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INTERPOL AND FORENSIC SCIENCE INSTITUTES: GENERAL OVERVIEW

Forensic investigation agencies play a key role in the criminal justice system: they detect and suppress criminal activity, document crime scene traces, collect evidence, and conduct forensic examinations. In today's globalized world, crime is increasingly acquiring a transnational character - cybercrime, organized crime, and terrorism do not recognize borders. This makes international cooperation between investigators and forensic experts extremely important.

One of the most important international structures coordinating criminal investigations at the global level is Interpol [1]. It maintains international databases of fingerprints, DNA, facial images, and other biometric identifiers, which help establish links between criminals, crime scenes, and criminal networks. Interpol also operates the "Innovation Centre" in Singapore a center that brings together law enforcement, scientists, and the private sector to exchange knowledge on emerging technologies and threats.

Through its activities, Interpol supports forensic standards and infrastructure, facilitates information exchange between laboratories worldwide, and organizes the International Forensic Science Managers' Symposium — an annual or periodic forum where forensic laboratory directors meet to share experience, new methodologies, and standards. An example is the "Operation Identify Me" project — an Interpol initiative aimed at identifying unidentified deceased women in Europe through forensic methods such as DNA analysis, facial reconstruction, and more.

The Interpol Innovation Centre has helped law enforcement worldwide better understand technological threats (cybercrime, new communication tools) and develop responses. "Operation Identify Me" is a real example where international cooperation enabled investigators to identify deceased victims using DNA, facial reconstruction, and biometric methods. Interpol coordinates the exchange of forensic

information, allowing detection of transnational crime chains and identification of suspects crossing borders.

European Network of Forensic Science Institutes (ENFSI) is one of the most influential international networks of forensic laboratories and expert institutions in Europe [2]. The Kyiv Scientific Research Institute of Forensic Examinations is a full member of ENFSI, which enables Ukrainian experts to participate in international projects, exchange knowledge, and standardize their practices according to European requirements. ENFSI promotes the implementation of pan-European methodologies, laboratory accreditation, and the unification of forensic procedures. Within ENFSI, thematic working groups exist (e.g., DNA, drugs, trace analysis), where experts from different countries jointly address issues and improve methods. ISO Standards: National forensic laboratories (e.g., in Ukraine) aim to harmonize with international standards by participating in the ISO Technical Committee ISO/TC 272 "Forensic Sciences" [2].

Through ENFSI, member laboratories can exchange best practices, standardize methodologies, and participate in working groups (e.g., drug analysis) that advance forensic science.

Participation has enabled Ukrainian forensic laboratories to raise their quality standards and adopt internationally recognized methods. International experience demonstrates that the effective functioning of forensic investigation agencies is impossible without integration into global cooperation networks, methodological standardization, and the implementation of advanced technologies. Institutions such as INTERPOL and ENFSI provide interaction, data exchange, and innovation development, significantly improving the quality of criminal investigations.

Modern investigations increasingly rely on innovative technologies. International experience highlights several trends and Machine Learning to research on international forensic practices, Artificial Intelligence (AI) is used for analyzing video and photographic data, as well as video analytics systems. The concept of forensic intelligence integrates diverse forensic data (e.g., traces, video, geolocation analysis) to build comprehensive criminal activity profiles. Examples include studies that apply deep learning to reconstruct objects at crime scenes using virtual reality (VR) environments. There are also

models that optimize server operations and automate preparation of digital evidence, enabling experts to perform analysis 24/7.

Technological advancements from artificial intelligence to digital forensics enable faster and more accurate evidence analysis, while organizational models differ among countries, showing that the optimal approach combines centralized standards with regional operational capabilities.

Ukraine, integrating into European and international structures, gains opportunities to develop its forensic science in accordance with modern global standards.

References:

1. INTERPOL Official Website — sections: Innovation Centre, Forensics, Databases.

2. European Network of Forensic Science Institutes (ENFSI) — official documents and working groups.

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IMPROVING THE LEGAL MECHANISM FOR SETTLING ARMED CONFLICTS WITHIN A STATE: FORMULATION OF THE SCIENTIFIC PROBLEM

Currently, armed conflicts are increasingly occurring in different countries of the world. Unfortunately, Ukraine is no exception in this matter. Under such conditions, the world practice of making management decisions in the security sector proves that the settlement of armed conflicts within the state occupies one of the first places in the system of ensuring state security.

Armed conflicts occurring within a state represent one of the most complex challenges for national and international legal systems. They typically involve a combination of political, social, ethnic, and economic factors, which makes their legal qualification and subsequent regulation significantly more complicated than in cases of traditional