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# **Accounting and Analysis of Equipment Overhaul Costs**

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## **ABSTRACT**

The article proposes to consider the theoretical and methodological foundations of accounting and analysis of equipment overhaul costs. The study of the literature showed that it is necessary to develop recommendations for improving accounting and analysis in real situations at the enterprise. For equipment that needs repair abroad, the authors suggest not to sell it as non-working (scrap metal), but to export and repair it abroad. The procedure for accounting for equipment repair costs abroad is proposed. To improve the analysis of equipment overhaul costs, the authors proposed an algorithm for equipment overhaul cost analysis, which will provide a balanced and reasonable cost estimate. To obtain relevant information for this analysis, the authors have formed requirements for sources of information for financial and economic analysis of non-current assets. The developed proposals will allow companies to improve accounting and analysis of equipment overhaul costs, which in turn will lead to cost savings and strengthen the company's competitive position.

Keywords: Accounting Aspects, Analysis, Costs, Equipment, Fixed Assets, Legal Aspects, Overhaul.

JEL Classification: M41, M49, L64

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### 1. Introduction

Issues of improving the accounting, analytical and legal aspects of any business operations of the enterprise have long occupied the views of various scientists (Panasyuk et al., 2020a; Panasyuk et al., 2020b; Babenko and Abdel-Badeeh, 2018; Bila et al., 2020; Ivanchenkova et al., 2019; Haiduchok et al., 2020; Kwilinski, 2019). Today in Ukraine the problem of depreciation of fixed assets of industrial enterprises remains relevant, which in Ukraine as a whole reaches about 76%, in connection with which each enterprise seeks to restore the initial capacity of fixed assets (Trusova, 2016; Bashynska et al., 2019; Tkachenko et al., 2019). However, difficulties may arise both in the process of repairing fixed assets and in reflecting such costs in the accounting system. The main role and economic importance of the cost of repair of fixed assets is that they are the main reserve for improving the efficiency of labour. Fixed assets consist of a large number of structural elements, which are made of different strength materials, perform different technological functions, have different operating loads and as a result work unevenly (Granov, 2016; Oliynyk, 2015). Studies of differences in financial and tax accounting, which relate to the cost of repair of fixed assets, can reveal significant reserves for improving the efficiency of use of fixed assets, which, in turn, will increase the competitiveness of domestic enterprises (Halynska and Oliinyk, 2020; Baumgärtel, 2008). The above determines the relevance of the study of problems of economic, organizational and legal nature of the cost of repair of fixed assets, including equipment. However, the issues of standard accounting and analysis of equipment overhaul costs are almost thoroughly considered in the literature (Zatoka, 2014; Tkachenko, 2015; Pokropivny, 2017; Liu et al., 2012), so we consider it necessary to develop recommendations for improving accounting and analysis in real situations of the enterprise.

## 2. Prerequisites for Improving the Accounting and Analysis of Equipment Overhaul Costs

The authors' analysis of the activity of production enterprises in Kamenets-Podolsky, Kyiv, Lutsk, Lviv and Zhytomyr allowed to identify and combine real non-standard problems faced by enterprises during the accounting and analysis of equipment overhaul costs. The study found the following:

- no gross errors were found at the enterprises in accounting for the cost of overhaul of equipment, but it was found that there is broken production equipment that enterprises can not repair in Ukraine, sold as scrap metal or simply disposed of; analysis of the cost of overhaul of equipment is almost not carried out at all.

Thus, we will consider in detail these aspects.

# 3. Improving Cost Accounting for Equipment Overhaul

Therefore, we will offer procedure for accounting for the cost of overhaul of equipment that is being repaired abroad. To operations that fall under the customs regime of processing outside Ukraine, art. 162 of Customs Code of Ukraine (Customs Code of Ukraine) includes operations for the repair of goods, including modernization, restoration and adjustment, calibration, so that the export of goods or equipment abroad for repair, modernization, restoration, calibration (with subsequent return to the customs territory of Ukraine), we carry out in customs regime of processing: processing outside the customs territory of Ukraine is a customs regime according to which Ukrainian goods are processed in the prescribed manner outside the customs territory of Ukraine without the application of non-tariff measures of foreign economic activity, subject to return of these goods or products (finished products) to the customs territory of Ukraine in the customs regime of import.

Duty and permission to export. To take the goods out for repair, it is necessary to obtain a special permit from the relevant supervisory authority, which is issued for the "declared" period of repair, but not more than 365 days. To do this, together with the application for export of goods, the company must submit:

- FEA-contract for repairs, which contains a specific list of repairs (modernization, restoration, etc.), the exported goods and the term of their implementation;

- other documents (optional), such as expert opinion on the need for repairs, conclusion and conditions under which the repairs must be carried out.

Technological schemes of processing when sending goods for repair are not required (Part 2 of Article 165 of CCU (Customs Code of Ukraine)). In the mode of processing can be exported for repair, including imported goods, which at import were exempt from customs duties (Part 3 of Article 164 of CCU (Customs Code of Ukraine)).

When exporting goods (equipment) for repair abroad in the customs regime of processing, it may be necessary to pay the export duty in cases established by law (Part 2 of Article 164 of CCU (Customs Code of Ukraine)). At the same time, VAT on export will not have to be paid (paragraph 206.13 of the of Tax Code of Ukraine (Tax Code of Ukraine)). Export of goods for repair is subject to full conditional exemption from VAT.

Since such a transaction is not a supply, the VAT return (in particular, on page 2) the volumes exported for repair of goods (equipment) are not reflected.

Completing the processing mode. The customs regime of "processing outside", associated with the repair of goods by a non-resident, usually ends with the import of repaired goods.

Thus, if the goods (equipment) repaired not under warranty are imported into the customs territory of Ukraine in time, the import operation:

- partially exempt from customs duties (Tkachenko, 2019). You will have to pay the positive difference between the amount of customs duties accrued on processed products and the amount of customs duties that would be payable in the case of import of the relevant goods that were exported outside the customs territory of Ukraine;
- partially exempt from VAT (paragraph 206.2.3 of the TCU). In this case, the positive difference between the amounts of VAT calculated based on the tax base of the repaired goods and the tax base of goods exported from Ukraine for repair, determined by the rules established by paragraph 190.1 TCU (Tax Code of Ukraine). Art. 57 CCU (Customs Code of Ukraine) provides several methods for determining the customs value of imported goods (and the procedure for their application), so that in some situations the customs value of repaired equipment may be higher, i.e. "same" customs value for import and export of repaired goods (equipment) cannot be.

So, if you have to pay "partial" VAT at customs when importing repaired goods (equipment) (given the different customs value of repaired goods during export and import), you must take into account:

- a) the amount of VAT on the import of repaired equipment is paid at customs without the use of an electronic VAT invoice. However, in order for the amount of partial VAT paid at customs when importing the repaired goods to participate in the calculation of the registration limit (included in line 2 of the SER Extract Form F/J1401206), the customs declaration (CD) must contain information about the tax number of the enterprise;
- b) paid at customs "partial" VAT can be included in the tax credit (PC). Such a PC is reflected in the term of the customs clearance procedure on the basis of the TD, which confirms the fact of tax payment, which is important: only in the period of the right to a tax credit;

We send for equipment repair. For the period of foreign repair / improvement of equipment is not removed from the warehouse and its cost is still taken into account on sub-account 104 "Machinery and equipment". Whether to depreciate the equipment depends on the effectiveness of the work performed by the non-resident with the equipment. If their result is the reconstruction, modernization, re-equipment, etc. (hereinafter - improvement) of the object, then according to paragraph 23 of the AR(S) 27 "Fixed assets" (Accounting Regulation), which requires for the period of improvement to suspend accrual depreciation. Depreciation is suspended starting from the month following the month of transfer of the FA to modernization, retrofitting, etc. That is, the FA object is not decommissioned, but simply stop depreciation. However, if not the entire health facility is sent for improvement, but only a part of it, then in this case, according to the explanation of the Ministry of Finance, the AR(S) 27 does not oblige to stop depreciation of FA (Letter, 2008).

If the non-resident will carry out the usual repair of equipment, restoration of its serviceability or overhaul, which does not lead to the improvement of the object of health, then at the time of repair to stop the depreciation of fixed assets is not required.

Equipment repair costs. If the result of the non-resident's work is the repair (restoration, adjustment) of the equipment or its part, which leads to the initially determined amount of future economic benefits (paragraph 15 the AR(S) 27), then the costs are reflected in current costs depending on directions of use of the equipment (Dt 23/91/92/93/94 – Ct 63, 68).

If the result of the non-resident's work is the improvement of the equipment or its part, then in this case the costs are included in the initial cost of the equipment being repaired (previously grouped on account 15 (paragraph 14 AR(S) 7)).

 Table No. 1. Overhaul of equipment abroad

Contents of business transaction	Accounting		Amount, UAH	
	Debit	Credit		
Export of equipment for repair				
Equipment for export abroad has been transferred to a non-resident for repair	104/2	104/1	280000	
2. Paid customs and other costs associated with the export of equipment	371	311	32000	
Depreciated on the costs incurred in the removal for repair of equipment	23, 91-94	631, 685	32000	
4. Debt offset with customs broker and international carrier is displayed	631, 685	371	32000	
Payment and receipt of repair services from a non-resident				
5. Prepayment for repair work is listed (\$ 2000 x 27 UAH/\$)	371	312	\$ 2000. 54000	
6. Repair works were received from a non-resident (signed act of performed works)	23, 91- 94	632*	\$ 2000. 54000	
7. Debts with a non-resident were offset	632	371	54000	
Import of repaired equipment				
8. Funds for payment of customs payments are transferred		311	1000	
to customs authorities (positive difference - according to				
part 3 of article 168 of the Customs code of Ukraine, item 206.2.3 TCU):	377			
- duties				
- "import" VAT	377	311	5500	
9. Broker and international transportation services are paid for	377	311	36000	
10. Costs related to the import of repaired equipment are reflected	23, 91-94	377, 631, 685	37000	
11. Debt offset with customs broker and carrier is displayed	631, 685	371	36000	
12. The amount of "import" VAT (in the form of a positive difference) in the PC (issued TD) is reflected	641/ VAT	377	5500	
13. Repaired equipment was posted	104/1	104/2	280000	
* Since the debt is non-monetary, we do not calculate exchange rate differences, and the costs are determined at the rate of the NBU on the date of prepayment.				

Consider as an example the situation with the overhaul of equipment abroad: the company exported outside Ukraine equipment for repair in the customs regime of processing. Upon export, the company paid for the services of a customs broker (excluding VAT) and international transportation (VAT - 0%) in the amount of UAH 32,000. The cost of the equipment repair service is \$ 2000 (the NBU

exchange rate on the date of prepayment for services was UAH 27/\$). Repair work is aimed at overhaul - restoration of the working condition of the equipment - and is not related to its improvement. Given that the repair is actually carried out outside the customs territory of Ukraine (paragraph 186.2.1 TCU [14]), VAT services are not taxed. When importing the equipment, the company paid "partially" the accrued duty (conditionally) – UAH 1,000. and "import" VAT (conditionally) – UAH 5,500, as well as customs broker services (excluding VAT) and international transportation services (VAT - 0%) - UAH 36,000 (See Table No. 1.).

Thus, the export of fixed assets for repair abroad is carried out in the customs regime of processing with a special permit, payment of duties and without VAT. Funds taken out for health repairs are not written off from the balance sheet. Depreciation of suspended health facilities is suspended if the result of non-resident services is overhaul, which leads to the improvement of the facility or its modernization. When importing repaired medical devices within the term specified in the Permit, "import" VAT is levied on the positive difference between the amounts of VAT calculated based on the tax base of exported and re-imported repaired medical devices. VAT paid on import is reflected in the PC in the general "import" order.

# 4. Improving the Analysis of Equipment Overhaul Costs

We offer an analysis of the cost of overhaul of equipment in the analysis of non-current assets. The stages of the proposed analysis of non-current assets of the enterprise can be grouped as follows (*See* Figure No.1).

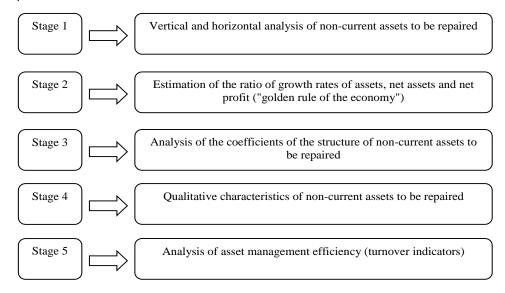


Figure No. 1. The proposed analysis of the cost of overhaul of equipment

Stage 1. In the process of functioning of an enterprise value of the components of non-current assets is constantly changing. Therefore, when analysing non-current assets according to the financial statements it is necessary to assess changes in their volume and structure, to study the status and efficiency of use. At the same time, considerable attention is paid to the fixed assets that form the basis of the material and technical base of any enterprise.

In financial analysis and management, fixed assets are considered as an object of capital investment, and therefore they are also called fixed capital. Briefly describe these stages of analysis. Thus, a description of the quantitative changes in the structure of non-current assets of the enterprise can be obtained using vertical and horizontal analysis of reporting, in particular the form №1 "Balance Sheet".

Vertical analysis shows the structure of non-current assets of the enterprise. As a rule, the indicators of the structure are calculated as a percentage of the total amount under section I "Non-current assets". Horizontal analysis of reporting is to build one or more analytical tables in which

absolute indicators are supplemented by relative growth rates (decreases). It should be noted that in the context of inflation, the value of the results of horizontal analysis decreases. In practice, often combine horizontal and vertical analysis, ie build analytical tables that characterize both the structure of non-current assets and the dynamics of its individual indicators.

Stage 2. The optimum growth of assets of the enterprise is determined by comparing the growth rate of assets with the growth rate of net income and the growth rate of net profit. Note that in the face of inflation, it is also advisable to consider the growth rate of production. If the growth rate of net profit is higher than the growth rate of assets, and the growth rate of volume is lower, then the increase in the efficiency of asset use occurred only due to rising product prices.

Stage 3. This is a study of the coefficients of consistency and mobility of enterprise assets and the relationship between non-current and current assets. If the share of non-current assets is more than 40%, some analysts say the "heavy" structure of assets, less - "easy". "Heavy" structure indicates significant overhead costs and high sensitivity to changes in revenue, "light" - the mobility of the enterprise. Under normal circumstances, the growth rate of current assets should be higher than the growth rate of non-current assets.

Stage 4. Qualitative characteristics of non-current assets to be improved are assessed by a number of indicators. Note that in the process of production and financial activities of enterprises are interested in the preservation and efficient use of fixed assets and other non-current assets. To assess and analyse these processes use a system of indicators, which includes:

- indicators of providing the company with fixed assets;
- indicators of the state of fixed assets;
- indicators of efficiency of use of fixed assets.

The level of provision of the enterprise with fixed assets is characterized by:

- a) an indicator of capital intensity of production;
- b) an indicator of labour capital;
- c) the coefficient of the real value of fixed assets in the value of the property of the enterprise;
- d) the index of fixed assets.

To assess the state of fixed assets of the enterprise use the following indicators:

- a) the depreciation rate of fixed assets;
- b) the coefficient of suitability of fixed assets;
- c) the coefficient of renewal of fixed assets;
- d) the ratio of disposal of fixed assets;
- e) growth rate of fixed assets;
- f) determining the share of the active part of fixed assets.

It should be noted that these figures are quite approximate, as in the balance sheet of most companies' assets are shown at cost. The carrying amount of assets often has nothing to do with their real value, especially in the face of inflation. Indicators of the use of fixed assets are mainly divided into two major groups – in kind and value. Sometimes another group of indicators is singled out – conditionally natural. Natural indicators include productivity per unit time of equipment, machine or mechanism. Such productivity is called technological and is measured in natural units (pieces/year; km/year; t/year). It is entered in the technical passport of the fixed asset. Natural indicators of the use of fixed assets are the most probable, but they do not allow to really assess the degree of use of fixed assets of different types. In order to eliminate such inconveniences, some companies use conditional-natural indicators. Their essence is that the productivity of the equipment, which has the largest share in the enterprise, is taken as a base. Based on it, first build indices are calculated, and then, taking into account these indices – the performance of other equipment. The result is productivity in conventional units. Natural and conditional-natural indicators of the use of fixed assets are used for their active part.

However, it is almost impossible to determine the productivity of buildings, structures, etc. in physical units. In view of this, cost indicators are used to determine the efficiency of use of all fixed assets.

Evaluation of the effectiveness of the use of fixed assets is carried out on the following main indicators:

- a) return on fixed assets;
- b) profitability of fixed assets (Basitere, 2017).

The efficiency of the enterprise is ensured by a high level of renewal of fixed assets, increasing their coefficient of suitability, increasing the rate of return on assets and profitability of fixed assets and reducing the capital intensity of production. The rate of renewal of fixed assets may reflect an increase in the efficiency of the enterprise due to the modernization or other improvement of non-current assets.

In our opinion, before analysing the rate of renewal of non-current assets, it is necessary to analyse the structure of costs for improving non-current assets and evaluate the effectiveness of improving non-current assets.

Stage 5. The financial condition of the enterprise is directly dependent on how quickly the funds invested in assets are converted into real money. The effectiveness of asset management is characterized by the following general indicators:

- turnover ratio;
- duration of one turnover of assets;
- the ratio of working capital.

Along with the above indicators in the analysis of fixed assets, it is advisable to study the relationship:

- purchased fixed assets and total assets;
- costs of repair and maintenance of fixed assets and their value;
- costs of repair and maintenance of fixed assets and income from sales of products (works, services).

The information on fixed assets provided in the financial statements provides an opportunity to analyse and evaluate how the company uses fixed assets. For the purpose of such analysis, in particular, the following indicators are used:

- average service life;
- the average age of fixed assets.

In our opinion, the analysis of non-current assets makes it possible to assess the need for repair, improvement of non-current assets and the effectiveness of the already performed repair or modernization.

For the analysis, which will allow to effectively manage these resources, you need relevant accounting information, in particular that contained in the financial and statistical statements of the enterprise, information on non-current assets contain balance sheet (form ND1), notes to financial statements (form ND1), forms ND1-OZ, 1-depreciation. These sources of information are used for retrospective analysis. Operational analysis is performed according to primary accounting. The forecast analysis of efficiency of use of non-current assets is applied at an estimation of the corresponding alternative administrative decisions. In order to conduct a qualitative and reliable analysis, the necessary information must meet a number of requirements (*See* **Tables No. 2**).

Table No. 2. Requirements for sources of information financial and economic analysis of non-current assets

Requirements	Characteristic		
Information efficiency	The information system must require a minimum of costs for the		
	collection, processing, storage and use of data, providing all the needs		
	of analysis and management		
Objectivity of	Information must be true, reliable, and objectively reflect economic		
information	facts, phenomena, and processes		
	Information for economic analysis can come from various sources		
Unity of	(regulatory, accounting, non-accounting), so it is necessary to eliminate		
information	the separation and duplication of different sources of information,		
	each economic phenomenon must be registered only once		
Analytical information	The information must meet the needs of economic analysis, ie to		
	ensure the receipt of data on those areas of activity and with the		
	details necessary for a comprehensive study of economic phenomena		
	and processes, identifying the impact of factors and determining		
	management reserves		
	The information needed to conduct an economic analysis should reach		
Efficiency of	the analyst as soon as possible. Only in this case it is possible to quickly		
information	influence the course of the production process, the results of economic activity		

Certain data that can be obtained from documents are used to analyze costs. Documenting transactions with non-current assets can be carried out both on standard forms and on forms developed by the company. This problem can be solved in different ways. The easiest way is to adapt, i.e. adapt, the typical forms to modern requirements, to supplement them with the necessary elements. But you can do otherwise: to enter the standard forms only those indicators that are provided in them, and for the rest to develop an additional form, drawing it up as an appendix to the standard form, or as a separate primary document. The choice of option in this case depends on the number of indicators, which have no place, and this number, in turn, depends not only on the requirements of the law, but also on the attention paid to management accounting, as the information needs of business leaders can be much wider than the requirements of the law.

## 5. Conclusions

Therefore, recommendations for accounting and analysis of equipment overhaul costs:

- a) for equipment that needs repair abroad, we offer not to sell it as non-working (scrap metal), but to export and repair it abroad. The procedure of accounting for the cost of repairing equipment abroad is proposed;
- b) the algorithm of the analysis of expenses for capital repairs of the equipment which will provide the balanced and substantiated estimation of expenses is offered.

Thus, the proposed recommendations can help the company to streamline and improve accounting and analysis of equipment overhaul costs, and spare.

### References

- 1. PANASYUK, V., KUZINA, R., MOROZ, J., BABICH, I., MELNYCHUK, I., AND CHYZHYSHYN, O. (2020a). *Accounting of exchange rate differences on transactions with foreign currency loans,* International Journal of Advanced Research in Engineering and Technology, 11(5), pp. 391-398.
- 2. PANASYUK V., LALAKULYCH M., YUHAS E., RYBAKOVA L., AND BOBRIVETS, V. (2020b). *Improving the Accounting and Auditing of Payroll Calculations,* International Journal of Management, 11 (5), pp. 307-319.
- 3. BABENKO, V., AND ABDEL-BADEEH, M.S. (2018). Modelling of the Control of Innovative Processes

- of a Production Activity Taking into Account Risks, International journal of economics and statistics, 6, pp. 99-104.
- 4. BILA, O., GONTAREVA, I., BABENKO, V., KOVALENKO, O., GLIEBOVA., N. (2020). Organizational and methodological guidelines for training education managers to implement the strategy of corporate social responsibility. International journal of circuits, systems and signal processing, vol. 14, pp. 679-685. DOI: https://doi.org/10.46300/9106.2020.14.87
- 5. IVANCHENKOVA, L., SKLIAR, L., PAVELKO, O., CHEBAN, Y., KUZMENKO, H., AND ZINKEVYCH, A. (2019). *Improving accounting and analysis of innovative costs,* International Journal of Innovative Technology and Exploring Engineering, 9(1), pp. 4003-4009.
- 6. HAIDUCHOK, T., SYSOIEVA, I., VASYLISHYN, S., LYSIUK, A., KUNDRYA-VYSOTSKA, O., AND KOSTYRKO, A. (2020). Accounting and control of settlements with counterparties under the conditions of quarantine measures, International Journal of Advanced Research in Engineering and Technology, 11(5), pp. 141-152.
- 7. KWILINSKI, A. (2019). *Implementation of Blockchain Technology in Accounting Sphere,* Academy of Accounting and Financial Studies Journal, 23(SI2), 1528-2635-23-SI-2-412, pp. 1-6.
- 8. TRUSOVA, N. (2016). Systemic factors of projected financial potential of business entities, Economic Annals-XXI, 161(9-10), pp. 61-65.
- 9. BASHYNSKA, I., BALDZHY, M., IVANCHENKOVA, L., SKLIAR, L., NIKOLIUK, O., AND TKACHUK, G. (2019). *Game risk management methods for investment portfolio optimization,* International Journal of Recent Technology and Engineering, 8(2), pp. 3940-3943.
- 10.TKACHENKO, V., KWILINSKI, A., KORYSTIN, O., SVYRYDIUK, N., AND TKACHENKO, I. (2019). Assessment of Information Technologies Influence on Financial Security of Economy, Journal of Security and Sustainability, 8(3), pp. 375-385. http://doi.org/10.9770/jssi.2019.8.3(7)
- 11.GRANOV, R. (2016). *Reconstruction, modernization and repair of fixed assets*, Debit-Credit, 17-18, pp. 10-13.
- 12.OLIYNYK, V. (2015). *Modeling of the optimal structure of insurance portfolio,* Problems and Perspectives in Management, 13(2), pp. 230-234.
- 13.HALYNSKA, Y., AND OLIINYK, V. (2020). *Modeling of the Distribution Mechanism for Fuel Industry Enterprises' Rental Income in the System. State Region Enterprise,* Journal of Advanced Research in Law and Economics, 11, 2(48), pp. 370-381, 10.14505/jarle.v11.2(48).10.
- 14.BAUMGÄRTEL, M. (2008). *Taxation, Accounting and Transparency: The Interaction of Financial and Tax Accounting*, Tax and Corporate Governance, pp. 93-100, 10.1007/978-3-540-77276-7\_7
- 15.ZATOKA, T. (2014). *Theoretical foundations of accounting for repair and modernization of fixed assets*, Regional Business Economics and Management, 2 (42), pp. 94-101.
- 16.TKACHENKO, N. (2015). "Accounting and financial accounting in enterprises of Ukraine: textbook", Kyiv: A.C.K., 784 p.
- 17.POKROPIVNY, S. (2017). "Economics of the enterprise", Kyiv: *Khvylia-Press Donetsk: MP «Search»*, 400 p.
- 18.LIU, J.N., LI, Y., CHEN, L., SUN, J.B., AND SHI, X. (2012). "Research on the Equipment Overhaul Management System", *Applied Mechanics and Materials*, pp. 198-199:1006-1011, 10.4028/www.scientific.net/AMM.198-199.1006
- 19. CUSTOMS CODE OF UKRAINE https://zakon.rada.gov.ua/laws/show/4495-17
- 20.TAX CODE OF UKRAINE https://zakon.rada.gov.ua/laws/show/2755-17
- 21.ACCOUNTING REGULATION (Standard) 27 "Non-current assets held for sale and discontinued operations" http://zakon2.rada.gov.ua/laws/show/z1054-03/print1154499496004944
- 22.LETTER of the Ministry of Finance of Ukraine dated 12/08/2008 № 31-34000-10-9/31548 https://zakon.rada.gov.ua/laws/show/4495-17
- 23.BASITERE, M., EUNICE, I. (2017). "An Evaluation of the Effectiveness of the Use of Multimedia and Wiley Plus Web-Based Homework System in Enhancing Learning in The Chemical Engineering Extended Curriculum Program Physics Course", *Electronic Journal of E-Learning*, 15(2), p. 156.