Notes.

The general principles that govern these statements are:

- They must exactly present the economic condition, efficiency and cash flows of companies.
- There must be disclosures for the conformation to I.A.S.
- They must be prepared according to the going concern principle.
- They must be prepared according to the accounting period's principle.
- There must be uniformity of presentation and classification of accounting data.
- Every essential accounting data must be presented separately.
- There must be comparative information for the current and the previous accounting period.
- There must be some qualitative characteristics: a) clarity, b) consistency, c) credibility, d) comparability

of accounting data.

- The substance of accounting data must be over the legal form.

The main aim of financial statements is to give the necessary and completed information for the financial condition, results of operation and cash flows of a company which are useful for the receiving of economic decision from their users

The information of financial statements must present:

- Assets.
- Liabilities.
- Stockholders equity.
- Revenues / Profits.
- Expenses / Losses.
- Cash flows.

1. BALANCE SHEET

1.1 Separation of assets in current and non - current

Balance sheet is a financial statement, which presents – in a static way (for a concrete time moment) – the assets of a company, its liabilities to the businessman (owner's equity) and to others (suppliers, creditors, financial institutions etc.).

According to I.A.S. each company can choose, on the base of its works, the separation of assets in current and non - current. In addition, the company can choose the separation of liabilities in current and long - term liabilities.

An asset is posted in the group of current assets when:

- It is expected to be liquidated or to be sold according to the ordinary operational circle.

- It is mainly possessed for trade purposes and is expected to be liquidated in twelve months from the balance sheet date.
- It is composed of cash or equivalent cash (which they have not restrictions to their use).

All the other assets are posted in the group of non - current assets.

A liability is posted in the group of current liabilities when:

- It is expected to be settlement at the ordinary operational circle.
- It must be settlement in twelve months from the balance sheet date.

All the other liabilities are posted in the group of long - term liabilities.

1.2 Minimal information in the main part of balance sheet

The minimal information that must be presented in the main part of balance sheet are the following:

- Tangible fixed assets.
- Intangible assets.
- Financial assets and participations.
- Investments that are posted according to the net worth method.
- Inventories.
- Customers and other claims.
- Cash.
- Suppliers and other current liabilities.
- Tax liabilities and tax assets according to I.A.S. 12

"Income tax".

- Provisions.
- Long - term interest - bearing liabilities.
- Capital and reserves.
- Minority interest.

1.3 Balance sheet model

BALANCE SHEET AT DECEMBER 31ST, 2004

	2004		2003
ASSETS			
Non - current assets			
Tangible fixed assets	XXX		XXX
Goodwill	XXX		XXX
Investments	XXX	**XXX**	XXX
	XXX		
Current assets			
Inventories	XXX		XXX
Customers	XXX		XXX
Other debtors	XXX		XXX
Prepayments	XXX		XXX
Cash	XXX	**XXX**	
	XXX	**XXX**	
Total assets		**XXX**	
	XXX		
STOCKHOLDERS EQUITY			
AND LIABILITIES			
Share capital and reserves			

Capital	XXX		XXX
Reserves	XXX		XXX
Accumulated profit	XXX		XXX
Minority interest	XXX	**XXX**	XXX
	XXX		
Long - term liabilities			
Loans	XXX		XXX
Tax deferral	XXX		XXX
Employee benefits	XXX	**XXX**	XXX
	XXX		
Current liabilities			
Suppliers	XXX		XXX
Other creditors	XXX		XXX
Short - term loans	XXX		XXX
Instant part of long - term loans	XXX		XXX
Quarantee provisions	XXX	**XXX**	XXX
	XXX		
Total stockholders equity and liabilities		**XXX**	
	XXX		

2. INCOME STATEMENT

2.1 Generally

Income statement presents the economic results (profit or loss) of a company for a concrete period (usually for a year).

According to International Accounting Standards, this statement must –at least – include the following:

- Revenues.

- Results of operational activities.
- Financial expenses.
- Loss or profit from affiliated companies or joint ventures, which is posted according to the net worth method.
- Taxation.
- Profit or loss from ordinary operations.
- Extraordinary revenues / expenses.
- Minority interest.
- Net profit or net loss of period.

The expenses are analyzed at activity or at sort. The most usual analysis is the first (analysis at activity).

2.2 Income statement model. Analysis of expenses at activity

INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31ST, 2004

	2004	**2003**
Revenues from sales	XXX	XXX
Cost of goods sold	(XXX)	(XXX)
Gross profit	**XXX**	**XXX**
Other operational revenues	XXX	XXX
Disposal expenses	(XXX)	(XXX)
Administrative expenses	(XXX)	(XXX)
Other operational expenses	(XXX)	(XXX)
Operating income	**XXX**	**XXX**
Financial expenses	(XXX)	(XXX)

Revenues from affiliated companies	XXX	XXX
Pre - tax income	**XXX**	**XXX**
Income tax	(XXX)	(XXX)
Income after income tax	**XXX**	**XXX**
Minority interest	(XXX)	(XXX)
Net income from ordinary operation	**XXX**	**XXX**
Extraordinary revenues / expenses	XXX	(XXX)
Net income of period	**XXX**	**XXX**

3. STATEMENT OF CHANGES IN EQUITY

3.1 Generally

Companies must present, as a component part of financial statements, a statement, which presents the changes in stockholders equity at the duration of a period (usually for a year).

That statement must present the following:

- Net profit or net loss of period.
- Revenues / expenses, profits / losses and other increases of economic benefits, which are posted in stockholders equity accounts.
- Cumulative effects because of changes in accounting policies and corrections of fundamental errors, which are posted according to I.A.S. 8 "Net profit or loss of period. Fundamental errors and changes in accounting policies".

3.2 Model of changes in equity statement

STATEMENT OF CHANGES IN EQUITY AT DECEMBER 31ST, 2004

	Share Capital	Prem[1].	Readj[2]. Res.	Conv[3]. Res.	Accum[4]. Profit	Total
Balance 01/01/2003	**XXX**	**XXX**	**XXX**	**(XXX)**	**XXX**	**XXX**
Changes in accounting policies.					(XXX)	(XXX)
Corrected balance	**XXX**	**XXX**	**XXX**	**(XXX)**	**XXX**	**XXX**
Surplus of readjustment properties.			XXX		XXX	
Deficit of readjustment investments.			(XXX)			(XXX)
Foreign exchange differences.				XXX	XXX	
Net increase and loss non - posted in income statement.			XXX	(XXX)	XXX	
Net profit of year.					XXX	XXX
Dividends.					(XXX)	(XXX)
Share capital issue.	XXX	XXX				XXX
Balance 31/12/2003	**XXX**	**XXX**	**XXX**	**(XXX)**	**XXX**	**XXX**

1 Premium.

2 Readjustment Reserve.

3 Conversion Reserve.

4 Accumulated Profit.

Deficit of readjustment properties.		(XXX)			(XXX)
Surplus of readjustment investments.		XXX			XXX
Foreign exchange differences.			(XXX)		(XXX)
Net increase and loss non - posted in income statement.		(XXX)	(XXX)		(XXX)
Net profit of year.				XXX	XXX
Dividends.				(XXX)	(XXX)
Share capital issue.	XXX	XXX			XXX
Balance 31/12/2004	**XXX**	**XXX**	**XXX**	**(XXX)**	**XXX**

4. CASH FLOW STATEMENT

4.1 Generally

Cash flow statement is defined from I.A.S. 7. Its purpose is to succeed the reporting of information for the changes of cash and equivalent cash of a company.

That statement classifies the cash flows of a period at flows from business, investment and financial activities.

4.2 Cash and equivalent cash

Cash is the money of a company in its cash register and in the bank as deposits, which the company has the possibility to use them directly.

Equivalent cash are the short - term investments of high liquidity, which are directly convertible in concrete amounts of cash and they are subjected to immaterial change of their value.

When we "talk" about cash flows, we mean the inflows and outflows, from the company, of cash and equivalent cash.

4.3 Business, investment and financial activities

Business activities are the main operations of income creation of company and other operations which are not investment or financial. Examples of these flows are:

- Earnings from sales of goods and rendering of services.
- Earnings from fees, commissions etc.
- Payments to suppliers.
- Payments to employees etc.

Investment activities are the acquisition and disposal of long - term assets and other investments, which are not included in equivalent cash. Example of these flows is:

- Payments for acquisition or earnings from sale of

property and intangible assets.

Financial activities are the operations, which cause changes on stockholders equity and borrowing of company. Examples of these flows are:

- Earnings from share capital issue.
- Loans' payments in full etc.

4.4 Model of cash flow statement

CASH FLOW STATEMENT AT DECEMBER 31ST, 2004

Cash flows from business activities	
Earnings from customers	XXX
Payments to suppliers and employees	(XXX)
Cash flows from main operations	XXX
Payments for interests	(XXX)
Payments for income taxes	(XXX)
Cash flows before extraordinary items	XXX
Compensation because of natural destructions	XXX
Cash flows from business activities	**XXX**
Cash flows from investment activities	
Real estate purchases	(XXX)
Earnings from sale of equipment	XXX
Earnings from interests	XXX
Earnings from dividends	XXX
Cash flows from investment activities	**XXX**
Cash flows from financial activities	
Earnings from share capital increase	XXX
Earnings from long - term borrowing	XXX
Payments for dividends	(XXX)

Cash flows from financial activities	**XXX**
Increase in cash and equivalent cash	XXX
Cash and equivalent cash at the beginning of period	XXX
Cash and equivalent cash at the end of period	**XXX**

5. NOTES OF FINANCIAL STATEMENTS

The notes constitute the fifth and last financial statement, which its preparation and publishing is imposed from I.A.S.

That statement must include the following:

- Presentation of preparation bases of financial statements and the accounting methods that selected for important transactions and other economic events.
- Reporting of additional information, which is necessary for the fair presentation.
- Disclosures of whatsoever specific accounting handling which is necessary for the right understanding of financial statements.

6. FINANCIAL STATEMENTS ACCORDING TO GREEK ACCOUNTING PRINCIPLES

Greek Accounting Principles and concretely the Greek Uniform Chart of Accounts impose the preparation of the following financial statements:

- Balance sheet.
- Operating account statement.
- Income statement.
- Retained earnings statement.

- Notes.

From the financial statements above, are compulsory published the balance sheet, income statement and retained earnings statement. There are introduced – according to I.A.S. – two new statements (cash flow statement and statement of changes in equity), which are compulsory published with the balance sheet, income statement and notes.

Therefore, everyone understands that Greek companies must do the necessary changes and introduce the new procedures for the harmonization with I.A.S. Of course, these changes do not concern all the Greek companies but only the public listed companies in the stock exchange of Athens. The official date of adoption of I.A.S. in Greece is January 1st, 2005. From that date, the companies must prepare their financial statements according to I.A.S. For the rest companies the adoption of I.A.S. is optional.

7. ADDITIONAL INFORMATION. INTERNATIONAL ACCOUNTING STANDARDS 8 & 10

Before we start writing about fixed assets, we must write some additional things, which concern the fair presentation of financial statements.

Financial statements that we wrote down above are prepared at the end of each accounting period (usually on 31/12/200X) and their information must present the fair economic condition of companies. However, sometimes there are important wrongs in these statements, which change the real economic condition of a company. In addition, there are sometimes which the company change the accounting policies that were used the previous period. In this case, the economic data cannot be comparative between these two periods

and – because of that change – the economic results that presented are not real.

7.1 International Accounting Standard 8.

Net profit or loss for the period, fundamental errors and changes in accounting policies.

These fundamental errors and changes in accounting policies are defined from I.A.S. 8. The purpose of that standard is to describe the accounting handling and presentation of some data of income statement on a constant basis in order to be comparative with previous periods. It also defines the accounting handling of changes in accounting policies and the correction of fundamental errors.

7.1.1 Fundamental errors

Sometimes, some amounts of balance sheet or of income statement are presented approximately and not fairly because there are not necessary information for them. In these cases are probably important the approaches that initial calculations were based and their presentation is not fair according to the definitions of I.A.S. So, if there is a fundamental error in financial statements then must be presented the following information in the notes of financial statements:

- Full description of that error.
- The total amount of that error which influences the current period.
- The amount which influences each of the previous accounting periods.

7.1.2 Changes in accounting policies

According to I.A.S. 8, changes in accounting policies are allowed only at the following cases:

- It is legally imposed from the regulations of the country that the company works or from I.A.S.
- It is imposed for the fair presentation of economic events and transactions of company for that accounting period.

When there is a change in accounting policies then must be presented the following:

- The reason of that change.
- The amount, which arise from that change and the effects to the current period.
- Whichever amount effects the previous accounting periods.
- A report, which shows that the amounts of previous periods were differentiated according to the change in accounting policies.

7.2 International Accounting Standard 10. Events after the balance sheet date

That standard is occupied with transactions, which were realized after the balance sheet date and before the approval of financial statements from the Board of Directors of a company.

For better informing of stockholders the financial statements must present information for transactions after the balance sheet date. The posting of these economic events must be done according to two ways:

- Events that must be recorded in the books (adjusting events).
- Events that is not necessary to be recorded in the books but there must be supplement report in the notes of financial statements (non - adjusting events).

Examples of adjusting events are:

- Fraud or error discovery, which effects financial statements after the balance sheet date and before their approval from the Board of Directors.
- Definition of value for assets, which were existed on balance sheet date and their valuation realized between the balance sheet date and the approval of financial statements from the board of directors.

Examples of non - adjusting events are:

- Transactions, which concern fixed assets of great value. In these cases, the signature of contracts, which concern these transactions before the balance sheet date, is an important event and must be reported to the notes of financial statements for the informing of the people, which have economic interests from that company.
- Destruction of fixed assets or inventories of important value because of destructive natural phenomenon (fire or earthquake etc.) after the balance sheet date.
- Discontinuing operations after the balance sheet date (I.A.S. 35).

According to the definition of International Accounting Standards

Committee[1] (I.A.S.C.), an information is important when its omission from the financial statements can influence investors at their economic decisions because they (investors), are based on these financial statements.

1 That Committee is responsible for the publishing of I.A.S.

CHAPTER 2

FIXED ASSETS

1. GENERALLY

As we mentioned before, the purpose of I.A.S. is to present fairly the economic condition of companies in order to prepare reliable and comparative financial statements not only in our country but also in all over the world.

The application of I.A.S. will have as a result the existence of important changes in current accounting principles. The preparation of financial statements will be done on the base of fair presentation of economic results and cash flows of company, in order to be assessment the possibility of company to continue its business activity (especially in the long - run) and serve the necessity of users of financial statements for information.

The success of that reality presupposes the overturning of current philosophy and specific purpose of Greek Accounting Principles. The posting, measurement and presentation of accounting data in financial statements must be done on a new and different basis.

Accounting handling of assets like fixed assets (buildings, lots), receivables accounts, doubtful accounts, provisions etc. becomes different and demands the attention of accountants and economic analysts for the harmonization with I.A.S.

Fixed assets are very important for the companies because they have as a result economic and other benefits for many years. Also they represent an important percentage of total value of assets (according to the form of company).

According to Greek Uniform Chart of Accounts, fixed assets are

posted to the first group of accounts and they include tangible fixed assets (buildings, machinery etc.), intangible fixed assets (goodwill, patents etc.), participations in other companies, long - term claims and fixed assets of branches or other centers. The summary accounts that are used for the accounting handling of fixed assets, according to Greek Uniform Chart of Accounts, are the following:

10 Land assets.

11 Buildings – Building fixed installations – Land improvements.

12 Machinery – Machine fixed and various non - fixed installations – Other mechanical equipment.

13 Transportation equipment.

14 Furniture and other equipment.

15 Capital investments in progress and prepayments for the acquisition of fixed assets.

16 Intangible assets and capitalized expenses.

17 .....[1]

18 Participations and other long - term claims.

19 Fixed assets of branches or other centers.

These fixed assets are posted with their acquisition value (purchase price) and they are presented with that value for the whole period of their use in the company[2]. The various expansions, additions and betterments increase the time of their useful life and their acquisition value.

The depreciations of fixed assets are realized according to the depreciation rates which are defined from the relative laws which the

1 That account can be used from the company according to its necessities.

2 That is the definition of Greek Uniform Chart of Accounts for the fixed assets.

state has enacted.

International Accounting Standards, before the presentation and analysis of various accounting data of balance sheet, mention when these data are posted or not in that statement. I.A.S. mention that an asset is posted in the balance sheet when is probably that the future economic benefits will be inputted in the company and the value of that asset can be valuated reliable. On the contrary, the recognition of expenses from which are not expected economic benefits are posted to the results of operation.

According to I.A.S., non - current assets and the way of their presentation in the balance sheet are the following:

1.1 Tangible fixed assets

In this group are posted the fixed assets (fields, lots, buildings, machineries, transportation equipment, furniture and other equipment, capital investments in progress) either they are privately owned or they are owned from the company because of financial leasing.

Tangible fixed assets are defined from I.A.S. 16 "Property, Plant and Equipment" insomuch they are privately owned and from I.A.S. 17 "Leases" insomuch they are owned because of financial leasing. The property, which is owned for investment purposes, is defined from I.A.S. 40 "Investment Property". The accounting handling of devaluation of fixed assets because of impairment loss of their value is defined from I.A.S. 36 "Impairment of Assets".

1.2 Intangible assets

In this group are posted the intangible assets of a company like electronic software, patents, goodwill etc. These assets are defined

from I.A.S. 38 "Intangible assets".

1.3 Goodwill

Goodwill is the difference between the value that was given and the real value of assets (minus liabilities) at the purchase of a subsidiary company. Goodwill is defined from I.A.S. 22 "Business Combinations".

1.4 Investments in subsidiaries

These investments are composed of the purchase value of subsidiary companies analysed at participation value (real value of assets) and goodwill. Investments in subsidiaries are defined from I.A.S. 22 "Business Combinations".

1.5 Other financial data

In this group are posted the non - current assets like owned investments until their expiration, financial assets for sale.

These assets are defined from I.A.S. 32 "Financial Instruments: Disclosure and Presentation" and I.A.S. 39 "Financial Instruments: Recognition and Measurement".

CHAPTER 3

INTERNATIONAL ACCOUNTING STANDARD 16.

PROPERTY, PLANT AND EQUIPMENT

We mentioned before that property, plant and equipment[1] are, fixed assets (fields, lots etc.) which are privately owned or they are owned from the company because of financial leasing. Privately owned fixed assets are defined from I.A.S. 16. *The main aim of that standard is to specify the accounting handling of tangible fixed assets.*

Examples of tangible fixed assets are:

- Land assets.
- Fields.
- Buildings.
- Machinery.
- Ships.
- Airplanes.
- Vehicles.
- Furniture.
- Office equipment.

1. POSTING OF TANGIBLE FIXED ASSETS

Tangible fixed assets are posted in the group of non - current assets of balance sheet. This posting is realized when:

- It is probably that the future economic benefits from

1 Property, plant and equipment are tangible fixed assets which are privately owned from the company in order to be used at goods' production or at rendering of services, for leasing or for managerial purposes.

these assets will be inputted in the company.

- The cost of these assets can be valuated reliable.

According to I.A.S., at the posting, tangible fixed assets must be separated to assets which are used for the production activity of company (fixed assets which are used from the businessperson) and to assets which the company owns for investment (investment property). The posting is realized on the base of that separation of fixed assets[1].

2. INITIAL MEASUREMENT OF TANGIBLE FIXED ASSETS

Tangible fixed assets are initially valuated at their cost[2]. The cost of a tangible fixed asset is composed of: i) the purchase price and ii) the relative expenses, which were required in order to make the fixed asset capable for the use that the company expect. Kinds of these expenses are the following:

- Expenses for the forming of installation space.
- Initial expenses for delivery and transportation.
- Formation and set up expenses.
- Whatsoever expenses, which were realized in order to bring the fixed asset in operation condition (administrative expenses, testing of operation expenses etc.).

1 There is also the possibility for the buildings to be posted in the group of current assets, when they are used for trade purposes. An example is the companies, which lease properties.

2 Cost of fixed assets is the amount that was paid in cash or equivalent cash or the real value of another asset which was given for the acquisition of the new fixed asset.

3. POSTING OF TRANSACTED FIXED ASSETS

A tangible fixed asset can be acquired after transaction with another similar or different fixed asset. The cost of such an asset is defined on the base of the real value of the received fixed asset, which is similar with the real value of the fixed asset that was given, plus the amount of cash or equivalent cash that were paid. The profit or loss from the difference of value of transacted fixed assets is posted to the results of operation.

3.1 Example

A company transacted a machinery with a supplier. The book value[1] of that machinery was €140.000 (acquisition value €200.000, accumulated depreciations €60.000). That company took a new technology machinery. Its real value[2] was €180.000. In addition, the company paid to the supplier for that new machinery €80.000 in cash.

Solution

Its obvious that the loss from that transaction was €40.000. This is because the company gave a machinery and cash of total value €220.000 (€140.000 + €80.000) and acquired a machinery of value €180.000.

The accounting entry of that transaction is the following:

	Debit	Credit
Results of operation	€40.000	

1 Book value is the amount which a fixed asset is posted in the balance sheet after the deduction of accumulated depreciations.

2 Real value is the amount which the fixed asset can be transacted between to parts. These parts are versed to that item and they act in this transaction by their will.

New machinery	€180.000
Old machinery	€140.000
Cash items	€80.000

4. SUBSEQUENT EXPENSES FOR TANGIBLE FIXED ASSETS

Subsequent expenses of a tangible fixed asset increase its book value when is possible that the future economic benefits, which will inputted in the company, will exceed the initial normal efficiency of that fixed asset. The other expenses of that asset are posted to the results of operation of the period that realized.

Examples of these subsequent expenses are the following:

- Conversion of installations in order to be extended their useful life[1] or to be increased their dynamic production.
- Parts replacement of a machinery in order to be improved the quality of produced goods.
- Application of new procedures in the production, which have as a result the reduction of production cost.

5. MEASUREMENT AFTER THE INITIAL POSTING OF TANGIBLE FIXED ASSETS

5.1 Basic method

1 Useful life of a fixed asset is: i) the time period which the fixed asset is expected to be used from the company, ii) the number of produced units, which the company expect to receive from that fixed asset.

According to that method, after the initial posting, a tangible fixed asset is presented to its acquisition value after the deduction of accumulated depreciations[1] and losses of its impairment[2].

5.2 Alternative method

According to the alternative method of measurement, a tangible fixed asset must be presented in revaluated value. The revaluation of value must be done tactical therefore the book values not to be different from the real values on the balance sheet date.

There is a solved example at the next page.

Example

Fixed assets value adjustment.

Company X & Z owns a property. Its acquisition value is €400.000. The accumulated depreciations are €100.000 and its book value is €300.000. According to an adjuster, the current real value of that property is €600.000.

Which is the accounting handling of that revaluation?

Solution

The revaluation of property's value to its real value, according to I.A.S. 16, is realized with two ways:

- Nullification of accumulated depreciations.

1 Depreciation is the systematic allocation of depreciable value of fixed assets at the duration of their useful life.

2 Impairment loss is the amount, which the book value of fixed assets exceeds their recoverable amount.

- Increase of cost and accumulated depreciations.

Nullification of accumulated depreciations

The depreciations that were posted until the revaluation of that property are €100.000 (that account has a credit balance). Therefore, we must debit that account in order to be balanced.

	Debit	Credit
Accumulated depreciations of property	€100.000	
Revaluation reserve[1]		€100.000

After that record the accumulated depreciations account is balanced.

The property account has a debit balance of €400.000 and after the nullification of accumulated depreciations its book value is €400.000 too. Now we must increase the acquisition value of property to its real value which is €600.000. We must debit the property account with €200.000 and we must credit the revaluation reserve with the same amount.

	Debit	Credit
Property	€200.000	
Revaluation reserve[2]		€200.000

1 Revaluation reserve is a stockholders equity account which declares the amount of overvaluation of that property. Its total amount at the and of the revaluation accounting handling will be equal with the difference between book value and revaluation value which is €300.000.

2 As we see, the total credit balance of revaluation reserve is €300.000 (€100.000 + €200.000). That amount presents the profit which arisen because of overvaluation of property's value.

After that entry the property account has a debit balance of €600.000 which is the same with its real value. After that revaluation, the company must change the depreciation method because the depreciations per year became different from them before the revaluation.

Increase of cost and accumulated depreciations

In that case we will increase the cost and the accumulated depreciations of a fixed asset in order to be presented with its real value.

Property's book value is €300.000 and its current value is €600.000. Therefore, there is an 100% increase of its book value according to the revaluation.

The increase of book value and accumulated depreciations will be calculated from the following formula:

$$\frac{Revaluation\_Value}{Book\_Value} \text{ x Acquisition Value – Acquisition Value}$$

$$\frac{€600000}{€300000} \text{ x } €400.000 - €400.000 = €400.000.$$

With that amount, we will increase the acquisition value of property.

$$\frac{Revaluation\_Value}{Book\_Value} \text{ x Accumulated Depreciations – Accumulated Depreciations.}$$

$$\frac{€600000}{€300000} \text{ x } €100.000 - €100.000 = €100.000.$$

With that amount, we will increase the accumulated depreciations.

Before the accounting entry, we must remind that the property

account has a debit balance of €400.000 and the accumulated depreciations account has a credit balance of €100.000.

Now we will increase the value of property with €400.000 and the accumulated depreciations with €100.000. The difference between these amounts represents the profit from the overvaluation and is posted to the stockholders equity account "revaluation reserve"

	Debit	Credit
Property	€400.000	
Accumulated depreciations		€100.000
Revaluation reserve[1]		€300.000

After that accounting entry the property account has a debit balance of €800.000 and the accumulated depreciations account has a credit balance of €200.000. Therefore, the new book value[2] of that property is €600.000 which is the same with its real value according to the adjustment.

6. DEPRECIATIONS OF TANGIBLE FIXED ASSETS

1 We see that revaluation reserve account has the same balance (€300.000) with the previous method of nullification of accumulated depreciations.

2 New book value is the new acquisition value (€800.000) minus the new accumulated depreciations (€200.000).

6.1 Generally

The depreciable amount[1] of a tangible fixed asset must be systematically allocated at the duration of its useful life. The method that is used must reflect the rate of consumption of economic benefits of that fixed asset from the company. The depreciation expenses of each period must be posted to the operating accounts.

For the systematic allocation of value of a tangible fixed asset must exist assessment of its useful life which is realized after the disclosure of the following information:

- The expected use of fixed asset.
- The expected wear and tear, which is depended from the period of its use and from the programme of repairs and maintenances.
- The technical obsolescence.
- Legal and other restrictions for the use of a fixed asset.

The depreciable amount of a fixed asset is defined after the deduction of its residual value[2].

The depreciation methods that are used are the following:

- Straight - line method.
- Decreasing charges method.

1 Depreciable amount is the cost of a fixed asset after the deduction of its residual value.

2 Residual value is the net amount that the company expect to receive from a fixed asset at the end of its useful life, after the deduction of its disposal expenses.

6.2 Straight - line method

Example

Company X acquired a fixed asset for €10.000. Its residual value was assessment for €800 and it' useful life was 5 years.

Which is the depreciation per period?

Solution

With straight - line method the depreciation per period will be: acquisition value – residual value = €10.000 - €800 = €9.200. Now we will divide the depreciable amount (€9.200) with the useful life in order to allocate the depreciation expense for each period.

$$\frac{€9.200}{5} = €1.840$$

Therefore, the depreciation expense for each period is €1.840 and is posted to the operating accounts.

6.3 Decreasing charges method

There are two decreasing charges methods:

- Fixed amount on decreasing depreciated amount.
- Decreasing amount on fixed value.

6.3.1 Fixed amount on decreasing depreciated amount

That amount is calculated with the following formula:

Percentage[1] = 1 – n $\sqrt{\frac{R.V.}{A.V.}}$

n = useful life of fixed asset.

R.V. = Residual Value of fixed asset.

A.V. = Acquisition value of fixed asset.

6.3.2 Decreasing amount on fixed value

According to that method, the acquisition value (after the deduction of residual value) is allocated at equal parts in the useful life of fixed asset and the equal amounts that arise are discounted. At the continuity, each discounted amount is divided with the total discounted value. With that divide, we calculate the percentage. Now if we multiply that percentage with the total acquisition value we will calculate the depreciation per year.

Example

1 Before the amount we must calculate the percentage of depreciation (depreciation rate). After that we will multiply the depreciable amount with that percentage. The amount that will arise is the depreciation expense.

The acquisition value of a fixed asset is €1.000 and the residual value is €0. The useful life of that fixed asset is 4 years.

Which is the depreciation per year according to the decreasing amount on fixed value method?

Solution

First, we will deduct the residual value from acquisition value.

€1.000 - €0 = €1.000.

The depreciable amount is €1.000.

As we mentioned before the depreciable amount is allocated at equal parts in the useful life of fixed asset, therefore:

$$\frac{€1.000}{4} = €250 \text{ / year.}$$

The depreciable amount per year is €250.

We will create the next table for better presentation.

Useful Life (years)	Acquisition Value	Present Value	Depreciation Rate
1	€250	€240,40	26,50%
2	€250	€231,14	25,48%
3	€250	€222,25	24,50%
4	€250	€213,70	23,55%
4 years	**€1.000**	**€907,49**	**100%**

As we mentioned before the equal amounts that are resulted from the allocation of depreciable amount are discounted. If the discount rate is 4% then we will apply the following formula:

$$\text{Acquisition Value} \times \frac{1}{(1+discount\ rate)^n}$$

n = useful life of fixed asset.

The present value for the first year is €250 x 1 / (1 + 0,04)[1] = €240,40.

For the second year: €250 x 1 / (1 + 0,04)[2] = €231,14.

For the third year: €250 x 1 / (1 + 0,04)[3] = €222,25.

For the fourth year: €250 x 1 / (1 + 0,04)[4] = €213,70.

The amount of €907,49 is the total discounted value.

Now we will divide the discounted amounts of each year with the total discounted value in order to calculate the depreciation rates.

First year: $\frac{€240,40}{€907,49}$ = 0,2650 or 26,50%.

Second year: $\frac{€231,14}{€907,49}$ = 0,2548 or 25,48%.

Third year: $\frac{€222,25}{€907,49}$ = 0,2450 or 24,50%.

Fourth year: $\frac{€213,70}{€907,49}$ = 0,2355 or 23,55%.

As we mentioned before, when we will calculate the depreciation rates we will multiply them with the depreciable amount and we will find the depreciation per year.

DEPRECIATIONS PER YEAR

Years	Total Acquisition Value		Depreciation Rates		Depreciations per year
1	€1.000	x	26,50%	=	€265,00
2	€1.000	x	25,48%	=	€254,80
3	€1.000	x	24,50%	=	€245,00

4	€1.000	x	23,55%	=	€235,50
4 years			**100%**		**€1.000**

The depreciations per year are:

First year = €265,00

Second year = €254,80

Third year = €245,00

Fourth year = €235,50

The sum of amounts above is €1.000, which is equal with the total acquisition value. That means that the book value of that asset after four years will be zero.

7. RE – EXAMINATION OF USEFUL LIFE AND DEPRECIATION METHOD OF TANGIBLE FIXED ASSETS

Useful life of tangible fixed assets must be re – examined and in the case of change of that useful life the depreciation must be revaluated. In addition, the company must change the depreciation method, which was selected. The company must re – examine the rate of influx of economic benefits from the fixed asset and if there is a change to that rate the company must modify the selected method in order to represent the fair rate of economic benefits.

8. RETIREMENTS AND SALES OF TANGIBLE FIXED ASSETS

A tangible fixed asset is cancelled from the balance sheet when the company sell or retires it and are not expected future economic benefits from it. Profits or losses from the retirement or sale of a tangible fixed asset are resulted from the difference between its book value and the earnings from its sale. The amount of that difference is posted to the results of operation.

Example of sale of a tangible fixed asset

Company X purchased a machinery on 01/01/2002. Its acquisition value was €60.000. Its useful life was 6 years and its residual value €0[1]. At the end of the fourth year (31/12/2005), the machinery was sold for €25.000.

Solution

The accounting entries of purchase and sale of that machinery are the following:

Purchase on 01/01/2002.

	Debit	Credit
Machinery	€60.000	
Cash Items		€60.000

The account of that machinery has a debit balance of €60.000.

As we mentioned before, the company purchased that machinery on 01/01/2002 and sold that on 31/12/2005. We understand that the machinery occupied in the company for four years. We must calculate the depreciations for these years.

First, we will calculate the depreciation rate from the following formula:

$$\frac{1}{n}$$

1 The residual value is zero only when the company doesn't expect to receive economic benefits from that machinery at the end of its useful life.

n = the useful life of machinery.

$\frac{1}{6}$ = 0,1667 or 16,67% / year.

The depreciation rate is 16,67% per year.

In order to calculate the amount of these depreciations we will multiply the depreciable amount with the rate that we found.

First year: €60.000 x 16,67% = €10.000.

Second year: €60.000 x 16,67% = €10.000

Third year: €60.000 x 16,67% = €10.000.

Fourth year: €60.000 x 16,67% = €10.000.

As we see the depreciations for each year are €10.000. The total accumulated depreciations are €40.000. The accounting entry of depreciations is the following:

		Debit	Credit
31/12/2002	Depreciation expenses	€10.000	
31/12/2003	Depreciation expenses	€10.000	
31/12/2004	Depreciation expenses	€10.000	
31/12/2005	Depreciation expenses	€10.000[1]	
	Accumulated depreciations		€40.000

After these accounting entries the book value of machinery is €20.000 (book value = acquisition value – accumulated depreciations

1 Every amount of €10.000 is posted to the operating accounts of the period that was realized.

= €60.000 - €40.000 = €20.000).

On 31/12/2005 the company sold the machinery for €25.000. The company received €25.000 in cash and gave a machinery of value €20.000. That means that the company had a profit €5.000. That profit is posted to the results of operation. The accounting entry of sale of that machinery is the following:

	Debit	Credit
Cash items	€25.000	
Machinery		€20.000
Results of operation[1]		€5.000

9. TANGIBLE FIXED ASSETS AND TAXATION

It is possible the book value of a fixed asset to be different from its tax base[2]. In that case is resulted a deferred tax difference.

Concretely there are two cases:

- Book Value of asset > Tax Base.

When the book value is greater than the tax base is resulted a deferred tax liability.

- Book Value of asset < Tax Base.

When the book value is lower than the tax base is resulted a deferred tax claim.

Example

Company X owns a machinery. Its book value is €1.000

1 The account "results of operation" shows the profit from the sale.

2 Tax base is the value of assets, which the tax legislation is accepted.

(acquisition value €2.000, accumulated depreciations €1.000). The tax base that tax legislation accepts is €900. The tax rate is 30%. Which is the tax that the company must pay?

Solution

As we see the book value of that fixed asset is greater than the tax base. The tax that the company will pay is €900 x 30% = €270 (that is the tax that the tax legislation accepts). However, the company must pay €1.000 x 30% = €300 because that is the tax from the real value of that fixed asset. The difference between these amounts (€300 & €270) which is €30 is a tax liability for the company. This means that the company must pay €30 more. This payment will be realized at future periods and is posted in the balance sheet as a tax deferral.

I.A.S. 12 "Income Tax" mentions the settlings that must be done to income tax and they concern occasions like the following:

- Fixed assets value adjustment.
- Depreciations with greater rates than the normal.
- Fixed assets value adjustment for tax purposes without accounting revaluation etc.

10. DISCLOSURES

The disclosures that must be presented for the tangible fixed assets are the following:

- The valuation method of acquisition value.
- Sales.
- Acquisitions from consolidations.
- Increases, which are resulted from revaluations.

- Losses from impairment.
- Reverses of impairment losses.
- The depreciation method that was selected.
- Whichever other change.

CHAPTER 4

INTERNATIONAL ACCOUNTING STANDARD 17.

LEASES

1. LEASES – GENERALLY

According to I.A.S. 17, leasing is an agreement between the lessor and the lessee, which the lessor transfers to the lessee the right to use an asset for a concrete period.

There are two kinds of leasing. Financial leasing and operating leasing. Financial leasing is the lease which the risks and benefits of the owning asset are transferred to the lessee. The transfer of ownership title is not demanded.

On the contrary, operating leasing is the lease, which is not financial. For instance, for a building lease, if there is not transfer of the ownership title to the lessee at the end of the leasing period, the lessor keeps an important part of dangers and benefits, which are resulted from the ownership of that building. That is an operating leasing.

Wages are the amounts that the lessee pays to the lessor for all of the leasing period[1]. The "minimal total wages" are the wages that the lessee has to pay to the lessor at the leasing period.

2. LEASES IN LESSEE'S FINANCIAL STATEMENTS

The liabilities and claims of a company from a financial leasing contract are initially presented in lessee's balance sheet as liability to suppliers with the lower amount between:

1 Leasing period is the period, which the lessee has arranged to lease an asset from the lessor.

- The present value of wages, which will compulsory be paid from the lessee.
- The real value of fixed asset.

In lessee's financial statements, financial leasing is posted as asset and liability with the amounts which are equal to the real value of leased fixed asset at the beginning of leasing period.

The expenses that are paid from the lessee and concern that leasing, increase the cost of fixed asset. The wages that the lessee pays are allocated as financial expenses and for the reduce of lessee's liability. Therefore, the financial leasing of a fixed asset has as a result two kinds of expenses for each period. The wage that is paid from the lessee and the depreciation expenses of leased fixed asset. The depreciation method of leased fixed assets must be the same with the method that is used for the depreciable fixed assets that are owned from the company.

Example

Company A & B acquired a machinery with financial leasing from company C & D. Its value was €10.000 and the leasing period was 10 years. The owning title of that machinery remains to company C & D.

Will that machinery be presented in the balance sheet of company A & B?

Solution

International Accounting Standards define that a machinery is recognized as an asset when is controlled from the company and the company expect the influx of economic benefits from its use in the future.

According to that definition, the machinery that company A & B acquired must be posted in the group of non - current assets of its balance sheet because that machinery is controlled from the company A & B and the economic benefits from its use will influx to that company.

3. LEASES IN LESSOR'S FINANCIAL STATEMENTS

The lessor must post in his balance sheet the fixed assets that were given to others as financial leasing. These assets must be presented as a claim against the lessee.

The wages that the lessor receives from the lessee must be posted as financial revenues.

At the previous example, the lessor will post his claim against the lessee (for the payment of wages) at the assets, (debtors), of his balance sheet while each wage collection must be posted to the financial revenues accounts.

4. INTERPRETATION 15: MOTIVES FOR OPERATING LEASING

Interpretation 15 concerns I.A.S. 17 "Leases". Sometimes at the negotiation of a new operating leasing the lessor can give to the lessee motives in order to attach an agreement. Example of these motives is the undertaking from the lessor of expenses that must be done for the attachment of the lease. The leasing of a fixed asset with that way is posted as following:

Lessor's financial statements

The motives, which are given from the lessor are part of the whole cost that was arranged for the leasing. The cost of these motives is deducted from the total wages, which the lessor will receive from the lessee.

Lessee's financial statements

The lessee posts these motives as a discount of the total wages that must pay to the lessor.

Example

A lessor gives some motives to the lessee in order to attach an operating leasing. These motives concern the expenses of transportation of a machinery to lessee's company. The cost of transportation is €50.000 while the leasing period is 5 years and the amount of wages per year is €80.000

Which is the amount of wages per year after that motive?

Solution

The total wages for the period of five years are €80.000 x 5 years = €400.000. The lessee will pay €350.000 because the amount of €50.000 concerns the expenses of transportation of that machinery, which are paid from the lessor. Therefore, the lessee will post the value of €50.000 to the results of operation (as a profit) of the period that the transportation happened. The rest of €350.000 will be

allocated to each year and is posted as financial revenue for the lessor and as an expense for the lessee.

The wage per year after that motive is:

$$\frac{€350000}{5} = €70.000 \text{ / year.}$$

5. GREEK UNIFORM CHART OF ACCOUNTS FOR THE LEASES

According to Greek Uniform Chart of Accounts, financial leasing is presented as operating leasing. At the end of the leasing period the owning title of leased fixed asset is transferred to the lessee in a lower price from its real value.

The fixed assets, which were acquired because of financial leasing, are posted to the memo accounts.

CHAPTER 5

INTERNATIONAL ACCOUNTING STANDARD 36. IMPAIRMENT OF ASSETS

1. GENERALLY

Tangible fixed assets of a company are occupied for its purposes for many years. There is a possibility, after the passage of a time period, the acquisition value of a fixed asset to be different from its real value. I.A.S. requires the fair presentation of assets, which are posted in financial statements. That means that each company, which adopts I.A.S., must find out on the balance sheet date if a fixed asset

is devaluated or not.

The devaluation of assets and its accounting handling is defined from I.A.S. 36 "Impairment of Assets".

The main aim of that standard is to specify the procedures that are putted into practice from a company in order to be secured that its assets will not be presented in a higher value than the recoverable amount[1].

2. RECOGNITION OF A FIXED ASSET, WHICH ITS VALUE CAN BE DEVALUATED

I.A.S. 16 "Property, plant and equipment" gives to the company the opportunity to use the alternative valuation method for its fixed assets after their initial posting.

As we wrote at the presentation of I.A.S. 16 there are two methods of valuation: Basic and Alternative method. According to the basic method, after the initial posting, a tangible fixed asset must be presented at its acquisition value after the deduction of accumulated depreciations.

The alternative method gives the chance of revaluation of fixed assets at their current (real) value (see example at page 31). According to that revaluation a fixed asset is devaluated when its book value exceeds its recoverable amount. In that case, there is an impairment loss[2].

The company must find out on the balance sheet date if an

1 Recoverable amount is the greater amount between net sale price and value in use of a fixed asset. The recoverable amount represents the money that the company would receive from the sale of that asset the moment that this calculation is realized.

2 Impairment loss is the amount that is resulted when the book value of a fixed asset is higher than its recoverable amount.

asset is devaluated or not.

The indications of impairment are coming from information of the exterior or interior environment of a company.

Information of the exterior environment is:

- Market value decrease of fixed assets.
- Important changes in technological and economic environment.
- The stock value of company is lower than its book value.

Information of the interior environment is:

- Obsolescence of fixed assets.
- Interruption or re - organization of a production activity.
- Internal audit reports, which present that the economic efficiency of a fixed asset, is more worse than the expected.

3. MEASUREMENT OF RECOVERABLE AMOUNT

We mentioned that recoverable amount is the higher amount between net sale price (the amount that is expected to be received from the sale of an asset after the deduction of disposal expenses) and its value in use[1].

A fixed asset or a cash – generating unit[2] is valuated in the lower value between its book value and its recoverable amount. This means

1 Value in use is the present value of cash flows that are expected to be received from the use of a fixed asset and from its sale at the end of its useful life.

2 Cash – generating unit is the smaller group of assets that create cash flows from their use.

that is not always necessary to calculate the sale value and the value in use together because if any of these values above is greater than the book value then the fixed asset is not devaluated.

The recoverable amount is defined for a concrete asset. However, if that fixed asset does not produce autonomous cash flows, then it must be posted to a cash – generating unit. In that case, the recoverable amount is defined for the whole cash – generating unit, which that fixed asset belongs.

After the comparing of recoverable amount and book value of that cash - generating unit the impairment loss that will be found out is allocated to the fixed assets – which belong to that unit – according to their value.

4. IMPAIRMENT LOSS: RECOGNITION AND MEASUREMENT

When the recoverable amount of a fixed asset is lower than its book value then the book value of that asset is reduced to its recoverable amount.

That difference, as we mentioned, is called impairment loss and is posted to the results of operation of the period that happened. But if that fixed asset is presented to its revaluated value then the impairment loss reduces that value.

If the impairment loss on the balance sheet date of next period has been reduced, then it must be recognized as revenue (to the period that the reversal of impairment loss happened). But if the fixed asset is presented to its revaluated value then the reversal of impairment loss increases that value.

After the recognition of impairment loss the new book value (the old book value was reduced to the recoverable amount) of a fixed asset is allocated on a systematic basis to its useful life[1].

1 Useful life is the period that the fixed asset is expected to be used

5. EXAMPLES

5.1 Impairment of assets

Company X owns three fixed asses. Their values are the following:

Fixed asset	Value in use[1]	Net Sale Price	Book Value
A	€95.000	€110.000	€100.000
B	€96.000	€99.000	€102.000
C	€94.000	€91.000	€97.000

Is there an impairment loss for each of the assets above?

Solution

We mentioned before that the impairment loss of fixed assets is recognized when the recoverable amount is lower than the book value. We also wrote that the recoverable amount is the greater amount between net sale price and value in use.

According to these that we wrote above, fixed asset A is not devaluated because, the recoverable amount is greater than the book

efficiently from the company.

1 Value in use is calculated as following: We converse the future cash flows of an asset into present cash flows with the appropriate discount rate. For better understanding of value in use there is a solved example at page 52.

value. Concretely, the recoverable amount is €110.000 (the greater amount between net sale price and value in use) and the book value is €100.000. Therefore, there is not impairment loss for that fixed asset.

Fixed asset B is devaluated. Its recoverable amount is €99.000 and its book value is €102.000. The impairment loss is €3.000.

Fixed asset C is also devaluated. Its recoverable amount is €94.000 and its book value is €97.000. The impairment loss is €3.000.

After these calculations, the new book values of these fixed assets are the following:

Fixed asset A: €100.000.

Fixed asset B: €99.000.

Fixed asset C: €94.000.

The differences between old and new book values (for the fixed assets B and C) are posted as expenses to the results of operation of the period that these impairments happened.

5.2 Calculation of value in use

As we mentioned before value in use helps us to calculate the recoverable amount of a fixed asset. After that if we compare the recoverable amount with the book value we will find if there is impairment loss.

We also mentioned that value in use is the present value of future economic cash flows which are expected from the use of the fixed asset in the company. But which is the way of calculation of that value? The following example will help us.

Example

Company Z produces the product K. It is calculated that the

demand for that product will be increasing at 3% per year. After 5 years from the current period the production of that product will stop. It is calculated that after these five years will not exist essential cash flows from the production of that product because of competitive products. At the previous period (2000) the net revenues from its sale were €50.000. The discount rate is 15,5%.

Which is product's value in use?

Solution

This example mentions that the revenues from the sale of that product were €50.000 (at the previous period 2000). If the demand will be increasing at 3% per year then the revenues from the sale of that product for the next five years[1] will be the following:

Year 2001 (next year): €50.000 + €50.000 x 3% = €51.500[2].

Year 2002: €51.500 + €51.500 x 3% = €53.045.

Year 2003: €53.045 + €53.045 x 3% = €54.636.

Year 2004: €54.636 + €54.636 x 3% = €56.275.

Year 2005: €56.275 + €56.275 x 3% = €57.963.

We calculated the revenues that the company will receive for the next five years from the sale of that product. In order to calculate the value in use we must converse the cash flows of each period in present flows. We must use the next formula:

1 We will calculate the revenues only for the next five years, because after the passage of these years the production of that product will stop.

2 For the calculation of revenues we will multiply the revenues of previous period with the percentage which declares the increase of demand every next period (3%).

Cash flows of period (revenues from sales) x $\frac{1}{(1+discount\ rate)^n}$

n = the number of each period (1st, 2nd…).

The present cash flows for the next five years will be the following:

Year 2001: €51.500 x 1 / (1 + 0,155)^1 = €44.589.

Year 2002: €53.045 x 1 / (1 + 0,155)^2 = €39.763.

Year 2003: €54.636 x 1 / (1 + 0,155)^3 = €35.460.

Year 2004: €56.275 x 1 / (1 + 0,155)^4 = €31.622.

Year 2005: €57.963 x 1 / (1 + 0,155)^5 = €28.199.

We calculated the present cash flows of next five years. The value in use will be their sum:

€44.589 + €39.763 + €35.460 + €31.622 + €28.199 = **€179.633 (value in use).**

6. DISCLOSURES

The disclosures that must be presented in financial statements for the impairment of assets are the following:

It must be presented:

- The impairment loss, which posted to the results of operation.
- The reversal of impairment loss, which realized at next periods.
- The value of losses, which posted to stockholders equity accounts.
- The reversal of impairment loss, which posted to stockholders equity accounts.
- Which is the recoverable amount? Net sale price or

value in use?

- The method that used for the definition of sale price.
- The discount rate that used for the calculation of value in use.

CHAPTER 6

INTERNATIONAL ACCOUNTING STANDARD 38.

INTANGIBLE ASSETS

1. GENERALLY – GREEK UNIFORM CHART of ACCOUNTS and I.A.S.

Greek Uniform Chart of Accounts defines as intangible assets the assets that can be valuated and transacted. Examples of intangible assets according to Greek Uniform Chart of Accounts are:

- Patents.
- Goodwill, which is resulted from business combinations.
- Industrial copyrights etc.

International Accounting Standard 38 defines that intangible assets are these which are not material and are owned from the company for use at the production activity or at rendering of services, for lease or for managerial purposes. Examples of intangible assets according to that standard are:

- Patents.
- Software.
- Industrial copyrights etc.

The main aim of that standard is to specify the criterions that are required for the posting of intangible assets in financial statements and their accounting handling.

2. DEFINITION OF INTANGIBLE ASSETS

The examples of intangible assets that I.A.S. 38 defines and other intangible assets, which are defined from the same standard[1], must come up to some premises in order to be characterized as intangible assets. These premises are the following:

- They must be recognized.
- They must be controlled from the company.
- The company must expect future economic benefits by their use.

If there are not these premises then the acquisition expenses of such an asset must be posted to the results of operation of the period that these expenses happened.

3. RECOGNITION AND MEASUREMENT OF INTANGIBLE ASSETS

1 Examples of intangible assets according to I.A.S. 38 are:

- Product marks.
- Newspaper and magazine titles.
- Software.
- Licenses.
- Patents.
- Industrial copyrights.
- Developing intangible assets.

An intangible asset must be posted in the books when:

- It is probably that the future economic benefits of that asset will influx in the company.
- The cost of that asset can be valuated reliable.

The initial valuation of intangible assets is realized at their cost.

If an intangible asset is acquired from a company, then its cost can be valuated from its purchase value, import duties, irrevocable purchase taxes and any other expenses which are required for the preparation of that asset for use.

If an intangible asset is acquired from a purchase then is posted with its real value on the purchase date.

If an intangible asset is acquired through government grant, (operation licences for radio or television channels etc.) then the grant and the intangible asset are posted with the same value.

If an intangible asset is acquired from transaction with another similar or not asset then its cost is the real value of the asset that transacted plus the amount of cash that paid for that transaction.

Finally, according to I.A.S. 22 "Business Combinations", goodwill which is resulted from the combination of two companies is an intangible asset. Therefore, the sale of a company in a higher price from its real value (stockholders equity) is a goodwill and is posted as intangible asset. Goodwill is defined from I.A.S. 22 and not from that standard (38).

4. EXPENDITURES FOR INTANGIBLE ASSETS

The expenditures for an intangible asset must be posted as expenses when they are realized except from the case that these expenditures are part of the cost of an intangible asset.

Examples of expenditures that are posted as expenses are:

- Exploration expenditures.
- Expenditures for training seminars.
- Expenditures for disposal activities.
- Re - organization expenditures.

5. MEASUREMENT OF INTANGIBLE ASSETS AFTER THE INITIAL POSTING

The measurement methods of intangible assets are two:

- Basic method.
- Alternative method.

Basic method

According to that method, after the initial posting, an intangible asset is presented at its cost minus the accumulated amortizations.

Alternative method

According to that method, after the initial posting, an intangible asset must be presented in a revaluated value, which represents its real value at the revaluation date minus every subsequent accumulated amortizations.

If a company revaluates an intangible asset then must also revaluate all the assets that belong to the group of the revaluated asset.

There are two ways for the revaluation of an intangible asset:

- Concurrent revaluation of acquisition value and

accumulated amortizations.

- Offsetting of accumulated amortizations from – before amortizations – book value. After that the net amount is revaluated to its real value and the new value of asset becomes its revaluated value which represents its real value.

Example of intangible asset revaluation

A company owns an intangible asset on 31/12/2003. Its acquisition value is €100.000 and the accumulated amortizations are €60.000. Its book value is €40.000. The real value of that intangible asset on 31/12/2003 is €70.000.

Which is the accounting handling of revaluation of that asset to its real value?

Solution

Concurrent revaluation of acquisition value and accumulated amortizations

According to the first way of revaluation, we must revaluate both of the acquisition value and accumulated amortizations of that asset.

For the revaluation of acquisition value and accumulated amortizations, we will use the same formula with the formula that we used in order to calculate the revaluation of tangible fixed assets (page 32).

$$\frac{Revaluation\ Value}{Book\ Value}$$ x Acquisition Value – Acquisition Value.

$$\frac{€70000}{€40000}$$ x €100.000 - €100.000 = €75.000.

$$\frac{Revaluation\ Value}{Book\ Value}$$ x Accumulated Amortizations – Accumulated Amortizations.

$$\frac{€70000}{€40000}$$ = €60.000 - €60.000 = €45.000.

After these calculations, we must increase the acquisition value at €75.000 and the accumulated amortizations at €45.000. The real value of intangible asset after the revaluation is:

	Acquisition Value.	€100.000	
Plus:	Revaluation of Acquisition Value.	€75.000	**€175.000**
	Accumulated Amortizations.	€60.000	
Plus:	Revaluation of Accumulated Amortizations.	€45.000	**€105.000**
	New Book Value (Revaluated Value).		**€70.000**

We see that the new book value of that intangible asset is the same with its real value on 31/12/2003.

Offsetting of accumulated amortizations with – before amortizations – book value

According to that way of revaluation, we will deduct the accumulated depreciations from the acquisition value and we will

increase the difference until the revaluation amount.

The account of that intangible asset has a debit balance of €100.000 and the accumulated amortizations account has a credit balance of €60.000. We must deduct accumulated amortizations from the acquisition value of that asset. Therefore, we will transfer the accumulated amortizations account to the main account of that intangible asset.

	Debit	Credit
Accumulated Amortizations	€60.000	
Intangible Assets		€60.000

After that accounting record the accumulated amortizations account is balanced and the account of intangible asset has a debit balance of €40.000. Now we must increase that amount (€40.000) until the real value of intangible asset, which is €70.000. The difference between these amounts (€30.000) is profit because of the overvaluation of that intangible asset and it will be posted to the stockholders equity account "Revaluation Reserve".

	Debit	Credit
Intangible Assets	€30.000	
Revaluation Reserve		€30.000

After that accounting record the account of intangible asset has a debit balance of €70.000, which is the same with its real value on 31/12/2003 and the credit balance of "Revaluation Reserve" account represents the profit because of the overvaluation of that intangible asset.

6. AMORTIZATIONS OF INTANGIBLE ASSETS

The amortization value[1] of intangible fixed assets must be allocated on a systematic basis at the period of their useful life[2].

The company must know the following for the definition of useful life:

- The expected use of the asset.
- Technological or economic obsolescence.
- Expected activities from competitors.
- Required maintenance expenditures for the receiving of economic benefits from that intangible asset.
- The period of control of that asset.

The company can use whichever amortization method but must always follows that. The method, which will be selected, must show the rates, which the economic benefits of intangible assets, are consummated from the company. In the case of intangible assets the amortization method that fits better is the straight - line method which we wrote down at the presentation of I.A.S. 16 "Property, Plant and Equipment" (page 35).

The amortizations of intangible assets are posted as expenses. Of course, for the definition of amortization value we must deduct the residual value from the cost of that asset. That value must be zero for intangible assets except from:

- The case that there is commitment from someone to purchase that asset at the end of its useful life.
- The case that there is an active market and the residual value can be defined to that market. It is supposed that this market will exist at the end of

1 Amortization value is the cost of an intangible asset.

2 Useful life is the time period which a fixed asset is expected to be used from the company.

useful life of that intangible asset.

Finally, for the amortization of goodwill, which is a result of business combinations are defined the following (from I.A.S. 22):

- That goodwill is amortized on a systematic basis at the duration of its useful life. For the amortization must be adopted the straight - line method apart from the case that there is an evidence that another method is better.

7. IMPAIRMENT LOSS OF INTANGIBLE ASSETS

The impairment loss of an intangible asset is defined from I.A.S 36. At that point, we will remind that according to I.A.S. 36 an impairment loss is recognized when the book value of assets is higher than their recoverable amount (the greater amount between net sale price and value in use).

Impairment loss is posted to the results of operation. However, if the intangible asset is presented to its revaluated value then the impairment loss reduces the amount of revaluation. The way of calculation of impairment loss is not different from the calculation of impairment loss of tangible fixed assets (see example at page 51).

8. RETIREMENT AND DISPOSAL OF INTANGIBLE ASSETS

An intangible assets is cancelled from the group of non - current assets of balance sheet when the company sale it or there are not expected future economic benefits from the use of that asset.

The difference between book value and the receipts from its disposal is profit or loss and is posted to the results of operation of the period that this disposal or retirement happened.

9. DISCLOSURES

For each group of intangible assets must be presented the following:

- Their useful life and the amortization rates.
- Amortization methods.
- Acquisition value and accumulated amortizations.
- Agreement of book value at the beginning and at the end of the period which presents:
  - Additions.
  - Retirements.
  - Increases from revaluation.
  - Impairment losses.
  - Reversals of losses.
  - Amortization expenses of period.
  - Other relative changes.

EPILOGUE

At the previous pages we wrote down as better as we could the management of fixed assets according to I.A.S.

We mentioned the fixed assets, as they are defined from I.A.S.:

- Tangible fixed assets (I.A.S. 16).
- Fixed assets that owned because of financial leasing (I.A.S. 17).
- Impairment of assets (I.A.S. 36).
- Intangible assets (I.A.S. 38).

Of course, I.A.S. are not exhausted only with the standards above. There are totally 34 I.A.S. and the "Framework for the preparation and presentation of financial statements" which define many cases that concern a company.

Apart from the presentation of each standard, we also mentioned some things about financial statements, which are defined from I.A.S. 1, and we compared these statements with the statements, which are defined from the Greek Uniform Chart of Accounts.

Before we finish that workmanship, we will write some opinions for the establishment of International Accounting Standards.

There is a serious conversation last years about I.A.S. and their adoption from European Union and from our country. I.A.S. will compulsory be adopted from the public listed companies in Athens' stock exchange from 01/01/2005. Therefore, the financial statements of these companies on 31/12/2005 must be presented according to I.A.S. That adoption will bring great changes to the current way of accounting handling and presentation of companies' assets and liabilities. For instance, the same mechanical equipment, which two different companies purchased, will have different value because of

their different useful life or depreciation method that each company will select or because of the impairment, which a company will calculate.

Everyone understands that the philosophy which financial statements were prepared until now is changing and I.A.S. try to harmonize two different pursuits. From the first side the codification of accounting principles which will minimize the capability of development of "creative Accounting" and from the other side the "arming" of financial statement editors with the necessary flexibility which will allow the adjustment of accounting principles to the changeable economic environment.

That means that employees of economic departments and accounts departments must be educated. In addition, there must be re - organization of these economic departments and accounts departments for the adjustment to the new developments, which are coming with I.A.S.

If companies make the right changes for the harmonization with I.A.S., it will be very benefit not only for them but for national economies too.

However, that does not mean that all the things will be perfect. I.A.S. is a step of improvement for the objectivity of financial statements but they are not panacea. Accounting scandals existed and will continue to exist. That is not a fault of I.A.S. Accounting belongs to social sciences and the man plays an important role to them. So, always will be accountants who will try to act in violation of the law in favour of their companies. For the avoidance of these situations, there must be effective audits from legal organizations and the relations between companies and audit organizations must be typical.

Finally, the only thing that we can say – as students which will occupy with Accounting – is to be better education for I.A.S. (more

lessons and time) because we think that I.A.S. are the future of Accounting and is very important for someone, whose will is to be an accountant, to know what International Accounting Standards are.

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