

Possibilities of Forensic Video and Audio Analysis while Investigation of Crimes, Related to Human Trafficking

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This article purpose is to investigate current issues arising while preparation of materials and appointment of forensic video and audio analysis in case of investigations of crimes related to human trafficking, as well as possibilities of analysis for forming the investigation evidence base. Attention is focused on the global and international significance of human trafficking issues, aggravation of people exploitation in war conditions. Exploitation types of victims of human trafficking and responsibility for committing such crimes were analyzed; types of procedural actions are given, for which technical means are used to obtain video and audio information in order to record traces of crimes; main legal characteristics of such procedural actions are specified. Mistakes that subjects of

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crime investigation make while obtaining evidence that causes loss of a large part of evidence at the stage of the trial, are considered. Specifics and modern possibilities of forensic video and audio analysis for investigation of such crimes are highlighted; it was found out exactly what information from investigated records is used by investigative bodies and for what purpose. An analysis of the tasks solved thanks to video and sound recording expertise and their role in law enforcement activities for further use in court proceedings was carried out. On the basis of researched materials, attention is focused on the results of forensic examinations contributing to resolution of topical issues regarding qualification of acts and circumstances of committed crimes in the field of human trafficking and exploitation of such people, as well as strengthens the evidence base in the case. There are a number of requirements for the proper preparation of materials for forensic video and audio analysis.

Keywords: *forensic video and audio analysis; human trafficking; identification research; diagnostic research.*

Research Problem Formulation

Human trafficking is a global problem that affects the lives of millions of people in almost every country in the world every year. The most well-known form of human trafficking is usually sexual exploitation. In addition, hundreds of thousands of victims become objects of trade for the purpose of forcing them to physical labor, labor exploitation (domestic service, child begging), removal of organs, etc. People exploitation increases in conditions of a state of war or armed conflict (especially such types as recruitment, coercion to participate in armed conflict, abduction and forced transfer for the purpose of obtaining a certain benefit, etc.).

According to the UN Commission on Combating International Crime, the trade in "slaves" is third largest category of organized crime: more profits are made

only from the illegal trade in drugs and weapons ¹. Illegal income from human trafficking feeds of corruption procedures, prepares a favorable basis for further development of illegal business and greatly complicates the work of legal structures and law enforcement agencies.

Law enforcement agencies, NGOs and the State in general are supposed to provide an effective fight against this negative social phenomenon. Ensuring the right to freedom and personal integrity, creating safe conditions for an individual life is an important and primary task of law enforcement agencies. Among remaining types of forensic examinations, it is forensic video and audio analysis that is able to fully and objectively establish circumstances of events in order to clarify the crime procedure and the guilt of the participants while investigation of this crime category.

1 Всесвітній день протидії торгівлі людьми / Річанський ЗЗСО І–ІІІ ст. URL: <https://richanskazos.com.ua/plan-provedennya-informatsijno-prosvitnytskyh-zahodiv-z-metoyu-vidz-nachennya-vsесvitnoho-dnya-protydiji-torhivli-lyudmy> (date accessed: 23.05.2022).

Analysis of Essential Researches and Publications

The issues of evidence formation while investigation of crimes related to human trafficking were considered at different times by the following scientists: M. O. Buriak ², V. K. Veselskyi and V. V. Piaskovskiy ³, N. O. Hutorova ⁴, O. M. Dzhuzha ⁵, V. S. Ivashchenko ⁶, V. M. Pidhorodynskiy ⁷, O. M. Radchenko ⁸, D. V. Shvets and K. L. Buhaichuk (with co-authors) ⁹, K. O. Shcherbakovska ¹⁰ etc.

The main current international legal documents designed to combat trafficking in persons (Protocol

to Prevent and Suppress Human Trafficking, Especially Women and Children and to Punish it supplementing United Nations Convention against Transnational Organized Crime and Council of Europe Convention ¹¹ on Measures to countermeasures against human trafficking ¹²), contain, in particular: basic terms and concepts related to human trafficking; list of socially dangerous acts; methods and techniques for preventing and countering this crime (in particular, for the purpose of labor exploitation); measures aimed at the protection and rehabilitation of its victims.

- 2 Buryak M. Yu. Торговля людьми и борьба с ней (криминологические и уголовно-правовые аспекты) : автореф. дис. ... канд. юрид. наук. Владивосток, 2005. 15 с.
- 3 Veselskyi V. K., Piaskovskiy V. V Торгівля людьми в Україні. Проблеми розслідування : навч. посіб. Київ, 2007. 266 с. URL: http://megalib.com.ua/book/16_Torgivlya_ludmi_v_Ukraini_Problemi_rozslidivannya.html (date accessed: 23.05.2022).
- 4 Гуторова Н. О. Проблеми кримінальної відповідальності за торгівлю жінками, вчинену організованими групами. Боротьба з торгівлею жінками: проблеми вдосконалення законодавства та завдання органів внутрішніх справ. Вісник Університету внутрішніх справ : спец. вип. Харків, 1999. С. 26—28.
- 5 Джуца О. М. Боротьба з торгівлею людьми. Міжнародне співробітництво ОВС у боротьбі з транснаціональною злочинністю : тези доп. Міжнар. наук.-теорет. конф. (Київ, 24.03.2010). Київ, 2010. 272 с.
- 6 Іващенко В. С. Кримінальна відповідальність за торгівлю людьми у законодавстві України. Юридичний журнал. 2005. № 8. С. 59—63.
- 7 Підгородинський В. М. Відповідальність за торгівлю людьми за кримінальним законодавством України : автореф. дис. ... канд. юрид. наук. Одеса, 2005. 19 с.
- 8 Радченко О. М. Торгівля людьми: кримінально-правові та криминологічні проблеми. Держава і право. 2011. № 2 (52). С. 439—444.
- 9 Швець Д. В., Бугайчук К. Л., Федосова О. В., Михайлова Ю. О., Пазинич Т. А. та ін. Особливості розслідування злочинів пов'язаних із торгівлею людьми : наук.-метод. рек. ; за заг. ред. Д. В. Швеця та К. Л. Бугайчука. Харків, 2017. 122 с.
- 10 Щербаковська К. О. Використання можливостей судових експертиз при розслідуванні торгівлі дітьми. Теорія та практика судової експертизи і криміналістики. 2011. Вип. 11. С. 183—189. URL: http://nbuv.gov.ua/UJRN/Tpsek_2011_11_27 (date accessed: 30.05.2022).
- 11 Протокол про попередження і припинення торгівлі людьми, особливо жінками і дітьми, і покарання за неї, що доповнює Конвенцію Організації Об'єднаних Націй проти транснаціональної організованої злочинності : прийнят. резол. 55/25 Генасамблеї ООН від 15.11.2000 р. ; ратифік. Законом України від 04.02.2004 р. № 1433-IV. URL: https://zakon.rada.gov.ua/laws/show/995_791#Text (date accessed: 19.05.2022).
- 12 Конвенція Ради Європи про заходи щодо протидії торгівлі людьми : прийнят. 16.05.2005 р. ; ратифік. Законом України від 21.09.2010 р. № 2530-VI. URL: https://zakon.rada.gov.ua/laws/show/994_858#Text (date accessed: 23.05.2022).

Article Purpose

This Article purpose is raising main problematic issues directly related to the global problem of crimes in the field of people trafficking and exploitation and issues arising while preparation of materials and appointment of forensic video and audio analysis in case of investigations of such crimes, as well as explore possibilities of this analysis to form investigation evidence base.

Main Content Presentation

For many months, if not years, not a day goes by without reports of the unbearable suffering of people in war-torn regions, of desperate journeys in safety search that end in exploitation or death.

Some researches demonstrate people exploitation, trafficking of women, children and men and their enslavement that like a shadow accompany conflicts and wars, are taking on new scales, intensities and forms, especially in countries where conflicts are raging: it is sexual exploitation, forced labor, involvement in armed and terrorist groups, exploitation for drug and organ trafficking, and much more. Trends in development of violence and human trafficking are alarming.

In addition to the hate-driven brutality that usually characterizes the early stages of war (killing men in front of their family members, enslaving women, exploiting children), human beings are increasingly being used as a disposable resource to satisfy the war-generated demand for organs and blood. Such victims are mostly men. In addition, during hostilities, people are often held against their will, they

become victims of kidnapping for ransom, or they are forced into unpaid labor.

As you know, the following types of exploitation are conventionally distinguished in human trafficking¹³:

- sexual one (the most common) is provision of sexual services related to meeting the needs of other people;
- labor one is the use of other people's labor in production, provision of services not related to the satisfaction of sexual needs, production of material or other goods;
- begging;
- forced participation in a military (armed) conflict;
- removal of organs and tissues for transplantation, illegal trade in human anatomical materials, or other purposes.

In our country, the criminal-legal characteristics of human trafficking are given in Art. 149 of the Criminal Code of Ukraine¹⁴ According to it, *"trafficking in human beings, as well as recruiting, moving, concealing, transferring or receiving a person, committed for the purpose of exploitation, with the use of coercion, kidnapping, deception, blackmail, material or other dependence of the victim, his vulnerable state or bribery of a third person, who controls the victim, in order to obtain consent for his exploitation"* shall be punished by deprivation of liberty for various terms (depending on the severity of the consequences caused by such a crime and the specifics of its commission — in relation to a minor or in relation to several persons, or repeatedly, or with a prior conspiracy by a group of persons, or an official using

13 Швець Д. В., Бугайчук К. Л., Федосова О. В., Михайлова Ю. О., Пазинич Т. А. та ін. *Op. cit.*

14 Кримінальний кодекс України від 05.04.2001 р. № 2341-III (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text> (date accessed: 30.05.2022).

an official position, or an organized group from three to fifteen years) with or without confiscation of property ¹⁵.

Fig. 1 demonstrates the main forms of human trafficking and their characteristics ¹⁶.

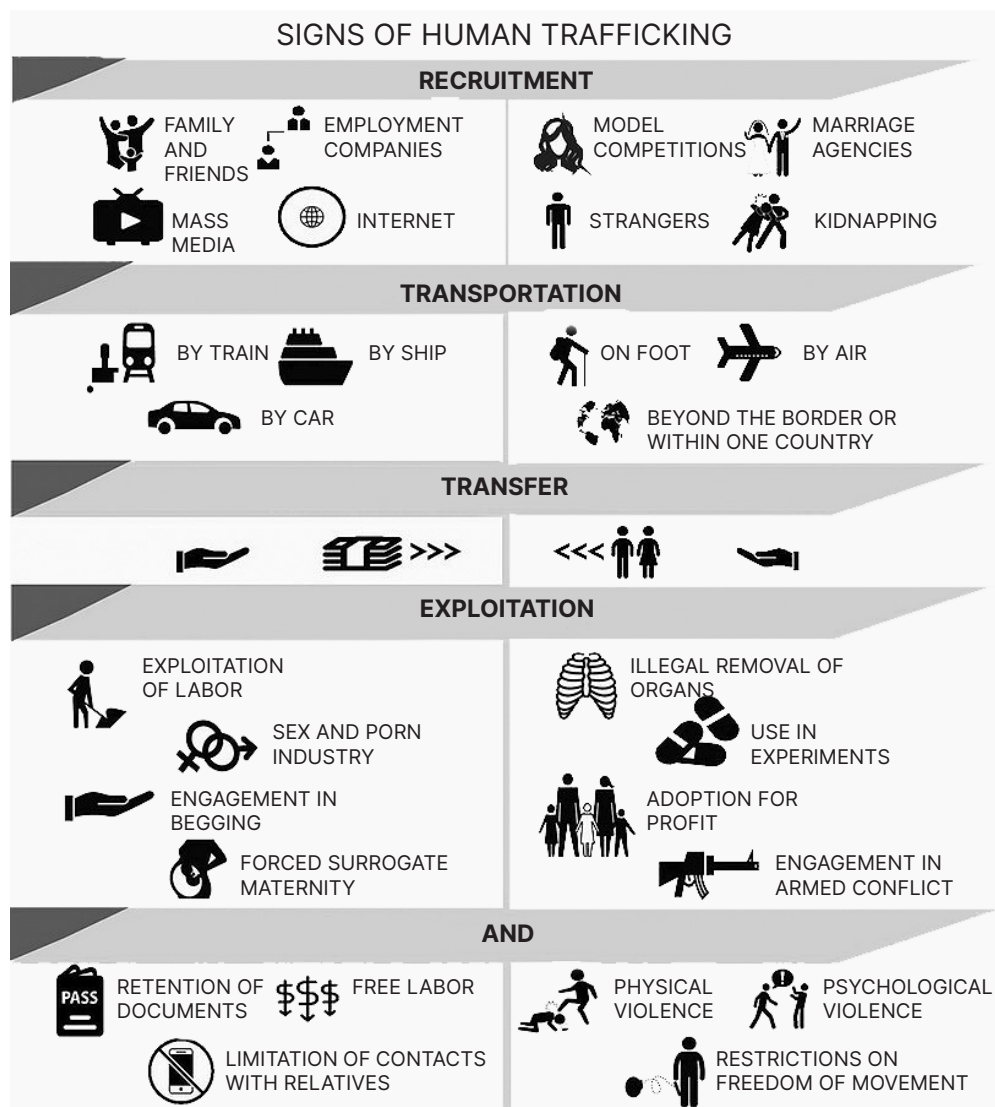


Fig. 1. Signs of human trafficking

¹⁵ Ibid.

¹⁶ Доброта В., Требунських І. Торгівля людьми: злочин, що не має кордонів. *Народне слово*. 07.09.2019. URL: <https://n-slovo.com.ua/2019/09/07/%d1%82%d0%be%d1%80%d0%b3%d1%96%d0%b2%d0%bb%d1%8f-%d0%bb%d1%8e%d0%b4%d1%8c%d0%bc%d0%b8-%d0%b7%d0%bb%d0%be%d1%87%d0%b8%d0%bd-%d1%89%d0%be-%d0%bd%d0%b5-%d0%bc%d0%b0%d1%94-%d0%ba%d0%be%d1%80%d0%b4%d0%be/> (date accessed: 29.04.2022).

According to the requirements of the Criminal Code of Ukraine, in addition to those indicated in fig. 1 of human trafficking crimes, torture: *"intentional infliction of severe physical pain or physical or moral suffering by means of beatings, torture or other violent actions"* is subject to criminal liability (Article 127)¹⁷. In Ukraine, this is a crime and is prohibited under any circumstances as a form of punishment.

Usually, the first steps in human trafficking are search for potential victims and their recruitment, most often by deception. In the search for and attraction of new victims, as well as consumers of their services (customers), criminals either openly address relevant offers to the general public (advertise their services using various types of deception and fraud), or covertly (secretly) look for potential victims in certain environments, that correspond to the purpose of customers of "live goods", or even use modern sources of information about potential victims (for example, using file cabinets or databases of enterprises, organizations, institutions, etc.). Open (loud) informing takes on a public character, criminals place advertisements about the attraction of potential victims or persons who need such services in the mass media.

Important factor in investigation of human trafficking crimes committed in an open (public) form is the real and tactically justified use of video surveillance to achieve an illustrative effect in order to record specific events, development in dynamics of events or phenomena, etc., that is quite difficult to do in the protocol by description. The use of technical means creates the maximum flow of evidence information, reflected in visual and sound images, which significantly facilitates the assessment of the results of investigative

actions in the form of obtained evidence data, the verification of compliance with the procedural requirements that regulate the conduct of investigative actions. Video and audio analysis at this stage can help the investigation to confirm a number of important circumstances regarding the offense under investigation, for example:

- confirm/deny the fact of availability/lack of specific persons at a specific time in a specific place;
- confirm/deny the fact and degree of acquaintance of these persons;
- determine the degree of involvement of each of participants in the offense;
- establish attitude of persons to investigated offense and their emotional state;
- find out chronology of events: data that can be used to reconstruct the course of events, behavior of participants, situation and conditions under that this event took place, etc.

Application of technical means of video monitoring of events in the case of investigation of a hidden (unspoken) form of searching for potential victims of human trafficking is very difficult. However, information obtained in this way creates the maximum flow of evidence that makes possible: prove the event fact that took place; expose a specific person involved in crime commission, or vice versa, confirm innocent person alibi; collect information useful for the investigation (about persons who committed the crime or those involved in its commission; about crime circumstances (conspiracy or concealment of traces of the crime); about facts of meetings or acquaintances; about involvement of specific persons in the crime commission or degree of their

17 Кримінальний кодекс України URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text> (date accessed: 30.05.2022).

involvement; about participant attitude to event, etc.).

Hidden (unspoken) form of committing such a crime certainly providing investigation with a much smaller volume of trace evidence (traceable) information than open (overt) form. Usually, only traffickers themselves, their counterparties and victims have information relevant to criminal proceedings in hidden (unspoken) form of committing such a crime¹⁸.

It is common knowledge that every committed criminal act leaves traces. Certainly, people who commit criminal acts in the field of human trafficking leave traces of their illegal activities. Law enforcement officers should identify and document the facts of such crimes according to a certain scheme of actions, in accordance with requirements of current legislation, taking into account the practical experience of detecting and preventing crimes in the field of human trafficking. Identification of such traces, their fixation and procedural registration, forensic research and interpretation of its results in forensic expert conclusions form the basis of the evidence base in criminal proceedings¹⁹.

The authors of the "Investigator's handbook" in the structure of forensic characterization of crimes consider such elements as *typical traces of a crime* covering any changes in the environment that occurred as a result of crime commission, namely:

- a) changes in material situation;
- b) traces-reflection (traces of hands, feet, transport, tools, etc.);
- c) material material evidence;
- d) ideal traces (traces of human memory);
- e) odorous traces and traces of microparticles²⁰.

Due to the wide range of issues which solution requires the use of specific expertise in form of forensic examination while investigation of crimes related to child trafficking, investigators sometimes do not appoint necessary forensic examinations, especially in presence of eyewitnesses to the crime, in particular victims, who directly indicate on the suspect or the accused. Investigators motivate this position by a number of objective and subjective factors, among which they single out specifics of purpose and duration of forensic researches, conducting them in another department, difficulty of

18 Черечукіна Л. В., Яковенко М. О. Виявлення та розслідування злочинів, пов'язаних з торгівлею людьми : метод. рек. для практ. працівн. Луганськ, 2013. 135 с. URL: <https://dspace.lduvs.edu.ua/bitstream/123456789/184/1/%D0%A7%D0%B5%D1%80%D0%B5%D1%87%D1%83%D0%BA%D1%96%D0%BD%D0%B0%20%D0%9B.%D0%92.%20%D0%AF%D0%BA%D0%BE%D0%B2%D0%B5%D0%BD%D0%BA%D0%BE%20%D0%9C.%D0%9E.%20%D0%92%D0%B8%D1%8F%D0%B2%D0%BB%D0%B5%D0%BD%D0%BD%D1%8F%20%D1%82%D0%B0%20%D1%80%D0%BE%D0%B7%D1%81%D0%BB%D1%96%D0%B4%D1%83%D0%B2%D0%B0%D0%BD%D0%BD%D1%8F%20%D1%82%D0%BE%D1%80%D0%B3%D1%96%D0%B2%D0%BB%D1%96%20%D0%BB%D1%8E%D0%B4%D1%8C%D0%BC%D0%B8.pdf> (date accessed: 29.04.2022).

19 Пілюков Ю. О. Процесуальні вимоги до висновку експерта у кримінальному провадженні. Актуальні проблеми правознавства. 2018. Вип. 3 (15). С. 99—102. URL: http://nbuv.gov.ua/UJRN/aprpr_2018_3_19 (date accessed: 30.05.2022).

20 Панов М. І., Шепітько В. Ю., Коновалова В. О. та ін. Настільна книга слідчого : наук.-практ. вид. для слідч. і дізнавач. 2-ге вид., перероб. і доп. Київ, 2007. 728 с.

obtaining samples for comparative research and their storage, etc.²¹

Sources of sound information form in their totality sound environment of the crime commission of a , make it possible to establish both the identity of the criminal and the rest of the circumstances to be proven. Forensic analysis of sounds recorded in a audio recording helps to recognize and identify sound signals, establish the type of sound sources and their number, and identify such sound sources. As Yu. V. Yashchurynskyi notes, *"sound environment of a crime event is a single system of sound traces of natural and artificial sources, subject-communicative activity of the criminal, and the tools, instruments and technical means used by him, united by a single goal. Achieving the specified goal is determined by nature and time of the action on the object of criminal encroachment, as well as the unity of the place (space) and the method of its achievement"*²².

While crime investigation by law enforcement agencies related to human trafficking, in parallel with the rest of measures, law enforcement officers can carry out the following types of procedural actions requiring the use of technical means of obtaining video and audio information to record crime traces:

- secret investigative (search) actions²³ (Chapter 21 of the Criminal Procedure Code of Ukraine carried out exclusively in criminal proceedings regarding serious or especially serious

crimes. Run and results of secret investigative (search) actions are recorded according to rules of criminal proceedings;

- surveillance of a person, thing or place²⁴ (Article 269 of Criminal Procedural Code of Ukraine). Conducting this covert investigative (search) action consists in direct or indirect visual observation using technical means of video recording, photography, special technical means by a person who observes traders, recruiters and others involved in the commission of a crime in order to find them and record illegal activities;
- audio and video control of the scene (Article 270 of Criminal Procedural Code of Ukraine)²⁵.

Measures to record criminal offenses are carried out with help of audio and video recording technical means. While investigating the criminal activity of human traffickers, video recording of negotiations (interference in private communication) with buyers or audio recording of their conversations with the victim of assault and other persons is quite often used.

Traces of such crimes, in addition to results of wiretapping and video surveillance, obtained in the process of wiretapping actions and measures, can be video and audio recordings obtained at enterprises providing telephone communication services. Potential sources of forensically significant information are

21 Щербаківська К. О. Використання можливостей судових експертиз при розслідуванні торгівлі дітьми. *Теорія та практика судової експертизи і криміналістики*. 2011. Вип. 11. С. 183—189. URL: http://nbuv.gov.ua/UJRN/Tpsek_2011_11_27 (date accessed: 30.05.2022).

22 Ящуринский Ю. В. Криминалистическая диагностика звуковой среды : дис. ... канд. юрид. наук. Киев, 1990. 327 с.

23 Кримінальний процесуальний кодекс України від 13.04.2012 р. № 4651-VI (зі змін. та допов.). URL: <http://zakon2.rada.gov.ua/laws/show/4651-17> (date accessed: 02.06.2020).

24 Ibid.

25 Кримінальний процесуальний кодекс України URL: <https://zakon.rada.gov.ua/laws/show/4651-17/ed20220520#Text> (date accessed: 02.06.2022).

mobile communication devices: a evidence variety and indicative information is contained in the mobile phones of participants in human trafficking. Mobile phone, on the one hand, is a carrier of traces of a crime, on the other hand, source of information.

General for removing information from electronic communication (Article 263 of Criminal Procedural Code of Ukraine)²⁶ and electronic information systems (Criminal Procedural Code of Ukraine)²⁷ in Crime detection and investigation activities is the use of technical control over information directly transmitted through technical communication channels. Information from communication channels is automatically recorded continuously while period of time determined by investigator. In contrast, specialists extract information already available and stored in their memory from mobile communication devices. Not only the content of the information, but its emotional color, background and other information that can accompany the speech and be recorded, for example, by sound recording devices, can be of cognitive importance for the removal of information from communication channels.

Practice of conducting video and audio analysis indicates that they can be conventionally divided into two main groups. The first group includes records made directly in activity field of law enforcement agencies, including: records of information that comes to the next part; records made while investigative

activity; records of court sessions, etc. This group should include records in the field of criminal proceedings as a result of the use of video and audio recording in the process of official and production activities (for example: records of messages from the *Ambulance* service, the State Emergency Service; conversations between aircraft crews and airfield controllers; conversations between power plant controllers, gas supply enterprises, railways, taxi services, etc.). The second group includes records obtained by private individuals to record information for purpose of its using to interpret various situations that are subject of a preliminary investigation. With such records, interested parties try to prove the fact of the event that took place; expose a certain person involved in the commission of a crime, or vice versa; substantiate one's own alibi. This group of records can contain information or details useful to the investigation²⁸.

Video and audio analysis is of fundamental importance for the objective consideration of crimes in the field of human trafficking by an investigator (detective, prosecutor), since wide use of technical means makes it possible to document the actions of criminals during the commission of such crimes. Thus, for example, in modern conditions, a valuable source of evidence and indicative information is:

- video and sound recordings obtained using household recording devices (recorder, telephone, etc.);

26 Кримінальний процесуальний кодекс України URL: <https://zakon.rada.gov.ua/laws/show/4651-17/ed20220520#Text> (date accessed: 02.06.2022).

27 Ibid.

28 Брендель О. І. Організаційні проблеми під час призначення судової експертизи відео-, звукозапису. *Науковий вісник Дніпропетровського державного університету внутрішніх справ*. 2020. Вип. 4 (108). С. 284—290. DOI: 10.31733/2078-3566-2020-4-284-290 (date accessed: 30.05.2022).

- video and sound recordings made on special devices for receiving information secretly;
- video and sound recordings from various video recorders (from external surveillance cameras, car video recorders, etc.);
- mobile phones and other data carriers that are components of mobile phones (SIM cards and memory cards, etc.), which under certain conditions also become objects of research. (Unfortunately, some investigators are not sufficiently familiar with forensic science possibilities and do not even guess that from the mobile phones seized while investigation, a highly qualified specialist can obtain data from the memory of mobile terminal and SIM card (sometimes several), from removable media, as well as connection information, audio and video recordings, messages, etc.).

Mistakes made in while obtaining evidence by the investigation subjects of crimes related to human trafficking can cause the loss of a significant part of evidence at the trial stage, if the court finds such evidence inadmissible due to violations of procedural norms during its collection. It is a carefully conducted examination of video and audio recordings that can ensure a complete and objective establishment of circumstances of the events to clarify the crime procedure and the guilt of the participants based on the available video and audio recordings while investigation of this crime category.

While investigating crimes related to human trafficking, there is often a need not so much to obtain and investigate in real time the content of conversations transmitted by mobile communication networks but to determine and further

extract the necessary information (if there are sufficient grounds to believe that such information is essential for establishing crime circumstances).

In forensic research of video and sound recordings, two main directions are distinguished: the first, where the research object is oral human speech and the second, which object is the technical component of recording. In view of the above, the main tasks of video and audio analysis are research on oral speech with the aim of identifying a person by voice and/or speech, as well as determining technical conditions and technologies for obtaining video and sound recordings. Video and audio analysis at this stage will help investigation to establish a number of important circumstances regarding the investigated offense (some of them we have already mentioned above), for example:

- confirm facts of presence/absence of specific persons in a certain place at a certain time;
- confirm the fact and acquaintance degree of these persons and each involvement degree of participants in offense;
- establish attitude nature of potential victim, as well as criminals directly, to a certain event that is taking place;
- find out data that will make it possible to reconstruct the situation and conditions under which the event took place, behavior of its participants;
- determine connections of accomplices and establish the facts of receiving remuneration for recruitment, people transportation, transfer, hiding and exploitation;
- establish the fact of person transfer to the customer and exploitation type for which such transfer took

place (for example, illegal removal of organs, forced surrogate motherhood, involvement in begging, adoption for profit, etc.);

- find out the facts of forcing people to perform certain types of work or exploitation (for example, using threats, deception or other coercion, blackmail, etc.);
- establish the facts of remuneration non-compliance the (its size, nature, conditions and duration) with the pre-arranged and agreed conditions or facts of of such remuneration missing in general;
- find out the facts of specific individuals sending children to photo studios for filming pornographic materials, etc., for a fee.

Specificity of research objects, diversity of tasks to be solved that can be put to forensic expert solving, as well as other factors determine some specifics that investigator should pay attention to when passing a resolution on appointment of video and audio analysis. These specifics can apply both to the questions posed to forensic expert and to the scope, nature and order of obtaining materials provided for research ²⁹.

It should be noted that quite often video and audio analysis is prescribed in a complex with examinations of other types (or types). For example, in a complex with video and audio analysis, semantic-textual examination is most often prescribed (in particular, when oral speech or its fragments are to be interpreted). The direct analysis of text reproduction of the content of conversation helps to strengthen the

evidence base in the case, since forensic expert conclusion is one of the pieces of evidence, on the basis of which the circumstances that are important for the correct further consideration of the case in court are established. Even the conclusion that records submitted for research are not suitable for conducting research will always be motivated and illustrated (for example, by numerical values of the relevant criteria of parameters under research).

We will briefly consider diagnostic technical research on recording media and equipment that can contain information about the technologies of obtaining/fixing/saving video and audio recordings, characteristics and features of the data media itself. Essence of this area of forensic Video and audio analysis is to perform research on technical means of reception/transmission/fixation/storage of visual and additive information and its carriers. Such researches are carried out with the aim of determining technical conditions and technologies for obtaining video and sound recordings (in particular, find out the recording system (mechanical, optical, magnetic one), method and means (analog or digital); detect the fact of copying, overwriting or duplicating, as well as signs, methods and means of installation; establish the technological characteristics of recording production detected defects, damages, etc.), as well as with the aim of diagnosing devices for recording recordings, means of their production, determining the technical condition of video and sound recording devices and their components, nature of malfunctions, probable causes their occurrence, etc ³⁰.

29 Можаяев М. О., Брендель О. І. Деякі організаційні та проблемні питання при призначенні комп'ютерно-технічних експертиз та експертиз відео-, звукозапису. *Судово-експертна діяльність в Службі безпеки України: актуальні питання теорії та практики* : зб. мат-лів Міжнар. наук.-практ. конф. (Київ, 31.03.2021). Київ, 2021. С. 191—195.

30 Брендель О. І. Сучасні можливості діагностичних досліджень у криміналістичній експертизі відео-, звукозапису. *Теорія та практика судової експертизи і криміналістики*. 2021. Вип. 23. С. 203—211. DOI: 10.32353/khrife.1.2021.15 (date accessed: 30.05.2022).

Conclusions

Despite introduction of strict criminal liability for human trafficking, adoption by most civilized states of numerous by-laws with the aim of solving this urgent problem worldwide as soon as possible, the number of real criminal proceedings and corresponding sentences for its occupation remains insignificant. A successful strategy for combating human trafficking consists in application of criminal punishment, in international coordination of police actions and in a set of some other measures that make it possible to prosecute criminals more effectively. In this sense, the fight against human trafficking is focused on fight against crime.

Attention should be paid to fundamental points that relate to certain aspects of the tactics of appointing and conducting forensic examinations while investigation of human trafficking cases and effectiveness of the use of forensic expert conclusions in such proceedings. Appointment of forensic examination should be preceded by actual measures to find additional and confirm available evidence, relating not only to the actual circumstances of the crime, but to the degree of awareness of involved persons proving their intention to commit a crime, as well as verifying complicity version in criminal activity of certain persons. In addition, investigators should more actively use non-procedural forms of specific expertise application for example, consultations of specialists, experts. While consultation, you can get background information related to a specific examination type, namely:

- modern capabilities of forensic research;
- correct question formulation;

- list of objects that should be provided to forensic expert, etc.

At preparatory stage, investigator should carefully consider question wording to forensic expert: they should be aimed at finding connections with the main fact, namely, the act of human trafficking that is of direct importance for establishing the truth in the proceedings. Forensic expert conclusion is information obtained through forensic research, which result directly depends on materials provided to forensic expert for research. In this regard, propriety and admissibility of the expert's opinion depends on the legality of obtaining (in the course of investigative (search) actions) information and material evidence provided to expert for research. In this case, preparation of objects for identification research becomes especially important. In order to solve the questions, expert should provide high-quality samples for comparison (experimental, free, conditional-free), trace-forming objects, information about other circumstances related to formation of traces.

Video and audio recording materials attached to the proceedings are the most objective source of evidence that is essential for crime investigation. Proper preparation of materials provided for Video and audio analysis not only facilitates forensic expert's work and shortens the research period, but guarantees the lack of comments while court hearing.

**Можливості експертизи відео-,
звукозапису під час розслідування
злочинів, пов'язаних із торгівлею
людьми**

**Ольга Брендель, Костянтин Нікулін,
Ельвіра Асланова**

Мета статті — дослідити актуальні проблеми, які виникають під час

підготовки матеріалів і призначення експертизи відео-, звукозапису в разі розслідування злочинів, пов'язаних із торгівлею людьми, а також можливості цієї експертизи для формування доказової бази розслідування. Акцентовано увагу на глобальності й міжнародному значенні проблеми торгівлі людьми, загостренні експлуатації людей в умовах війни. Проаналізовано види експлуатації жертв торгівлі людьми та відповідальність за скоєння таких злочинів; наведено різновиди процесуальних дій, за яких застосовують технічні засоби для отримання відео- й аудіоінформації з метою зафіксувати сліди злочинів; зазначено основні правові характеристики таких процесуальних дій. Розглянуто помилки, яких у процесі отримання доказів припускаються суб'єкти розслідування злочинів, що спричиняє втрату значної частини доказів на етапі судового розгляду. Висвітлено особливості й сучасні можливості застосування судової експертизи відео- та звукозапису для розслідування таких злочинів; з'ясовано, яку саме інформацію із досліджуваних записів використовують слідчі органи та з якою метою. Проведено аналіз завдань, вирішуваних завдяки експертизі відео-, звукозапису, і їхньої ролі у правоохоронній діяльності для подальшого використання у судочинстві. На підставі досліджених матеріалів акцентовано увагу на результатах експертиз, що сприяє розв'язанню актуальних питань із кваліфікації діянь і обставин скоєних злочинів у сфері торгівлі людьми й експлуатації таких людей, а також зміцнює доказову базу у справі. Наведено низку вимог до належної підготовки матеріалів для проведення експертизи відео- та звукозапису.

Ключові слова: судово експертиза відео-, звукозапису; торгівля людьми; ідентифікаційне дослідження; діагностичне дослідження.

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The authors declare that they have no conflict of interest.

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