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PROBLEMS REGARDING COST ESTIMATE FOR FORENSIC COMMODITY RESEARCH

The development of new directions while performing of various types of examinations and forensic researches is one of the priority areas of scientific activity of experts of forensic science institutions of the Ministry of Justice of Ukraine. One of problematic issues arising at the present stage of the development of forensic trade analysis is determining the cost of services, choosing a methodological approach and method for performing aforesaid researches, the limits of competence of forensic trade experts while determining the cost of certain services. Creating methodological recommendations «Determining the Cost of Services while performing forensic trade analysis» will contribute to the improvement of the quality of expert practice in carrying out the forensic examinations in this field.

Whole performing forensic trade researches to determine the cost of services in the framework of the expert subject field 12.1. «Determining the cost of machinery, equipment, raw materials and consumer goods» raises a lot of disputes and doubts, both among forensic experts working in state expert institutions and among appraisers. This is because the service is a product that is endless that means intangible. Also, one of the arguments is that the word service is not listed in the title of specialty 12.1 and does not apply to objects of valuation in intangible form, according to the definitions of national standard № 1 «General principles for property and property rights assessment».

At the 39th meeting of the section of forensic trade analysis at the Ministry of Justice of Ukraine which was held in May 2018, it was proposed to consider a research work on the topic: «Determining the cost of services while performing forensic trade examinations» will contribute to ensure objectivity and completeness of research on determining the cost of services, the formation of uniform methodological principles for performing examinations and forensic researches in this area filling in the gaps in determining the cost of services, using them for preparing and confirmation of the qualifications of forensic experts in relevant subject field.

Keywords: service, products, realization, intangible object, classification of services, assortment of services, tariff.

Formulation of Research Problem. Development of new directions in the performance of different types of expertise and expert

studies is one of the priority areas of scientific activity of specialists of judicial expert institutions of the Ministry of Science of Ukraine.

One of the problematic issues that arises at the present stage of the development of forensic expertise is the determination of the cost of services. While performing commodity research to determine the cost of services, within the expert specialty 12.1. *Determining the Cost of Machines, Equipment, Raw Materials and Consumer Goods* raises a great deal of controversy and doubt both among the forensic experts working at the State Expert Institutions and among the appraisers. This is since the service is considered a product that is immaterial, ie intangible. One of the arguments is that word *service* is not included in the specialty 12.1 name and does not refer to valuation objects in intangible form according to the definitions of national standard №1: *General principles of property and property valuation* defining intangible valuation objects are valuation objects that do not exist in a tangible form but which provide some economic benefit. Intangible assets include financial interests (shares (units, shares), options, other securities and their derivatives, promissory notes, accounts receivable and payables, etc.), as well as other property rights.¹

It should be noted that the result of the work for the provision of any service is evaluated in monetary terms, that is, the service is a kind of goods, proposals for which are available on the Ukrainian market and can accordingly be the object of evaluation. In our opinion, this point of view is relevant, therefore, at the meetings scientific advisory and methodological council at the Ministry of Justice of Ukraine, it was noted that the problem of methodological regulation of solving the cost of services has not been solved so far.

Analysis of Current Researches. We do not currently have any methodologies and guidelines for the preparation of forensic materials to evaluate the cost of services, and therefore we consider it necessary to carry out scientific development that will contribute to the formation of uniform methodological foundations, as well as the correct formulation of questions for the examination and expert research in this area.

At the 39th meeting of scientific advisory and methodological council at the Ministry of Justice of Ukraine which was held in May 2018, it was proposed to consider R&D on the topic: *Determining the cost of services in for performing forensic commodity researches*. At the autumn 40th section of forensic expertise at the Ministry of Justice of Ukraine, Volyn Branch of Lviv Research Institute of Forensic Examinations provided a package of documents on the topic *Determining the Cost of Services while Forensic Examination*. The work is planned to be completed within a period of 3 years, namely: from January 2019 to

¹ Дв.: Ofitsiyni visnyk №37 2003 r. Natsionalnyi standart №1 «Zahalni zasady otsinky maina y mainovykh prav». Zatverdzheno Postanovoiu Kabinetu Ministriv Ukrainy vid 10 veresnia 2003 r. №1440 [in Ukrainian].

December 2021, the co-executor of the topic is the Hon.Prof. M. S. Bokarius Kharkiv research Institute of forensic examinations.

Research Purpose. We substantiate the relevance of this development:

- this is the first time the topic has been addressed and the theoretical and practical aspects of service evaluation have not been covered;
- development of methodological recommendations based on this will ensure the objectivity and completeness of the research;
- classification and assortment of services will be carried out in the work;
- work will define the limits of competence of experts of commodity experts (what kinds of services may be objects of commodity expertise and expert research);
- list of output data needed to determine the cost of services will also be generated.

Main content presentation. Here are the definitions under the Law of Ukraine: *On Consumer Rights Protection*:

1. *Service* is contractor activity to provide (transfer) to the consumer a certain tangible or intangible good defined by the contract, which is carried out at the individual order of the consumer to meet his personal needs;

2. *products* – any product (product), work, or service that is manufactured, performed, or provided to meet public needs;

3. *realization* – activity of economic entities on sale of goods (works, services)».

This R&D performer will analyze the objects of commodity research that will fully relate to services (its concept).

The work will be done to identify the range of services provided by enterprises of different ownership types, which are the most common and have a wide range of offers in the market of similar services, which will allow for comparative analysis of the cost of services.

Carrying out a costing study involves three steps:

- collection of raw data;
- search and collection of data regarding the cost of services provided by enterprises of different ownership;
- determining the cost of services.

In the first stage, the expert collects raw data on the list of materials, raw materials used and the types of work (services) that are performed to deliver the result: the service provision .

The second stage is the search and collection of data on the cost of services provided by enterprises of different ownership, represented in the market of similar services, which have a wide range of offers for the possibility of conducting and comparing types of services and goods, materials used, etc.

The third stage involves a comparative analysis of the proposals and averaging of the evaluation results regarding the cost of the service being investigated.

Since KhRIFE experts are developmental co-executors of topic: *Determining the cost of services for performing forensic commodity researches*,« we are offered an example of determining the cost of services, indicating the technology of service evaluation, the choice of methodological approaches and determining the cost of the service.

Objective of the assessment: to conduct a study of the estimated cost of placing promotional media on rolling stock A and B, in accordance with the attached tender documentation.

The study presents the tender documentation, according to which the *name of the competition subject* (for the right to use commercial experience and business reputation for providing full-cycle advertising services under a commercial concession agreement):

Service № 1 – Provision of a service for distribution of a video log made by the manufacturer and at the manufacturer's own expense, considering the requirements of the Law of Ukraine «On Advertising» and the requirements of the Customer.

Service №2: providing a service for production and distribution of circulation of the logbook in accordance with the requirements of the Customer.

Service №3: Provision of indoor advertising service on Branch C trains according to customer requirements.

Service №4: additional types of advertising (subject to availability of advertising counterparty):

- distribution of disposable head restraints with advertising image of the winner of the competition;
- placement of additional promotional stickers in the cars;
- placement of advertising stickers on the outer surfaces of the rolling stock.

The technology of service evaluation is determined by the actual circumstances of a assessment situation. In the example above, the commodity research process is based on both the consideration of the input data presented for the commodity research entities and the available market information from different sources at the valuation date.

Evaluation technology (commodity research) of different categories of objects implies the division of the evaluation process into several stages:

- study and preliminary collection of the initial data on the object of evaluation (a service in the form of advertising media), based on the raw data presented for conducting this commodity research;
- identification of the object during which its product characteristics are realized;
- substantiation and choice of methodological approaches to property valuation;

- estimation of the cost of the research object (cost) based on the chosen approach;
- conducting a detailed comparative analysis of the commercial offers of different price sources of the research object at the date of valuation. At this stage, the expert will finally weigh the acceptability of the chosen level of market value of services, determine the relevance of the situation of the market of commercial offers (price dynamics) for the considered evaluation period;
- in accordance with the tasks of the commodity research, this research on the question raised in the statement was conducted within the competence of the expert of the commodity expert, considering the provided initial data regarding the object of the research;
- reconciliation of the obtained results and final conclusions about the cost of the service.

Based on the submitted identification documents are subject to the services, namely: providing video distribution service; provision of services for production and distribution of circulation of the logbook; provision of indoor advertising services on Branch C trains as required by the Customer; additional types of advertising (subject to availability of advertising counterparty).

Technical specification:

Service №1: Placement of a magazine (Video magazine – audiovisual work with materials of informational and entertaining nature: videos, videos, clips, audio-visual effects, other informative visual materials and advertising videos).

Requirements for the video log:

– timing of the video log: duration not less than 8 hours. 20 minutes broadcast.

– Frequency of replacing the content of the video log: weekly 100% update of the video log, content titration. Must contain a variety of programs by genre (subject to copyright used in the video magazine), but without loudspeaker support.

– Video magazine content should contain no more than 20% of the advertisement of the total volume of the broadcast.

– Obligatory filling of the video magazine by the Customer.

Technical requirements for the video format of video magazines for uploading to video systems contained in Д trains:

– file size to be uploaded to the video system: 3 files up to 3 gigabytes (GB).

– number of rolling stock: 10 units.

– video format: AVI, mpeg-TS

– video codec – mpeg-2, mpeg-4, H.264

Technical requirements for the video file format for uploading to video systems contained in production E trains:

– number of rolling stock: 2 units; AVI format without additional processing and conversion;

- 1024x768 pixel image format, 16x9 aspect ratio;
- video clips of one issue are reduced in length by video blocks up to 3 Gigabytes,
- maximum number of end blocks of up to 5 files.

Service №2: logbook. The contractor fully provides the process of making the journal at his own expense. Required official information provided by the affiliate of the *Ukrainian Railways* SOE for journaling:

- opening statement of the Head of the branch of the *Ukrainian Railways* SOE in Ukrainian and English;

- safety instructions;
- train schedule;
- general information and technical characteristics of trains;
- train wagon schemes;
- scheme of network of trains A and B;
- information for persons with disabilities;
- loyalty programs for high-speed trains of the branch of *Ukrainian Railways* SOE;

- *Ukrainian Railways* SOE branch news and useful information on introduction of new services on trains A and B.

- Technical requirements for the logbook:
 - paper porosity, cm^3/g , not less than: 0,97;
 - paper density, internal block $110 \text{ gr}/\text{m}^2$;
 - paper density, outer block $350 \text{ gr}/\text{m}^2$;
 - periodicals: monthly, 12 times a year;
 - placement: 100% availability in the pockets of chairs of cars of I and II classes; minimum circulation: 15 thousand copies.

Service №3: placement of all types of indoor advertising on trains of branch formation of the *Ukrainian Railways* SOE according to the schemes:

Technical requirements for advertising materials used for indoor advertising materials used for indoor advertising in the rolling stock of the branch of the *Ukrainian Railways* SOE and conditions of placement:

- poster (poster) in wagons – Size (format): A2; A3; A4; A5;
- paper density: not less than $150 \text{ gr}/\text{m}^2$;
- lamination: posters should be laminated with transparent film Oracal S640/641, which is easy to remove and does not damage the surface;

- installation/dismantling: treatment of the rolling stock surface after dismantling of advertising materials and bringing it to the proper aesthetic and sanitary condition;

- stickers on the elements of passenger seats: size (format) 50x300mm., Material Oracal S640/641, installation / dismantling: surface cleaning after dismantling.

Service № 4: subject to availability of additional advertising scenes of the counterparty, the placement of the advertisers is coordinated by the branch of the *Ukrainian Railways* SOE and is formalized by additional

agreements to the contract in accordance with the procedure for determining the amount of payment for the provision of advertising services at that time.

While research we have identified the services, namely: the name of the objects of study (tariffs), their purpose, main characteristics, pricing characteristics, location of the object of valuation and so on. A tariff is a system of rates for payment for production and non-production services provided to the public, companies, organizations, firms and institutions¹.

Methods used in the execution of the above examination, both general and separate method of commodity. Separate method of commodity research is the system of procedures for the knowledge of consumer value of goods and the determination of the laws of its manifestation and preservation².

Appraisal of property can be carried out using well-known methodological approaches in the world, in particular: income, comparative and cost. Performed forensic examination used a comparative methodological approach of assessment. The comparative approach is based on the principles of substitution and supply and demand.

The comparative approach involves the analysis of selling prices and the offering of similar property, with the corresponding adjustment of differences between the objects of comparison and the object of valuation.

To determine the market value of a valuation item in tangible form using a comparative approach, information on similar property should meet the following criteria:

- terms & conditions of the purchase or sale agreement or the terms of the offer for the conclusion of such transactions do not differ from the conditions that meet the requirements for determining the market value;
- the sale of such property is subject to the standard terms of payment;
- conditions on the market for similar property that determined the pricing of the sale or offer, have not changed substantially at the valuation date, or changes that may have occurred can be considered.

In the examination, the comparison of the objects was made with approximate analogues, as the baseline information was used metro and public transportation tariffs of communal property of one of the cities of Ukraine.

In the course of commodity research we conducted a detailed analysis of prices (basic tariffs that correspond to the types of advertising means / advertisements that are placed on the territory of the subway and

¹ URL : <https://uk.wikipedia.org/wiki/Тариф> (data zvernennia 14.05.2019).

² Osnovy sudovoi ekspertyzy [Basics of forensic examination]: navchalnyi posibnyk dlia fakhivtsiv, yaki maiut namir otrymaty abo pidtverdyty kvalifikatsiiu sudovoho eksperta / avt.-uklad.: L. M. Holovchenko, A. i. Lozovyi, E.B. Simakova-Yefremian ta in. Kharkiv : Pravo, 2016. S. 256 [in Ukrainian].

tariffs of public transport utilities of one of the cities of Ukraine), taking into account information provided by the executive body of the city council: *On the issue of determining the amount of advertising fees in the M city.*

Comparative approach in this paper involves a direct comparison of the evaluated service with similar services.

Conclusions. Performed research established the estimated cost of services for placement of advertising carriers in rolling stock of trains A and B, in accordance with the submitted Competition Documentation.

Summing up, we conclude that the creation of methodological recommendations: *Determining the cost of services for performing forensic commodity researches* will contribute to:

- ensuring objectivity and completeness of cost-benefit research;
- formation of common methodological bases for conducting expertise and expert studies in this area;
- use, if necessary, in the future, by law enforcement authorities and judges of the results obtained for the preparation and appointment of judicial expertise, as well as the correct formulation of issues assigned to cases in determining the value of services;
- elimination of gaps in determining the cost of services, which will be based, as on the study of regulatory documents, special literature of the specified direction and practical experience of experts;
- use of forensic experts in the relevant specialty for the preparation and certification of qualifications.

References

- Fundamentals of forensic examination*: a training manual for specialists who intend to obtain or confirm the qualification of a judicial expert / aut. - Structure.: L. M. Golovchenko, A.I. Lozovyi, E.B. Shimakova-Yefremjan and others. H : Right, 2016. P. 256 [in Ukrainian].
- Official Gazette* № 37 of 2003 National Standard № 1 «General Principles of Appraisal of Property and Property Rights» Approved by the Decree of the Cabinet of Ministers of Ukraine dated September 10, 2003 № 1440 [in Ukrainian].
- On Protection of Consumer Rights*: Law of Ukraine dated May 12, 1991 № 1023–XII. LIGA: LAW OF ELITE [in Ukrainian].
- Tariff*. URL: <https://uk.wikipedia.org/wiki/Tariff> (accesses 02.06.2019) [in Ukrainian].

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ПРОБЛЕМНІ ПИТАННЯ З ОЦІНКИ ВАРТОСТІ ПОСЛУГ ПРИ ПРОВЕДЕННІ ТОВАРОЗНАВЧИХ ЕКСПЕРТИЗ

Розробка нових напрямків при виконанні різного виду експертиз та експертних досліджень є одним з пріоритетних напрямків наукової діяльності фахівців судових експертних установ МЮ України. Одним з

проблемних питань, яке виникає на сучасному етапі розвитку судової товарознавчої експертизи та нових напрямків експертних досліджень, є визначення вартості послуг, вибору методичного підходу та методу при проведенні вищезазначених досліджень, межі компетенції експертів-товарознавців при визначенні вартості певних послуг. Створення методичних рекомендацій «Визначення вартості послуг при проведенні судово-товарознавчих експертиз» сприятиме: забезпеченню об'єктивності та повноти досліджень щодо визначення вартості послуг, формуванню єдиних методологічних засад при проведенні експертиз та експертних досліджень даного напрямку, використанню, у разі необхідності в подальшому, правоохоронними органами і суддями отриманих результатів для підготовки і призначення судових експертиз.

Ключові слова: послуга, продукція, реалізація, нематеріальний об'єкт, класифікація послуг, асортимент послуг, тариф.

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