

# POLICE STUDIES

THE PERIODICAL OF THE POLICE SCIENTIFIC COUNCIL

## **ÁZSOTH, SZILVIA**

A new weapon in combating violence against women and domestic violence

## **CHVOJKÁNÉ TÖRÖK, ESZTER**

Changes in Hungarian crime prevention strategies with regard to children and young people

## **DUDÁS-BODA, ESZTER**

The role of forensic anthropology in the forensic excavation of clandestine graves

## **FÁBIÁN, VANESSZA**

The potential role of the forensic nurse in Hungarian criminal procedure - criminalistic and procedural aspects

## **HERKE, CSONGOR – HERKE-FÁBOS, BARBARA KATALIN**

Social cohesion and community justice: the restorative city potential of Pécs



2025/3-4





## **EDITED BY THE EDITORIAL BOARD**

### **CHAIRMAN:**

Dr. Zsolt Pozsgai Police Major General

### **MEMBERS:**

Dr. habil. József Boda ret. Nat. Sec. Major general

Dr. Gábor Boros Police Colonel

Károly Dávid ret. Police Major General

Dr. univ. Ottó Dsupin ret. Police Major General

Dr. Gergely Gárdonyi PhD

Dr. habil. Zoltán Hautzinger Police Colonel

Dr. Frigyes Janza ret. Police Major General

Prof. Dr. Klára Kerezsi DSc

Prof. Dr. Gábor Kovács Police Major General

Dr. József Németh PhD Police Colonel

Prof. em. János Sallai ret. Police Colonel

Dr. Gyula Sipos ret. Police Major General

### **MANAGING EDITOR:**

Dr. Gyula Gaál PhD

### **COPY EDITORS:**

Mariann Kudar

### **TECHNICAL EDITOR:**

Norbert Steib

### **RESPONSIBLE PUBLISHER:**

Dr. József Németh PhD Police Colonel, chairman, Police Scientific Council (Hungary)

### **PUBLISHER**

Police Scientific Council (Hungary)

Address: 1139 Budapest, Teve u. 4-6.

1903 Bp. Pf.: 314/15.

Telephone: +36 1 443-5533, BM: 33-355

Fax: +36 1 443-5784, BM: 33-884

E-mail: [rtt@orfk.police.hu](mailto:rtt@orfk.police.hu)

URL: <https://r-tt.hu/>

HU ISSN 2630-8002 (online)

### **CONDITIONS FOR PUBLICATION**

The editorial board calls for manuscripts that analyse and evaluate issues of crime prevention, law enforcement, public safety, public order, border policing, leadership and management and overall support. Papers should be submitted by e-mail and should include the author's name, their service location, position and telephone number. The submitted manuscripts are peer-reviewed, and the editorial staff reserves the right to edit the manuscripts and correct their content and typography. The published papers do not represent the opinion of the Police Scientific Council, but the authors' own viewpoints that are based on their academic freedom. Unacceptable manuscripts cannot be returned. The editorial board does not publish duplicate publications.



# CONTENTS

2025/3-4.

**ÁZSOTH, SZILVIA**

A new weapon in combating violence against women and domestic violence (9-20)

**CHVOJKÁNE TÖRÖK,  
ESZTER**

Changes in Hungarian crime prevention strategies with regard to children and young people (21-32)

**DUDÁS-BODA, ESZTER**

The role of forensic anthropology in the forensic excavation of clandestine graves (33-38)

**FÁBIÁN, VANESSZA**

The potential role of the forensic nurse in Hungarian criminal procedure - criminalistic and procedural aspects (39-47)

**HERKE, CSONGOR –  
HERKE-FÁBOS,  
BARBARA KATALIN**

Social cohesion and community justice: the restorative city potential of Pécs (49-61)

**HERKE, ZSOLT**

The relationship between global warming and the number of violent crimes (63-76)

**KEMÉNY, BERTALAN**

Digital Knowledge Base for Supporting Migration Governance - An Opportunity for Interdisciplinary Research (77-90)

**NAGY, ÁGNES**

Digital threats: trust and manipulation in cyberspace (91-105)

**NÉMETH, ÁGOTA**

The path of drugs today (107-119)

**PERGER, ÁDÁM**

The EU Legal Aspects of Cybercrime (121-131)

**PETRÉTEI, DÁVID**

A review of „Fenyvesi: The Past, Present and Future of Criminalistics” (133-140)

**VÖLGYESI, LEVENTE**

The circumstances of the creation of Act VIII of 1903 on the Border Police and its contemporary relevance (141-154)

## **AUTHORS**

2025/3-4.

**ÁZSOTH, SZILVIA**

PhD candidate  
Doctoral School of the Faculty of  
Law  
University of Pécs.

**CHVOJKÁNE DR. TÖRÖK,  
ESZTER**

Doctoral School of the Faculty of  
Law and Political Sciences  
University of Pécs

**DR. DUDÁS-BODA, ESZTER  
PHD**

Forensic Anthropologist and Gene-  
tic Expert  
Hungarian Institute for Forensic  
Sciences  
Debrecen Institute

**DR. FÁBIÁN, VANESSZA**

PhD Candidate  
Faculty of Law  
Department of Criminal and Civil  
Procedure Law  
University of Pécs

**DR. HABIL. DSC. HERKE,  
CSONGOR**

professor, head of department and  
Doctoral School  
Faculty of Law and Political Scien-  
ces  
Department of Criminal and Civil  
Procedural Law

**DR. HERKE-FÁBOS, BAR-  
BARA KATALIN PHD**

assistant professor  
Department of Civil Law, Family  
and Social Law Group  
Faculty of Law and Political Scien-  
ces  
University of Pécs

**HERKE, ZSOLT**

Lieutenant Colonel  
Police Department of Pécs  
PhD student

**DR. KEMÉNY, BERTALAN**

Assistant Lecturer,  
Ludovika University of Public Service,  
Faculty of Law Enforcement,  
Department of Aliens Policing

**NAGY, ÁGNES**

Police Colonel, Police Senior  
Counsellor  
Deputy Commissioner of the  
County Police  
Responsible for Criminal Affairs

**DR. NÉMETH, ÁGOTA**

Assistant Professor  
Department of Criminal Justice and  
Economic Security,  
Faculty of Law Enforcement  
Ludovika-University of Public Service

**PERGER, ÁDÁM**

PhD student, trainee lawyer,  
Géza Marton Doctoral School  
University of Debrecen

**DR. PETRÉTEI, DÁVID**

Head of Lab, Latent Print Laboratory,  
Hungarian Institute for Forensic  
Sciences  
Chairperson, ENFSI Scene of  
Crime EWG



**DR. HABIL VÖLGYESI,  
LEVENTE PHD**

associate professor  
Péter Pázmány Catholic University  
Faculty of Law and Political Sciences  
Department of Legal History



ÁZSOTH, SZILVIA

## **A new weapon in combating violence against women and domestic violence**

*“Violentia atque iniustitia non modo turpia, sed etiam imbecilla sunt.”<sup>1</sup>*

### **Introduction**

On 14 May 2024, the European Union (hereinafter: EU) adopted Directive 2024/1385 on combating violence against women and domestic violence (hereinafter: Directive). Beyond its historical significance and binding legal force, it remains to this day the only EU legal instrument that directly addresses violence against women and domestic violence.

Its justification is supported in particular by the survey carried out by the European Union Agency for Fundamental Rights between April and September 2012, in which 42,000 randomly selected women living in the EU were interviewed in order to collect comparable data on gender-based violence against women. According to the findings set out in the 2014 report containing the results of this survey, violence against women and girls is one of the most prevalent and widely recognized human rights violations worldwide. It was also established that one in three women had already suffered physical or sexual violence, most often perpetrated by intimate partners.<sup>2</sup>

The relevance of the issue was further highlighted by the marked rise in incidents of physical and psychological violence against women, as well as

---

<sup>1</sup> Marcus Tullius Cicero: On Moral Duties (De Officiis) – De officiis II.2, In. Cicero De Officiis, translated with an Introduction and Notes by Andrew P. Peabody, Boston, Little, Brown, and Co., (1887.) Available at: [http://files.libertyfund.org/files/542/Cicero\\_0041-01\\_EBk\\_v6.0.pdf](http://files.libertyfund.org/files/542/Cicero_0041-01_EBk_v6.0.pdf) Accessed: 21.08.2025

<sup>2</sup>Available at: [https://fra.europa.eu/sites/default/files/fra\\_uploads/fra-2014-vaw-survey-main-results-apr14\\_en.pdf](https://fra.europa.eu/sites/default/files/fra_uploads/fra-2014-vaw-survey-main-results-apr14_en.pdf) Accessed: 14.05.2025., pp. 7-193

domestic violence, during the Covid-19 pandemic. This phenomenon has also been highlighted on the website of the Council of the EU<sup>3</sup> and has been examined by the present author in the study entitled *Domestic Violence in Hungarian Judicial Practice*. It was concluded therein that the forced confinement of families during the pandemic intensified existing or emerging conflicts, thereby unintentionally contributing to the rise in domestic violence incidents.<sup>4</sup>

These assertions are further corroborated by the 2022 report of the European Institute for Gender Equality (EIGE) on combating online violence against women and girls. The report aimed, inter alia, to provide information on the phenomenon and characteristics of cyber violence against women, to identify the main challenges in this field, and to collect examples of effective practices for addressing it.<sup>5</sup>

Against this background, this study focuses on the new Directive, in particular on outlining its background, its main provisions and novelties, and on conducting a comparative analysis of certain of its points with the 2011 Istanbul Convention.

## **Analysis of the Directive and Its Novelties**

### ***The Istanbul Convention as a Reference Framework***

The Council of Europe Convention No. CETS 210, opened for signature on 11 May 2011 on preventing and combating violence against women and domestic violence (Istanbul Convention – hereinafter: IC), can undoubtedly be regarded as a milestone and foundational document in the drafting

---

<sup>3</sup> Available at: <https://www.consilium.europa.eu/hu/policies/eu-measures-end-violence-against-women/#facts> Accessed: 14.05.2025.

<sup>4</sup> Ázsoth, Sz. (2024): Kapcsolati erőszak a hazai bírósági ítélezési gyakorlatban [Domestic violence in Hungarian court practice], In: Gaál, Gy. – Hautzinger, Z. (ed.) A rendészet tudománya és gyakorlata [The science and practice of policing] Pécs, Hungary: Magyar Hadtudományi Társaság Határőr Szakosztály Pécsi Szakcsoport [Hungarian Military Science Society Border Guard Section], Pécs, Working Group, pp. 325-331

<sup>5</sup> Available at: [https://www.noierdek.hu/wp-content/uploads/2024/11/ewl\\_hungarian.pdf](https://www.noierdek.hu/wp-content/uploads/2024/11/ewl_hungarian.pdf) Accessed: 11.05.2025

of the Directive. Its role was further reinforced by the fact that the European Union acceded to the Convention on 1 October 2023,<sup>6</sup> with the result that, from 2011 until the closing date of this manuscript, 39 of the 45 states outside the EU had ratified it, 6 had “only” signed it, while Azerbaijan fully distanced itself from it.<sup>7</sup>

Regarding the content of the IC, opinions were highly divided fourteen years ago and remain so to this day, and its legitimacy has been surrounded by significant political debate within the EU. By way of example, in 2018 the Bulgarian Constitutional Court declared the IC unconstitutional, while the Polish government argued that the Convention fails to take religious beliefs into account and promotes so-called “gender ideology.”<sup>8</sup>

Of particular importance is the judgment of the Court of Justice of the European Union of 6 October 2021 in Case 1/19<sup>9</sup>, which made it possible for the EU to accede to the IC by qualified majority voting. In this context, the EU undertook obligations only in those matters that fall within EU competences (e.g. judicial cooperation, asylum, prohibition of extradition, etc.). Accordingly, under this ruling, the EU Member States must interpret and apply EU law in the fields of exclusive EU competence in a manner consistent with the Istanbul Convention.<sup>10</sup>

---

<sup>6</sup>Available at: <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=210>

Accessed: 11.05.2025

<sup>7</sup> Available at: <https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=210>

Accessed: 11.05.2025

<sup>8</sup> Kasim, C. (2024): Advancing Gender Equality: The EU's Landmark Directive 2024/1385 on Violence Against Women; Stiftung Universitaet Hildesheim; Georg-August – University of Goettingen, pp. 2-3

<sup>9</sup>Available at: <https://curia.europa.eu/juris/document/document.jsf?text=&docid=238745&pageIndex=0&doclang=HU&mode=lst&dir=&occ=first&part=1&cid=1595641>

Accessed: 11.05.2025

Accessed: 11.05.2025

<sup>10</sup>Available at: <https://curia.europa.eu/juris/document/document.jsf?jsessionid=B59D3B1F876A6DC3B390088D993A1C88?text=&docid=238745&pageIndex=0&doclang=hu&mode=lst&dir=&occ=first&part=1&cid=5249286>

### ***The Main Objectives of the Directive***

The Directive lays down minimum rules concerning offences and sanctions relating to the sexual exploitation of women and children, as well as cyber-crime. Before reviewing the main provisions set out in the Preamble, it is therefore appropriate to first set out these specific objectives, namely:

*“(a) the definition of criminal offences and penalties in the areas of sexual exploitation of women and children and computer crime;*

*(b) the rights of victims of all forms of violence against women or domestic violence before, during and for an appropriate time after criminal proceedings;*

*(c) protection and support for victims, prevention and early intervention.”<sup>11,12</sup>*

The overarching aim of the Directive is to guarantee women’s fundamental rights to equal treatment and non-discrimination by criminalizing at the Union level certain forms of violence against women – including online violence – while strengthening victims’ access to justice, protection and, not least, support. In this light, Article 1 of the Directive defines its primary objective as to *“provide a comprehensive framework to effectively prevent and combat violence against women and domestic violence throughout the Union.”<sup>13</sup>*

In this context, the Directive stresses that violence against women and domestic violence undermine the fundamental rights enshrined in the Charter of Fundamental Rights of the European Union (hereinafter: Charter), in

---

Accessed: 11.05.2025

<sup>11</sup> Directive 1. Chapter Art. 1.

<sup>12</sup> Available at: [https://www.europarl.europa.eu/doceo/document/A-9-2023-0234-AM-298-298\\_EN.pdf](https://www.europarl.europa.eu/doceo/document/A-9-2023-0234-AM-298-298_EN.pdf)

Accessed: 11.05.2025, pp. 1-151

<sup>13</sup> Directive Preamble par. (1)

particular the prohibition of discrimination (Article 21) and equality between women and men (Article 23),<sup>14</sup> and also refers to the fundamental rights set out in the Convention on the Rights of the Child<sup>15</sup> adopted by the UN General Assembly on 20 November 1989.<sup>16,17</sup>

The Directive also underlines the specific characteristics of crimes of violence against women and domestic violence, and affirms that, precisely because of these features, they must be addressed, regulated and prevented comprehensively and in a targeted manner. This is so notwithstanding the fact that existing Union and national legislation already provide a certain level of safeguards and protection, though not with sufficient effectiveness.<sup>18</sup>

Particular attention is drawn to circumstances where the conduct is coupled with discrimination based on a combination of grounds such as “*sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation.*”<sup>19</sup> Victims in such cases are recognised as requiring enhanced protection, as they face a heightened risk of gender-based violence.<sup>20</sup>

Building on this, the legislator relies on the theory of intersectional discrimination, formulated by Kimberlé Crenshaw in the 1990s, which reveals

---

<sup>14</sup> Available at: <https://eur-lex.europa.eu/legal-content/HU/TXT/PDF/?uri=CELEX:12016P/TXT> Accessed: 11.05.2025

<sup>15</sup> Available at: <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child> Accessed: 11.05.2025

<sup>16</sup> Directive Preamble par. (2)-(3)

<sup>17</sup> The Hungarian Parliament promulgated the Convention on 22 November 1991 with Act LXIV of 1991 on the promulgation of the Convention on the Rights of the Child, signed at New York on 20 November 1989. Available at: <https://net.jogtar.hu/jogszabaly?docid=99100064.tv>

<sup>18</sup> Directive Preamble par. (5)

<sup>19</sup> Charta Art. 21.

<sup>20</sup> Directive Preamble par. (6)

how distinct forms of discrimination overlap and together exacerbate the disadvantages experienced.<sup>21</sup>

### ***General Provisions of the Directive***

The first chapter of the Directive, which contains two Articles, defines its subject matter and scope - namely the minimum rules previously referred to - and then provides the relevant definitions for its application. Examination of these definitions shows that the Directive declares the concepts of violence against women and domestic violence in almost identical terms to those set out in Article 3 of the IC. However, it no longer defines “gender.” For many of the Convention’s critics, this constitutes a forward-looking step compared to the IC, as the legislator no longer distinguishes between the concepts of gender (as a social construct) and sex (as a biological category).

A significant change has also occurred in the definition of “victim” compared to the IC, insofar as the Directive provides that a victim is “*any person, regardless of their gender, who has suffered harm directly caused by violence against women or domestic violence, including children who have suffered harm because they have witnessed domestic violence.*”<sup>22,23</sup> The list of definitions has further been expanded compared to the IC to include terms such as hosting service provider, intermediary service provider, child, dependant, and competent authority.<sup>24</sup>

The legislator also introduced a broader, more flexible definition of domestic violence: “*Domestic violence is a form of violence which could be specifically criminalized under national law or covered by criminal offences which are committed within the family or domestic unit or between*

---

<sup>21</sup> Kasim, C. (2024): Advancing Gender Equality: The EU’s Landmark Directive 2024/1385 on Violence Against Women; Stiftung Universitaet Hildesheim; Georg-August – University of Goettingen, pp. 4-5

<sup>22</sup> Directive Chapter 1. Art. 2. point c)

<sup>23</sup> Cf. IC Art. 3. point e)

<sup>24</sup> Directive Chapter 1. Art. 2.



*former or current spouses or partners, whether or not they share a household.”*<sup>25</sup>

## ***Offences***

Chapter 2 of the Directive, entitled “*offences concerning sexual exploitation of women and children and computer crime*,” sets out the conduct to be criminalized within the EU. These include female genital mutilation and forced marriage; the non-consensual sharing of intimate or manipulated material (including deepfakes); online threatening harassment (cyber stalking); online harassment (cyber harassment); and online incitement to violence or hatred (cyber incitement).<sup>26</sup> Thus, the Directive criminalizes several forms of violence against women, both online and offline, throughout the Union.<sup>27</sup>

Regarding the offences defined in the Directive, the Member States are required to establish harmonised sanctions. It specifically provides that the maximum penalty for the offence of female genital mutilation shall be set at no less than five years imprisonment.<sup>28</sup>

Similarly, to ensure uniform sanctions, the Directive stipulates that the maximum penalty for the offence of forced marriage shall be set at no less than three years imprisonment.<sup>29</sup>

## ***Child Protection Clauses***

The Directive places special emphasis on child victims, guaranteeing their protection and support from the moment an incident of violence against

---

<sup>25</sup> Directive Preamble (9) par.

<sup>26</sup> Directive Chapter 2. Art. (3)-(8), and Preamble par. (9)

<sup>27</sup> Info document from the european union eu laws and initiatives to combat violence against women and international child abduction Available at: <https://as-sets.hcch.net/docs/ade6fa5c-fdc2-4337-ab1a-43c76d089de1.pdf> Accessed: 11.05.2025

<sup>28</sup> Ibid. Art. 10.

<sup>29</sup> Directive Art. 10.

women or domestic violence is reported, and for as long as such assistance is required. Owing to their vulnerability, the experience of domestic violence – whether as direct victims or witnesses – can be devastating for children, as it causes immediate psychological and emotional harm, impacts their development, and increases both in the short and long term the risk of suffering from physical and mental health problems. The recognition that children who directly witness and suffer harm from domestic violence are themselves victims constitutes an important step forward in safeguarding children affected by such violence.<sup>30</sup>

A few of these provisions, by way of illustration, include:

- a) reporting procedures must be safe and confidential, designed in a child-friendly manner, and worded in age-appropriate and developmentally suitable language;
- b) children must be assisted by trained professionals during the reporting process;
- c) where the perpetrator or participant in the violent act exercises parental authority, the child must be placed under preventive protection in order to avoid the risk of repeated violence or additional physical and psychological harm resulting from having to live with the perpetrator or suspect;<sup>31</sup>
- d) Member States must ensure that a child receives appropriate support as soon as the authorities have reasonable grounds to believe that they have become a victim or witness of violence against women or domestic violence;
- e) children must be provided with expert support, medical care, and emotional, psychosocial, psychological and educational assistance, tailored to their age, developmental needs and individual circumstances;

---

<sup>30</sup> Directive Preamble par. (13)

<sup>31</sup> Directive Preamble par. (6), (34), (38)-(43)

- f) in the case of temporary placement, priority must be given to placing the child with the non-violent parent or holder of parental responsibility, in permanent or emergency accommodation equipped with support services;<sup>32</sup>
- g) the Directive also establishes aggravating circumstances where the offence is committed against a child or in the presence of a child.<sup>33,34</sup>

### ***Preventive Measures***<sup>35</sup>

As noted above, the Directive places strong emphasis on provisions designed to safeguard victims and to prevent the offences it covers. The relevant rules are primarily set out in Article 34 of Chapter V, entitled “*Prevention and early intervention*.” Its main elements can be summarized as follows:

- The overarching objective of preventive measures is to support people from an early age through the organization and implementation of targeted awareness-raising campaigns and programmes (including research and educational programmes). These aim to familiarize individuals with all manifestations, root causes, and consequences of the offences defined in the Directive, thereby reducing the likelihood of victimization.
- Member States must publish and make easily accessible – in the most commonly spoken languages within their territories – information concerning “*preventive measures, the rights of victims, access to justice and to a lawyer, and the available protection and support measures, including medical treatment*.”<sup>36</sup>

---

<sup>32</sup> Directive Chapter 3. Art. 31.

<sup>33</sup> Directive Chapter 2. Art. 11.

<sup>34</sup> Cf. IC. Art. 46. point d)

<sup>35</sup> Directive Chapter 5. Art.34. par. (1)-(9)

<sup>36</sup> Ibid. par. (3)

- The protection of children is of particular importance also in the field of prevention. Accordingly, Member States must pay special attention to ensuring that information addressed to children is formulated in a child-friendly manner.
- The legislator emphasizes that information addressed to persons with disabilities must be made available in accessible formats tailored to their individual needs.
- Preventive measures must target and aim to reduce demand for victims of sexual exploitation.
- Preventive measures explicitly address the cyber offences mentioned in the Directive. Member States must therefore ensure that such measures include the development of digital literacy skills and responsible, critical approaches to the online environment, enabling users to better recognize and handle cases of online violence, seek support, and thereby prevent the occurrence of the relevant offences.
- Finally, the Directive draws attention to the “*Prevention of Discrimination*” Article of Directive 2006/54/EC of the European Parliament and of the Council on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation.<sup>37</sup> It also stipulates that Member States must address and prevent sexual harassment in the workplace. However, it should be noted that the Directive does not define workplace sexual harassment, and it may be regarded as a shortcoming that it only superficially addresses the issue of workplace sexual violence and contains no targeted guidelines on this matter.

---

<sup>37</sup> Directive 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation  
Available at: [eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006L0054](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006L0054)  
Accessed: 21.08.2025

### ***Provisions Concerning Perpetrators***<sup>38</sup>

The Directive contains minimum requirements regarding perpetrators of sexual and domestic violence with a preventive aim, in particular to reduce the risk of reoffending. In this regard, Member States are required to establish intervention programmes and make participation in such programmes accessible to perpetrators, with special attention to those at risk of recidivism as well as to those who themselves feel they may commit such acts of violence.

The Directive specifically highlights perpetrators of sexual coercion, stipulating that Member States must encourage such offenders to participate in intervention programmes.

### ***Coordination and Cooperation***<sup>39</sup>

Member States must designate or establish at least one official body responsible for coordinating, implementing, monitoring, and evaluating measures adopted to prevent and combat all forms of violence covered by the Directive. These bodies also coordinate the continuous collection, processing, and transmission of statistical data to common platforms (e.g. Eurostat, Eurojust, EIGE, etc.), ensuring that such statistics do not contain personal data.

By 14 June 2029, Member States must adopt national action plans aimed at preventing and combating violence against women and domestic violence. These plans must include in particular a review of measures, priority directions, as well as the necessary financial resources and their allocation.

---

<sup>38</sup> Directive Chapter 6. Art. 37.

<sup>39</sup> Ibid. Art. 38-44.

## ***Transposition***

The Directive currently represents the only EU legal instrument specifically addressing provisions on violence against women and domestic violence. Member States are required to transpose the provisions of the Directive into national law by 14 June 2027.<sup>40</sup>

## **Conclusion**

This study, in addition to presenting Directive 2024/1385 on combating violence against women and domestic violence, has sought to examine, through a comparative analysis, the similarities and differences between the Directive and the Council of Europe Convention No. CETS 210, opened for signature on 11 May 2011, on preventing and combating violence against women and domestic violence, thereby highlighting the trajectory of progress in addressing such forms of violence.

It is encouraging that an increasing number of states recognize that progress in this field has been, is, and always will be necessary, and such developments may pave the way for a significant reduction in the number of victims.

In the case of Hungary, it can be said that although the Criminal Code and complementary resolutions and regulations help victims find safety and provide solutions for holding perpetrators accountable, an effective method for addressing the problem is still lacking.

It may further be concluded that the declaration of domestic violence as a criminal offence in the Criminal Code has undoubtedly represented a major step forward in protecting victims, especially where minors are involved, which in itself is commendable. Nevertheless, in my view, there is still room for improvement in the area of prevention, for which the Directive can provide useful guidance.

---

<sup>40</sup> Directive Chapter 7. Art. 49.

**CHVOJKÁNE TÖRÖK, ESZTER**

## **Changes in Hungarian crime prevention strategies with regard to children and young people<sup>1</sup>**

### **Introduction**

This study examines the prevention of juvenile delinquency within the framework of Hungarian crime prevention strategies, with special emphasis on the practical application of preventive measures, the substance of the programmes implemented, and the societal challenges arising in their execution.

The prevention of juvenile delinquency constitutes a complex and multifaceted endeavour, shaped by a range of interrelated factors such as family background, academic failure, insufficient community support, and adverse social patterns. Since young people do not turn to criminal behaviour overnight, effective prevention requires the coordinated efforts of key social actors, including parents, teachers, social workers, and law enforcement authorities.

### **National Strategy for Social Crime Prevention**

The Hungarian state crime prevention policy has been renewed several times in the past decades. The first comprehensive strategy was the National Strategy of Social Crime Prevention (hereinafter: TBNS) - Resolution 115/2003 (X. 28.) adopted by the Hungarian Parliament on 28 October 2003 - whose primary task was to focus on crime prevention and to prevent the criminalisation of juveniles.

---

<sup>1</sup> This study is the English version of the presentation delivered at the conference “The Law Enforcement Research and Innovation” held in Pécs on June 26, 2025

It treated crime prevention as a long-term, complex socio-political issue, in which the protection of children and young people played a prominent role. The strategy clearly recognized that the prevention of juvenile crime is not only the responsibility of law enforcement agencies, but can only be successful as a result of broad cooperation across institutions and disciplines.<sup>2</sup>

The National Strategy for the Prevention of Crime in Society's main finding on juvenile delinquency is that the vast majority of young people commit crimes against property and their criminal careers start earlier and earlier. In this context, it notes that the younger the age of first offending, the greater the likelihood of re-offending or developing a criminal lifestyle.<sup>3</sup>

The document placed particular emphasis on the need for early intervention, i.e., to address behavioural problems (truancy, rule-breaking, family conflicts) that emerge in childhood before they become criminalised.

The strategy draws attention to the fact that, although the majority of young offenders live in complete families, i.e., were brought up by their parents together, the vast majority come from disadvantaged marginalised family backgrounds where poverty, unemployment and daily social problems were a dominant experience.<sup>4</sup>

The results expected from the implementation of the tasks in the strategy are the reduction of groups of young people at risk of falling into poverty, social integration, improvement of children's socialisation and increase in tolerance through mediation programmes. Young people will learn non-violent conflict management and their sense of moral responsibility will increase through the use of restorative justice methods.

---

<sup>2</sup> Társadalmi Bünmegelőzés Nemzeti Stratégiájáról szóló [National Strategy for Social Crime Prevention] 115/2003. (X.28.) OGY határozat 1

<sup>3</sup> Balogh, K. (2020): "Mindig a rosszat csinálom, már kicsinek is" – avagy a fiataalkori bűnelkövetés a kriminológiai magyarázatok tükrében. ["I always do the wrong thing, even as a child" – juvenile delinquency in the light of criminological explanations] Themis Külsőszám, p. 120

<sup>4</sup> Társadalmi Bünmegelőzés Nemzeti Stratégiájáról szóló [National Strategy for Social Crime Prevention] 115/2003. (X.28.) OGY határozat <sup>7.1</sup>



Awareness-raising work is mainly focused on alcohol and drugs<sup>5</sup>. The media will be responsible for providing regular and extensive information on the programmes, the objectives and results of the strategy, and for organising competitions and contests for young people.

During the period of the National Strategy for Social Crime Prevention, several good crime prevention practices have been developed and implemented in Hungary in line with the objectives of the strategy. These practices typically operated at local level, based on institutional cooperation, and mainly targeted juveniles, disadvantaged groups and vulnerable communities.

Such school-based crime prevention programmes with police presence include DADA and ELLEN-SZER.

The D.A.D.A. programme is a crime prevention and education programme implemented by the police, based on both legal and professional grounds, which helps to develop health-conscious and risk-avoidant behaviour among children in the context of school education.

The programme can only be taught by trained police officers, within a strict framework of content and methodology, with a view to the protection and development of children. The aim is to ensure that children are always aware of dangerous situations and can distinguish between positive and negative influences.

They can calculate the consequences and outcomes of their decisions and actions. They should be able to resist even the temptations and offers of their peers, and resolve conflict situations in such a way that they do not feel like losers when they emerge from them.<sup>6</sup>

The secondary school version of the D.A.D.A. programme is the ELLEN-SZER youth protection and crime prevention education programme, which is based on the age-specific crime prevention activities for secondary

---

<sup>5</sup> Dr. Sivadó, M. (2012/1.): Új drogstratégiára van/volt szükség. [A new drug strategy is/was needed] Magyar Rendészet, pp.159 -161

<sup>6</sup> Available at: <https://www.police.hu/hu/hirek-es-informaciok/bunmegelozes/aktualis/30-eves-a-dada-program>  
Accessed: 31.07.2025

school students in grades 10-11.<sup>7</sup> The programme focuses specifically on the prevention of violence and drug use, given that these are the most significant problems in juvenile delinquency.<sup>8</sup>

The School Policeman programme, launched by ORFK in 2008, is one of the best known and longest running prevention initiatives and has greatly contributed to the comprehensive crime and accident prevention activities carried out by the police to protect children. One of the aims of the programme is to bring the police closer to young people and thereby create a positive image of the police among children, parents and teachers.<sup>9</sup>

The Strategy emphasises that the effectiveness of crime prevention is not primarily based on the application of criminal sanctions, but on social, educational and community interventions.

Community programs should be developed for street children, with a primary focus on those that concentrate on training, education, and meeting the conditions for future employment.<sup>10</sup>

## **National Crime Prevention Strategy (2013-2023)**

The Strategy, adopted in 2013, has already placed particular emphasis on children and young people. According to the NBS, educating young people

---

<sup>7</sup> Maczó, J. -Pozsonyi, F. (2022): Drogprevenció az ifjúsági munkában. [Drugs prevention in youth work] Erzsébet Ifjúsági Alap Nonprofit Kft., online edition, p.14

<sup>8</sup> Available at: <http://www.bunmegelozes.eu/pdf/ellenszer.pdf>  
Accessed: 21.07.2025

<sup>9</sup> Dr. Miju , A. (2016): A bűnmegelőzés fejlődése és szervezete Magyarországon, [The development and organization of crime prevention in Hungary] Jogi Fórum Publikáció, p. 30

Available at: [https://www.jogiforum.hu/files/publikaciok/miju\\_anita\\_\\_a\\_bunmegelozes\\_szervezete\\_es\\_fejlodes\\_mag.yarorszagon\[jogi\\_forum\].pdf](https://www.jogiforum.hu/files/publikaciok/miju_anita__a_bunmegelozes_szervezete_es_fejlodes_mag.yarorszagon[jogi_forum].pdf)  
Accessed: 07.31.2025

<sup>10</sup> Kerecsi, K. (1995): A gyermek- és fiatalkorúak bűnözése és a gyermekkorú sértettek Magyarországon ·<sup>1</sup>Juvenile crime and child victims in Hungary<sup>1</sup> Kriminológiai tanulmányok, p. 3, p. 19, p. 124

to become useful members of society is one of the most important and fundamental tasks and values of society and the state as a whole.<sup>11</sup>

The 2013 strategy also highlights the potential of strengthening small communities to reduce the number of young people at risk of falling into street situations, and the crime-prevention role that an effective child protection referral system can play.<sup>12</sup> In this context, the training and further training of physical education teachers and coaches in crime prevention and the inclusion of crime prevention in the programme of various children's camps are identified as specific tasks.

Educational establishments can be not only a place where information is disseminated, but also a place where many crimes are committed, sometimes the line between student pranks and crime is very thin and young people are often unaware that their pranks are criminal offences.<sup>13</sup>

In order to achieve these objectives, it is essential to carry out preventive education activities to help people to understand the legal and social consequences of their actions, so that they are able to identify and avoid the risks they face.

The Action Plans linked to the strategy also set out tasks such as running school prevention programmes<sup>14</sup> (Re-Action, ELLEN-SZER, "School of the Future") in primary and secondary schools, training and further training in crime prevention for teachers and child protection officers so that they can also provide crime prevention education in schools. It is important to

---

<sup>11</sup> A Nemzeti Bünmegelőzési Stratégiáról [National Crime Prevention Strategy] szóló 1744/2013 (X.17) Korm.határozat 8.2

<sup>12</sup> Kopasz, M. (2021): Az iskolai gyermekvédelmi jelzőrendszeri tagok észlelési és jelzési magatartása és annak meghatározói – elméleti modellek és empirikus kutatások. [The detection and reporting behavior of members of school child protection alert systems and its determinants – theoretical models and empirical research Esély, 2021/3, p.16

<sup>13</sup> A Nemzeti Bünmegelőzési Stratégiáról [National Crime Prevention Strategy] szóló 1744/2013 (X.17) Korm.határozat 8.2

<sup>14</sup> A 2018-2019-es évekre vonatkozó intézkedési tervről szóló 1838/2017 (XI:9) Kormányhatározat II. [Government Decree 1838/2017 (XI:9) on the action plan for 2018-2019, Section II.]

integrate crime prevention programmes into family and school events programmes, as well as into programmes in the social and child welfare services.

In the action plan for 2018-2019, the educational work related to the safe use of the Internet, the mapping and prevention of online dangers, the management of online harassment, the expansion of the educational themes of the Bűvösvölgy Media Understanding Education Centre with crime prevention topics are already included as tasks related to this area.<sup>15</sup>

The operation of programmes and the organisation of campaigns aimed at preventing victimisation in the online space are also highlighted in the action plan for 2022-2023. Prevention is even more important in the case of online crime, as the aim is to enable the target group to recognise criminal intentions and to develop the necessary self-protection mechanisms based on caution to avoid them.<sup>16</sup>

Among the programmes aimed at the prevention of child and juvenile delinquency, the accredited training on "Crime prevention in schools", based on experiential pedagogical methodology, was of particular importance, which helped to increase teachers' knowledge on crime prevention. The programme provided practical methods for dealing with bullying, deviant behaviour and peer violence in schools.<sup>17</sup>

Also of particular note was the cooperation with the University of Physical Education, which trained sports and physical education staff on crime prevention principles and their impact on young people. Physical education teachers can serve as role models, mentors and models for young people, and through movement and sport they can develop the social competences and attitudinal changes that are also important in crime prevention, such as

---

<sup>15</sup> A 2018-2019-es évekre vonatkozó intézkedési tervről szóló 1838/2017 (XI:9) Kormányhatározat II. [Government Decree 1838/2017 (XI:9) on the action plan for 2018-2019, Section II.]

<sup>16</sup> A Nemzeti Bűnmegelőzési Stratégia 2022-2023. évekre szóló intézkedési tervéről szóló 1878/2021 (XII.6) Kormányhatározat 3.2 [Government Decision 1878/2021 (XII.6) on the action plan for the National Crime Prevention Strategy for 2022-2023, Section 3.2]

<sup>17</sup> Available at: [https://ekor.bm.hu/?utm\\_source=chatgpt.com](https://ekor.bm.hu/?utm_source=chatgpt.com)

Accessed 17.07.2025

problem solving, rule following, useful participation in teamwork, aggression management, non-violent conflict resolution, respect, recognition, fairness, application of acquired knowledge and joy.<sup>18</sup>

Re-Action, launched by the National Council for Crime Prevention in 2012, is an interactive crime prevention demonstration in secondary schools that uses complex methods to teach crime prevention skills through action-tactical situations and demonstrations to multiple target groups (students, teachers, parents).<sup>19</sup>

In crime prevention, it is important to constantly look for new ways to prevent crime, especially in the delivery of crime prevention information to young people, which is why the NBT launched the “Let music be your passion!” campaign. As a result, the first crime prevention musical, “Taurin trauma”, was presented on 12 December 2015 in Nyíregyháza, at the Crime Prevention Compass conference organised by the Móricz Zsigmond Theatre in Nyíregyháza. The musical “Taurin trauma”<sup>20</sup> addressed young people through theatre to prevent violence and addiction.<sup>21</sup>

The transfer of crime prevention knowledge is most effective in early childhood, and the skills and social competences that can be developed as a result of this knowledge can be shaped and developed most effectively at

---

<sup>18</sup> A Nemzeti Bünmegelőzési Stratégiáról[National Crime Prevention Strategy]szóló 1744/2013 (X.17) Korm.határozat 8.2 and Available at: <https://tf.hu/hirek/hirek/10679-bunmegelozes-helye-es-szerepe-a-sportfoglalkozasokon> Accessed: 17.07.2025

<sup>19</sup> A Nemzeti Bünmegelőzési Stratégia 2016-2017.évre szóló intézkedési tervéről szóló 1166/2016 (IV.6) Kormányhatározat 2.2 [Government Decision 1166/2016 (IV.6) on the action plan for the National Crime Prevention Strategy for 2016-2017, Section 2.2]

<sup>20</sup> Dr. Budavári, R. (2025): Gombok kabát nélkül. Az állami kriminálpolitika és demokratikus támogató stratégia tükröződése a Társadalmi Bünmegelőzés Nemzeti Stratégiája és a Nemzeti Bünmegelőzési Stratégiák egymáshoz viszonyulásában. [Reflection of state criminal policy and democratic support strategy in the relationship between the National Strategy for Social Crime Prevention and the National Crime Prevention Strategies], Belügyi Szemle, 2025/2., p. 429

<sup>21</sup> Barabás A. T. (ed.) (2023): Alkalmazott kriminológia. [Applied criminology] Budapest: Akadémiai Kiadó – Ludovika Egyetemi Kiadó  
Available at: [https://mersz.hu/dokumentum/m1139alkal\\_\\_660/#m1139alkal\\_658\\_p2](https://mersz.hu/dokumentum/m1139alkal__660/#m1139alkal_658_p2)  
Accessed 31.07.2025

this age, when it is still easy to develop the mechanisms that help us to live safer lives.

The NBT has published self-made storybooks entitled Forest Town Tales 1-2 and Soul Losers.<sup>22</sup> The stories are aimed at 5-10 year olds and help children learn how to protect themselves from becoming victims or perpetrators.

### **National Crime Prevention Strategy (2024-2034)**

Government Resolution 291/2023 (19 July) on the National Crime Prevention Strategy 2024-2034, annexed to which is Annex I, assigns an important role to the family, educational institutions and the settings for useful leisure time, and continues to emphasise the prominent role of the child protection signalling system. Therefore, one of the most important aspects of child and youth protection is that the sovereign professions should take a complex and integrated approach to a child's life, working together and complementing each other's activities.<sup>23</sup>

With regard to children and young people, the Strategy highlights the youth survey conducted in 2017 and the latency survey conducted in 2018. The research covered parent-child relationships, peers and the influencing power of the school environment. In addition to these environmental influences, personal attitudes such as self-esteem, desire to conform, sense of responsibility, conflict management were also examined.<sup>24</sup>

The studies among young people suggest that a significant proportion of students have already experienced online or offline bullying, and the vast

---

<sup>22</sup> A 2018-2019-es évekre vonatkozó intézkedési tervről szóló 1838/2017 (XI:9) Kormányhatározat 2.1

[The Government Decision 1838/2017 (XI:9) on the action plan for 2018-2019 2.1]

<sup>23</sup> A Nemzeti Bünmegelőzési Stratégiáról (2024–2034) szóló 291/2023. (VII. 19.) Kormányhatározat I. számú melléklete (továbbiakban: NBS) 6.2 [Annex I to Government Decision No. 291/2023 (VII. 19.) on the National Crime Prevention Strategy (2024–2034) (hereinafter: NBS) 6.2]

<sup>24</sup> NBS 2024–2034 4.2

majority have been involved themselves. The prevalence of this phenomenon is influenced by age, with lower prevalence in older age groups, and varies considerably by type of school.

Universities are emerging as a new actor, as they have the potential to provide the right crime prevention approach and the ability to understand complex social phenomena, which is essential for prevention work.<sup>25</sup>

The info-communication environment and the opportunities it offers have radically changed the way young people think, feel, cope and socialise. The changes in the norms of the virtual world have not only led to unprecedented freedom, but also to the demoralising effect of a lack of control.<sup>26</sup>

Digital communication globalizes: it makes world events visible everywhere, simultaneously and equally, without being tied to any particular location.<sup>27</sup>

Differences in values and information processing are a major barrier to communication and cooperation between different generations.

The blurring of the boundaries between real and virtual space and the intertwining of the two dimensions are creating increasingly complex situations, especially as technological developments continue to open up new opportunities for activities in the digital space.

The anonymity, the "inconsequentiality" experienced, gives young people (and not only them) the opportunity to connect to social media with assumed identities and sub-selves. This is particularly dangerous at a stage of life when their personalities are still developing, when their self-esteem and self-image are unstable.<sup>28</sup>

---

<sup>25</sup> NBS 2024–2034 5.2

<sup>26</sup> NBS 2024–2034 point 6

<sup>27</sup> Borbíró, A. – Gönczöl, K. – Kerecsi, K. – Lévy, M. (ed.) (2020): *Kriminológia* [Criminology], Budapest. Wolters Kluwer Hungary Kft.

Available at: [https://mersz.hu/dokumentum/m736YOV1796\\_\\_222/#m736YOV1796-220\\_p2](https://mersz.hu/dokumentum/m736YOV1796__222/#m736YOV1796-220_p2)

Accessed: 29.08 2025

<sup>28</sup> NBS 2024–2034 point 6

The Strategy will continue to pay particular attention to the latest scientific findings and good practices in crime prevention, and it is important that its programmes can be implemented both online and offline, both because of the history and the constantly evolving digitalisation.

Among the crime prevention practices in Hungary at the time of writing, there are several initiatives that respond effectively to the challenges of child protection and cybercrime in the digital age. The following programmes in particular stand out as good practice, given their law enforcement function, social utility and preventive power.

The Hotline of the Safer Internet Centre in Hungary allows users to report harmful and illegal content online 24 hours a day. The system is an excellent support for the fight against e-crime, in particular child pornography and paedophile content. The primary aim of the hotline is to remove harmful and illegal content from the internet as quickly as possible, which can be harmful to the physical, mental and spiritual development of children. To this end, we work closely with Hungarian authorities, content providers, social media platforms and INHOPE members.<sup>29</sup>

The Helpline<sup>30</sup>, run by the Blue Line Children's Crisis Foundation, has a particular value in providing anonymous psychological support to prevent self-harm or help victims of crime in crisis situations.

The NETMENTOR programme,<sup>31</sup> which has been operating for almost ten years, is a nationally available educational model based on the principle of peer support, which provides preventive knowledge about staying safe online, involving students and teachers.

These programs illustrate that crime prevention in the digital space is not only a technological issue, but also a legal and pedagogical one.

---

<sup>29</sup> Available at: <https://saferinternet.hu/oldalak/safer-internet-center>  
Accessed: 21.07. 2025

<sup>30</sup> Available at: <https://kek-vonal.hu/kik-vagyunk>  
Accessed: 21.07.2025

<sup>31</sup> Launched as part of Hungary's Digital Child Protection Strategy, adopted by the Government in Government Decree 1488/2016. (IX.2.)



The digital culture subject, introduced as part of the National Curriculum (NAT), aims to build the digital competences of primary and secondary school students. Although the curriculum is under continuous development, it is appropriate to expand the content in order to recognise and prevent online risks to children, such as sextortion, deepfake technologies and data theft.

There is a particular need to develop teachers' digital child protection and cybersecurity skills. Current practice shows that many teachers are not adequately prepared to identify, address and integrate threats in the online space. This situation justifies the development of a national accredited in-service training programme to train teachers in the basic theory and practice of digital rights, data protection and online child protection.

Another challenge is to adequately address cyberbullying and psychological trauma in the online space.<sup>32</sup> The number of school psychologists working in public education is insufficient, especially given the lack of expertise focusing on specific digital risks. To remedy this, it is essential to strengthen the psychological care system and provide targeted professional training to address online risks.

Last but not least, a significant proportion of parents are not aware of the nature of the digital risks<sup>33</sup> to children and are often not actively involved in school prevention programmes. In this area too, there is an urgent need to develop well-structured information programmes accessible to parents, providing legal and practical knowledge and facilitating cooperation between families and educational institutions.

---

<sup>32</sup> Baracsi, K. (2014/9): A világháló veszélyei – internetbiztonság az Európai Unióban és Magyarországon. [The dangers of the World Wide Web – Internet security in the European Union and Hungary], *Belügyi Szemle*, p. 60

<sup>33</sup> Bottyán, L. (2023): Gyermek a kibertérben – online kockázatok klasszifikációja (4C). [Children in cyberspace – classification of online risks (4C), *Dunaújvárosi Egyetem online folyóirata, Dunakavics* [University of Dunaújváros, online magazine, Dunakavics] 2023/11.2., pp. 6 – 7  
Available at: <https://ojs.mtak.hu/index.php/dk/issue/view/1509/1072>  
Accessed 31.07.2025

Children are a sensitive mirror not only of the future but also of present society. If we are able to identify at an early stage the factors that put them at risk and provide appropriate support - whether through the family, the school or the police - we have a real chance of making crime prevention not just a principle but a practice.

The key to success is cooperation, targeted programmes and the presence of properly trained professionals in all institutions dealing with children and young people.

**DUDÁS-BODA, ESZTER**

## **The role of forensic anthropology in the forensic excavation of clandestine graves**

### **Introduction**

Among its many competencies, forensic anthropology deals with the identification of decomposed corpses and skeletal remains, thereby assisting in answering questions of personal identification that arise during criminal investigations. Forensic excavations are particularly relevant in cases of violent crimes involving buried or concealed human remains, where bodies often must be recovered, examined, and identified in an advanced state of decomposition or skeletonization. The work of forensic anthropologists is indispensable for detecting and clarifying such crimes.

### **The purpose of forensic exhumations**

The primary aim of forensic exhumations is the professional recovery of decomposed bodies or skeletal remains from the soil, particularly in cases where conventional methods of identification are no longer feasible due to the advanced stage of decomposition. Additionally, remains may sometimes have been buried in a dismembered state, making it crucial to recover them while preserving contextual evidence and minimizing additional damage. This is essential for establishing the circumstances, cause, and time of death, as well as the identity of the deceased. Forensic anthropologists are especially important in the proper recovery and documentation of skeletons and other remains, since the position, arrangement, injuries, or deficiencies of bones may yield vital information about the circumstances of death.

## **The role of the scene, the crime scene investigator, the forensic anthropologist, and the forensic archaeologist**

Why is the professional documentation of the crime scene so important? Much like in traditional crime scenes, the recovery of decomposed or skeletonized human remains represents the first encounter with evidence. Consequently, such documentation holds vital information regarding the perpetrator's *modus operandi*. These data can reveal the actions of the offender and allow reconstruction of events surrounding the burial. Accurate, systematic, and professional excavation is therefore indispensable.

At this point, forensic anthropology intersects with forensic archaeology, highlighting the multidisciplinary nature of forensic excavations. Forensic archaeology applies archaeological theory and methods within the context of the law. A pioneer in this field in Europe is the Netherlands Forensic Institute (NFI), whose protocols and practices serve as reference points for the discipline. During forensic excavations, forensic archaeology is responsible for locating, surveying, and documenting graves, as well as cooperating with forensic anthropologists in the professional recovery of decomposed or skeletonized remains.<sup>1</sup>

This raises the question: whose responsibility is the excavation—archaeologists, anthropologists, or crime scene technicians? Ideally, all three. Each professional contributes unique expertise to the process:

- The crime scene technician is skilled at producing precise and detailed photographic documentation and collecting samples for later laboratory analyses. However, they usually lack in-depth knowledge of human osteology or taphonomic agents (the scientific study of

---

<sup>1</sup> the Netherlands Forensic Institute (2013) Forensic Archaeology: uncovering buried and scattered evidence.

Available at: [https://www.forensischinstituut.nl/binaries/nfi/documenten/publicaties/2013/08/01/forensische-archeologie/forensic-archeology-%28engelstalige-brochure%29\\_tcm35-32785.pdf](https://www.forensischinstituut.nl/binaries/nfi/documenten/publicaties/2013/08/01/forensische-archeologie/forensic-archeology-%28engelstalige-brochure%29_tcm35-32785.pdf)

Accessed: 30.07.2025.

postmortem changes, including environmental, plant, and animal influences<sup>2</sup>).

- The forensic anthropologist possesses specialised osteological knowledge, can identify human interventions (e.g., dismemberment), and recognise certain taphonomic indicators (e.g., plant or animal activity). However, they are less familiar with soil processes and the formation of sediment.
- The forensic archaeologist understands soil movement, sedimentary processes, and site analysis, including alterations in vegetation.
- In summary, the most effective forensic excavation would ideally involve all three experts: the crime scene technician, the forensic archaeologist, and the forensic anthropologist at the scene, followed by anthropologists and medical professionals in the laboratory examination of the recovered remains.

### **The process of locating and excavating graves**

The following outlines, in broad terms, the steps of a forensic excavation according to anthropological and archaeological standards. It is noteworthy that actual digging begins only after several preliminary surface tasks, many of which require anthropological expertise.

1. Observation of vegetation and soil, with special attention to anomalies and disturbances.
2. Detection of certain insect species, signs of animal activity, or the presence of animal feces.
3. Pedestrian survey of the affected area and its inspection with technical equipment (e.g., ground-penetrating radar, drones, thermal imaging, infrared photography, geophysical methods).
4. Identification and marking of the grave.

---

<sup>2</sup> Bartosiewicz L. (2008): Taphonomy and paleopathology in archeozoology. *Geobios* 41, pp. 69-77

5. Removal of surface markers (gravestones, vegetation, objects) and excavation of the first soil layer with documentation.
6. Excavation and documentation of the second soil layer.
7. Excavation and documentation of the third soil layer.
8. Collection of samples from the soil above the remains and documentation of body positioning.
9. Sampling from the remains, recovery of the body/skeleton (detailed procedure described later), and sampling of the soil beneath the remains.
10. Documentation of grave features and associated artifacts buried with the remains.
11. Restoration of the grave to its original condition.<sup>3</sup>
12. The number of soil layers depends on burial depth; typically, one layer represents 20–45 cm, depending on environmental and soil conditions. Generally, graves dug to conceal homicide victims are shallower than conventional burial depths.

Additional precautions during recovery include adherence to the “Historical Anthropological Protocol” published by Pap et al. in 2009.<sup>4</sup> Key points emphasized for forensic contexts include:

- In supine burials, the skull and pubic bone often lie about 10 cm higher than the rest of the skeleton.
- When uncovering the skeleton, leave soil on the skull and pelvis, and first expose the rest of the body.

---

<sup>3</sup> Spennemann, D.H.R., Franke, B. (1995): Archaeological techniques for exhumations: a unique data source for crime scene investigations, *Forensic Science International*, Volume 74, Issues 1–2, 5-15 Available at: [https://doi.org/10.1016/0379-0738\(95\)01733-Y](https://doi.org/10.1016/0379-0738(95)01733-Y)

<sup>4</sup> Pap, I. – Fóthi, E. – Józsa, L. – Bernert, Zs. – Hajdu, T. – Molnár, E. – Bereczki, Zs. – Lovász, G. – Pálfi, Gy. (2009): Historical Anthropology Protocol – For the handling, basic processing and primary scientific examination of anthropological materials from archaeological excavations. *Anthropologiai Közlemények* 50., pp.105–123

- Excavation should proceed from the outside toward the bones, moving from the skull downward, following the natural orientation of the skeleton.
- Once bones emerge, only spatulas and brushes should be used, leaving bones and artifacts in situ until full documentation is complete.
- Special care must be taken with small and fragile elements such as hand and foot bones, infant and child remains, and teeth.

The process of documenting excavated human remains is as follows:

1. After exposure, photograph the grave, ensuring that a scale and north arrow are placed beforehand.
2. Record the exact position of the body (“body posture”). The remains must be fully uncovered but left in situ until documentation is complete. Artifacts found alongside the body should also be documented, and detailed photographs taken.
3. Prepare scaled grave drawings (typically 1:10). In cases of unusual positioning, produce detailed sketches to accurately represent the site.
4. Record the vertical and horizontal position of graves and skeletal remains.

The process of collecting anthropological finds can be read below:

1. Bones should ideally be recovered on the same day to prevent soil hardening or warping due to sun exposure.
2. The bones should be extracted in the following order: hand and foot bones, lower limb bones, followed by upper limb bones, pelvis, sternum, clavicles, ribs, scapulae, vertebrae, and finally the skull.
3. Bones must be removed intact; joints should not be broken. Pulling from the midshaft is prohibited, as this risks breaking the bone ends.

4. Soil should not be removed from inside the skull, as this reduces fragility during transport.
5. Extra care must be taken with the delicate facial skeleton, nasal bones, and teeth.

## Conclusion

This study has aimed to highlight the multidisciplinary nature of forensic excavations, in which forensic anthropology plays a central role. The participation of forensic anthropologists ensures systematic and professional recovery, minimizing the risk of evidence loss—an essential factor for both laboratory analyses and criminal proceedings. “It is a truism that the forensic value of material evidence studied at a forensic laboratory is only as good as its recognition, documentation and recovery at the crime scene. Since collection, analysis, interpretation and evaluation of physical evidence goes hand in hand; evidence collection and evidence evaluation are interdependent rather than independent. Collection and sampling of physical evidence are therefore subject to a selection process, based on the theoretical and methodological aspects and the background knowledge of the available to the investigator. [...] If not recorded properly, the destructive nature of an archaeological excavation will lead to loss of evidence at best, but it could also lead to ambiguous or erroneous interpretation of the obtained forensic record.”<sup>5</sup> Even the most advanced laboratory cannot replace the accuracy of on-site work.

---

<sup>5</sup> Groen, W.J.M.: Forensic Archaeology (2018): Integrating Archaeology with Criminalistics and Criminology in Barone P.M. – Groen, M. (Eds.) Multidisciplinary Approaches to Forensic Archaeology (1st ed.), Springer International Publishing, 1-16



**FÁBIÁN, VANESSZA**

## **The potential role of the forensic nurse in Hungarian criminal procedure - criminalistic and procedural aspects**

### **Introduction**

This research introduces a professional whose role is already well-defined and recognized within international criminal justice systems, but who remains relatively unknown in Hungary. This professional is typically referred to in Hungarian literature as an 'igazságügyi szakápoló', which roughly translates to 'forensic nurse'. However, this designation does not fully capture the complexity of the tasks performed by this professional. This emerging role is gaining increasing importance in criminal proceedings, particularly regarding the forensic and procedural aspects of evidence handling.

The relevance of the topic lies in the fact that, although nurses and other healthcare professionals in practice frequently encounter victims of crime – especially in cases of sexual violence, domestic violence, or child abuse – the Hungarian legal system currently does not provide them with institutionalized authority to collect evidence properly, document it, or participate in judicial proceedings.

In this paper, I present, based on international examples—particularly the experiences of the United States and other common law systems—how the forensic nurse has become a key actor in criminalistic processes. I then explore how and under what conditions this professional role could be integrated into the framework of Hungarian criminal procedure.

## **The concept and historical overview of forensic nursing**

According to scholarly definitions, a forensic nurse is a registered nurse who has received specialized training in forensic medicine, criminalistics, and criminal procedure, and is prepared to provide comprehensive healthcare and legal support to victims of crime.<sup>1</sup>

Their responsibilities include documenting injuries, conducting forensic examinations, recording victim statements, and cooperating with law enforcement and judicial authorities. When necessary, they may also testify as expert witnesses in court proceedings, while simultaneously providing emotional support to patients and their families.<sup>2</sup>

The development of forensic nursing can be traced back to the 1980s in the United States, when it became increasingly evident that victims of violent crimes—particularly sexual assault—were not adequately served by conventional medical care. Traditional medical examinations often failed to ensure the proper documentation and preservation of evidence, rendering such evidence inadmissible in criminal proceedings. To address this gap, specially trained nurses began working with trauma survivors, offering both medical care and legally sound documentation of forensic evidence.<sup>3</sup>

A major milestone in the field was the launch of the first Sexual Assault Nurse Examiner (SANE) program in 1977 in Memphis, Tennessee. Throughout the 1980s, several initiatives were launched across the country with the aim of providing trauma-informed, holistic care to victims, while improving the quality and reliability of evidence collection. In 1992, the International Association of Forensic Nurses (IAFN) was established,

---

<sup>1</sup> <https://www.forensicnurses.org/page/whatisfn>  
Accessed: 06.12.2025

<sup>2</sup> <https://www.forensicnurses.org/page/whatisfn>  
Accessed: 06.12.2025

<sup>3</sup> 3 Lynch, V. A. & Duval, J. B. (2011): *Forensic Nursing Science* (2nd ed.). Mosby/Elsevier, p. 105

which remains one of the most prominent global organizations in the field, playing a key role in standardization, training, and research.<sup>4</sup>

### **The forensic nurse's criminalistic significance**

The forensic nurse holds a particularly important role in criminal proceedings from a criminalistic perspective because, due to their unique position, they are able to recognize and professionally document material residues relevant to the crime—such as blood, saliva, hair—as well as other types of traces, like clothing items or other physical evidence.<sup>5</sup>

These traces are often at risk of being damaged during the initial hospital care—such as during clothing changes, cleaning, or medical interventions. If there is no healthcare professional present who recognizes their criminalistic value, such evidence can easily be lost. The forensic nurse can help precisely in this aspect: identifying evidence-worthy traces and material residues, and ensuring their proper separation, documentation, and preservation.<sup>6</sup>

This role is particularly important because the police or forensic experts often come into contact with the victim much later—when some of the traces may already have been damaged or destroyed. Therefore, the forensic nurse can sometimes be the first and only person to detect and record such traces while they are still intact. For this reason, it would be essential to introduce specialized training and procedural protocols dedicated to this task.

---

<sup>4</sup> W. Shebi Mol (2024): Forensic Nursing – An Overview, (IJSR), Vol. 13., No. 12, 1054–1055.

Available at: <https://www.ijsr.net/archive/v13i12/SR241215161149.pdf>

Accessed: 13.06.2025

<sup>5</sup> Fenyvesi, Cs. (2015/1): Trends in criminalistics. The past, present, and future of criminal investigation. JURA, pp.303–304

<sup>6</sup> Fenyvesi, Cs. – Herke, Cs. – Tremmel, F. (eds.) (2022): Criminalistics. Ludovika University Press, Budapest. 241.

## **Conditions and professional requirements for becoming a forensic nurse**

In order to become a forensic nurse, one must first hold a registered nurse or advanced practice nurse qualification. Building on this, a specialized postgraduate training program is undertaken, which specifically focuses on forensic nursing.<sup>7</sup>

This training covers a range of knowledge areas: from the basics of forensic medicine, through the recognition and documentation of criminalistic traces, to the lawful collection and preservation of evidence. An essential part of the curriculum is victim-centered care—meaning that the nurse not only performs their technical duties well but also supports the trauma-affected patient with empathy and appropriate communication.<sup>8</sup>

In addition, knowledge of legal procedures is indispensable—especially preparation for appearing as an expert witness in court. These nurses often testify in court, where they must provide professional opinions on their investigative experiences, documented traces, or the patient's condition.<sup>9</sup>

The training includes not only theoretical but also practical components: through case studies, simulations, and clinical practice, trainees acquire the necessary skills. This is particularly important because, for example, during evidence handling, the so-called chain of custody—the procedural chain ensuring the authentic traceability of evidence—must be strictly followed to maintain the credibility and validity of the traces throughout the process.<sup>10</sup>

---

<sup>7</sup> Available at: <https://nursestudy.net/forensic-nurse-careers-and-requirements/>  
Accessed: 06.14.2025

<sup>8</sup> Hammer, R. M. - Moynihan, B. - Pagliaro, E. M.: *Forensic Nursing* (2011): A Handbook for Practice (2nd ed.). Jones & Bartlett Learning, p. 112.

<sup>9</sup> Available at: <https://www.forensicnurses.org/page/aboutSANE>  
Accessed: 06.15.2025

<sup>10</sup> Available at: <https://www.forensicnurses.org/page/aboutSANE>  
Accessed: 06.15.2025

The International Association of Forensic Nurses (IAFN) recognizes several certifications. The most well-known among these is the Sexual Assault Nurse Examiner (SANE), specialized in caring for victims of sexual assault. There are also more general forensic certifications, such as the Forensic Nurse Examiner, or those specialized in the psychiatric field, like the Forensic Psychiatric Nurse.<sup>11</sup>

Obtaining these certifications typically requires passing exams, gaining practical experience, and ongoing continuing education. This highlights that the forensic nurse is an interdisciplinary professional, combining healthcare, legal, and forensic technical knowledge—thus serving as a bridge between patient care and criminal justice.

### **The development of forensic nursing in Hungary**

In the Hungarian healthcare and justice system, the position of a "forensic nurse" does not yet exist as an officially recognized professional role. However, in the complex care of crime victims—especially in emergency and psychiatric departments—there is an increasing emphasis on trauma-informed care, strict documentation discipline, and cooperation with authorities.<sup>12</sup>

For similar purposes, the Probation Service of the Ministry of Justice was established in Hungary on July 1, 2003. This service aimed to implement reform efforts defined in the national crime prevention strategies (Act No. 115/2003 of the National Assembly). Among other objectives, it placed great emphasis on ensuring that the direct interests of the victim carry greater weight in criminal proceedings, strengthening the offender's obligation to make reparations, and mitigating the damages caused by the

---

<sup>11</sup> Available at: <https://www.forensicnurses.org/page/aboutSANE>  
Accessed: 06.15.2025

<sup>12</sup> Nogel, M. (2020): Current issues in expert evidence. HVG-ORAC, Budapest. p. 75

crime. Alongside the retributive approach to justice, the idea of restorative justice also emerged in Hungary.<sup>13</sup>

Subsequently, on January 1, 2006, county and central forensic offices were established in 19 counties and in Budapest, respectively. Their expanded responsibilities included victim support. Crime victims can turn to these offices for financial aid, legal, and psychological assistance with their problems.<sup>14</sup>

Currently, this activity in Hungary is performed by hospital doctors or general practitioners working in the healthcare system. However, due to a lack of forensic and criminal law knowledge, they often carry out this task without sufficient thoroughness, which at times significantly complicates the process of proving evidence.

### **The potential procedural role of the forensic nurse in the Hungarian criminal procedure**

The purpose of this study is to examine the procedural role that the forensic nurse may assume within the framework of the current Hungarian Criminal Procedure Code (hereinafter: CPC).<sup>15</sup>

First, it is necessary to review the regulation of the CPC, with particular attention to the definition of persons involved in the procedure. According to Section 37 of the CPC, "the defendant, the person reasonably suspected of committing the crime, the defense counsel, the victim, the private prosecutor, the subsidiary private prosecutor, the private party, the party with a proprietary interest, other interested parties, and the legal person subject to the procedure as defined by law shall participate in the criminal procedure." Based on this provision, it can be established that the forensic nurse does not appear as an independent, explicitly named procedural participant in the law.

---

<sup>13</sup> Szűcs, E. (2010/4): The concept, development, and role of victim support and victim care in criminalistics, pp. 124–145

<sup>14</sup> Szűcs, E.: *ibid.*

<sup>15</sup> Act XC of 2017 on Criminal Procedure

However, it is worth examining the "other interested parties" category mentioned at the end of Section 37. Paragraph (1) of Section 58 defines other interested parties as natural or legal persons) whose rights or legitimate interests are directly affected by the decision made in the criminal procedure, or b) who have rights or obligations related to the procedural act affecting them as set out in this law." Paragraph (2) provides an illustrative list, which includes, among others, witnesses, experts, assistants, and persons subject to identification procedures. Accordingly, the forensic nurse may appear as an "other interested party" in various capacities, such as an expert or an assistant.

When considering the possibility of an expert role, Section 188 of the CPC must be taken into account, which states: "If the establishment or assessment of the facts to be proven requires special expertise, an expert shall be appointed." The forensic nurse possesses complex and specialized healthcare and forensic knowledge, which may justify their expert role in interpreting bodily injuries, psychological conditions, and traumatic symptoms. This role is particularly relevant in cases involving sexual abuse, domestic violence, or minor victims.

Furthermore, based on Section 59 of the CPC, the forensic nurse's participation as an assistant can also be examined. According to the law, "in order to represent or protect the rights and legitimate interests of the defendant, the victim, the party with a proprietary interest, and other interested parties, and to facilitate the exercise of rights or the fulfillment of obligations under this law, assistants may participate in the criminal procedure." Among the explicitly listed assistants are, for example, *"support persons"* and *"adult persons designated by the victim or the complainant."* Consequently, the forensic nurse may participate in the procedure on the victim's side as a supporter or an assistant designated by them. This participation is particularly justified if the victim requires special treatment, such as being a child, elderly, or person with disabilities.

## **De lege ferenda proposals**

As the conclusion of my thesis, I would like to list my *de lege ferenda* proposals which, in my conviction, would facilitate the introduction of the forensic nurse role into the Hungarian criminal justice system.

1. First, I consider it indispensable to establish a clear and unambiguous legal definition. It would be necessary to explicitly name the forensic nurse as a distinct legal entity in the Criminal Procedure Act and the related healthcare and judicial legislation, and to precisely define in which cases and under what conditions they may participate in criminal proceedings.
2. My second proposal concerns the detailed specification of competencies and responsibilities. It is important that the legislator clearly stipulates the tasks a forensic nurse may perform—such as documenting injuries, professionally recording statements, collecting primary evidence, and, if necessary, appearing as a witness in court. This would not only clarify the role but also promote the development of protocols for cooperation between the police, prosecution, and judiciary.
3. Thirdly, I consider the introduction of specialized training programs necessary. A multidisciplinary postgraduate program, built upon basic legal, forensic, psychological, and healthcare knowledge, would provide an opportunity for domestic nurses to acquire appropriate qualifications aligned with the standards of the International Association of Forensic Nurses (IAFN).
4. Furthermore, I propose that the procedural status of the forensic nurse be integrated into the expert system. It would be advisable to examine the possibility of including the forensic nurse as a forensic expert within the criminal procedure.
5. Finally, I advocate for the launch of pilot programs and methodological research. These pilot programs would enable the practical



application of forensic nurses, for example, in child protection centers, crisis centers, or units caring for victims of sexual violence. At the same time, this would offer the legislator an opportunity to evaluate the organizational, professional, and legal impacts of integration.

### **Closing thoughts**

In summary, I believe that institutionalizing the role of the forensic nurse would not merely mean creating a new professional position within criminal proceedings. Rather, it would represent the establishment of a collaborative system between healthcare services and the criminal justice system that strengthens the protection of victims' rights, the professional handling of evidence, and the fairness of the procedure.



**HERKE, CSONGOR – HERKE-FÁBOS, BARBARA KATALIN**

## **Social cohesion and community justice: the restorative city potential of Pécs**

### **Introduction**

Urban communities in the 21st century are facing increasingly complex challenges: growing social inequalities, rapid urbanisation and weakening community cohesion are problems that are becoming increasingly difficult to address through traditional law enforcement and judicial means<sup>1</sup>. In response to these trends, the concept of restorative cities has emerged, applying the principles of restorative justice to the management of urban life. Restorative cities aim not only to sanction crime, but also to restore community relations, build social trust and resolve conflicts in a peaceful, community-based way<sup>2</sup>. The restorative approach argues that conflicts and crimes are not isolated legal problems, but violations of the community's interest that need to be restored for sustainable peace<sup>3</sup>.

The concept of restorative cities offers a new approach to urban safety and crime prevention. Traditional criminal justice systems often deal with crime in a reactive way, but restorative approaches focus on preventing conflict and crime by strengthening community relations<sup>4</sup>. Restorative

---

<sup>1</sup> World Cities Report 2020: The Value of Sustainable Urbanization. United Nations Human Settlements Programme. Available at: <https://unhabitat.org/wcr/> Accessed 08.12.2025

<sup>2</sup> Matczak, A. (2021): What is a restorative city? (Czym jest miasto sprawiedliwości naprawczej?), *Archiwum Kryminologii (Archives of Criminology)*, Vol. XLIII/2 (2021) p. 402

Available at: <https://doi.org/10.7420/AK2021.19>

<sup>3</sup> Zehr, H. J. (2002): *The little book of restorative justice*. Good Books, p. 8

<sup>4</sup> Braithwaite, J. (2002): *Restorative justice and responsive regulation*. Oxford University Press, p. 11

justice argues that state sanctioning is not enough to deal with the consequences of crime; the involvement of the parties involved (victims, offenders and communities) is key to real healing and reconciliation<sup>5</sup>. Restorative cities apply this philosophy to the urban space as a whole: all actors, be they schools, police, community centres or municipalities, actively contribute to the development of a restorative culture. In restorative cities, crime prevention is not an exclusive police task but a complex community strategy. Peaceful conflict management, promoting social justice and encouraging community participation all contribute to a safer urban environment<sup>6</sup>.

The paper provides a comprehensive analysis of the role of restorative cities in crime prevention, highlighting difficulties and concerns and describing international good practice. In addition to a comprehensive analysis, the authors have undertaken to explore the possibilities for adapting restorative cities at home. The study concludes by examining the architectural and environmental infrastructure, the institutional network and interpersonal relations, the cultural and educational conditions of the place of residence, and by showing that the city of Pécs is suitable for the introduction and application of the restorative urban concept.

### **The concept of the restorative city**

The challenges facing cities in the 21st century – rising social inequalities, accelerating urbanisation and weakening community cohesion – have called for new types of approaches to urban planning and crime prevention. Traditional repressive instruments such as law enforcement and criminal justice are increasingly unable to deal effectively with conflicts in urban communities. In response to this problem, the concept of restorative cities has emerged<sup>7</sup>.

---

<sup>5</sup> Zehr, H. J. (2002): i.m. p. 14

<sup>6</sup> Matczak, A. (2021): i.m. p. 413

<sup>7</sup> Matczak, A. (2021): i.m. p. 408

A restorative city is not just a legal or administrative reform, but a new social approach: it takes conflict as the property of the community and seeks to resolve it through the active participation of the community<sup>8</sup>. The aim of a restorative city is not to sanction crime per se, but to restore relationships, rebuild trust and actively involve stakeholders in addressing problems. Children play a key role, as the protection and support of young people is a cornerstone of the restorative city model, which has a direct impact on the success of long-term crime prevention strategies.

According to the restorative approach, crime and other conflicts are not in fact disputes between the state and the offender, but rather breakdowns in relationships between individuals and communities that need to be restored<sup>9</sup>.

The restorative city has three major goals:

- Strengthening social cohesion: phenomena of isolation, anonymous relationships and alienation are common in urban communities. The aim of the restorative city is to replace these with relationships based on cooperation, mutual respect and shared responsibility<sup>10</sup>. Strengthening community participation and social relations will reduce the risk of crime and increase the sense of security in the long term.
- Restorative conflict management: in restorative cities, conflict management is based on restorative justice principles. The focus is not

---

<sup>8</sup> Christie, N. (1977): Conflicts as property. *British Journal of Criminology*, Vol. 17, No. 1 (January), pp. 1-2

Available at: <https://doi.org/10.1093/oxfordjournals.bjc.a046783>

<sup>9</sup> Zehr, H. J. (2002): i.m. pp. 7-15

<sup>10</sup> Matczak, A. (2021): i.m. p. 412

on punishment, but on dialogue, accountability, reconciliation between victims and defendants, and restoration of harm<sup>11</sup>. Community mediation programmes<sup>12</sup>, restorative conferences and community justice forums are all part of this approach.

- Strengthening community participation: the restorative city aims to ensure that citizens are not just passive beneficiaries of public services, but also active shapers of community life in the city. This participation is not limited to political voting but also extends to conflict management, urban planning and community decision-making<sup>13</sup>.

It is important to understand that the restorative city does not aim to replace criminal justice altogether, but to complement it with a more human, community-centred dimension. The aim is not to replace justice with community, but to enhance individual and collective sense of responsibility, reduce escalation of conflict and promote healing in the community. A restorative approach can also make a significant contribution to addressing school violence<sup>14</sup>. The restorative city concept is that all urban spaces and institutions, from schools to community centres, can play a part in creating a restorative culture, contributing to a more just and inclusive urban life<sup>15</sup>.

---

<sup>11</sup> Braithwaite, J. (2002): i.m. p. 4

<sup>12</sup> Bérces, V. (2009): A resztoratív igazságszolgáltatási koncepció érvényesülésének lehetőségei büntetőügyekben – különös tekintettel a mediációra és annak hazai szabályozására. [The possibilities for applying the concept of restorative justice in criminal cases – with particular regard to mediation and its regulation in Hungary], *Iustum Aequum Salutare*, 2009/3., p. 141

<sup>13</sup> Vasilescu, C. (2023): Building the restorative city: what goals and processes? *The International Journal of Restorative Justice*, Vol. 6. No. 1. p. 121

<sup>14</sup> Pongrácz, I. (2025): Resztoratív eszközökkel az iskolai online kortárs zaklatás ellen [Restorative tools against online bullying in schools], *Jura*, 2025/1., p. 191

<sup>15</sup> Matczak, A. (2021): i.m. p. 420

Achieving the goals outlined above has a direct impact on crime prevention. Creating social cohesion has an impact on residents' sense of security. This can lead to results in terms of preventing victimisation. And a restorative approach to conflict management and strengthening community participation will have an impact on preventing and deterring offending. And the concept's urban planning and policing model aims to prevent crime (situational prevention).

The concept of the restorative city also assigns means to achieve these objectives, which are:

- technical tools and equipment to increase the sense of security,
- architectural and transport solutions based on a restorative approach,
- restorative conflict management methods,
- micro- and macro-level cooperation.

### **Urban design principles and aspects**

Restorative environments typically take the form of designed structures such as water surfaces, green spaces, quiet noise levels, visual complexity and escape from urban bustle<sup>16</sup>. However, these characteristics are not found exclusively in natural environments: urban parks, quiet streets, community gardens, and certain cultural and artistic spaces can also have a restorative<sup>17</sup> effect.

---

<sup>16</sup> Hartig, T. – Evans G. W. – Jamner, L. D. – Davis, D. S. – Gärling, T. (2003): Tracking restoration in natural and urban field settings. *Journal of Environmental Psychology*, Vol. 23. No. 2 (June) p. 113

Available at: [https://doi.org/10.1016/S0272-4944\(02\)00109-3](https://doi.org/10.1016/S0272-4944(02)00109-3)

<sup>17</sup> Stigsdotter, U. K. – Corazon, S. S. – Sidenius, U. – Refshauge, A. D. – Grahn, P. (2017): Forest design for mental health promotion - Using perceived sensory dimensions to elicit restorative responses. *Landscape and Urban Planning*, 2017/160., p. 13

Available at: <https://doi.org/10.1016/j.landurbplan.2016.11.012>

The concept of the restorative city thus goes beyond traditional urban planning and combines crime prevention with environmental psychology and sustainable urban development in an interdisciplinary way. In a restorative city, design not only focuses on functionality and aesthetics, but also actively promotes the well-being of its inhabitants, particularly in the dimensions of mental and emotional health<sup>18</sup>. The increasing stress levels of urban populations and the aftermath of the pandemic have made the importance of public spaces that allow for retreat, relaxation and social connection particularly valuable.

A restorative city is therefore not just a physical space, but also a set of values and attitudes that put urban quality of life at its core. Pedestrian and wheelchair-friendly transport systems, the development of community spaces, the enhancement of biodiversity, and social inclusion and participation are all cornerstones of the restorative city.

The urban design principles of restorative cities are thus based on a restorative justice philosophy: the organisation of space is not only aimed at preventing crime, but also at promoting community cohesion, social participation and justice. Restorative urban planning seeks to create an environment that encourages dialogue, community cooperation and peaceful conflict resolution.

Crime Prevention Through Environmental Design (CPTED) theorises that the physical design of the environment can influence the incidence of crime<sup>19</sup>. Restorative cities apply this principle by seeking not only to prevent crime, but also to foster community presence, transparency and a sense of responsibility.

---

<sup>18</sup> Roe, J. & McCay, L. (2021): *Restorative Cities: Urban Design for Mental Health and Wellbeing*. London: Bloomsbury Visual Arts. p. 113

<sup>19</sup> Cozens, P. M. (2010): Crime prevention through environmental design. In Fisher, B. S. - Lab, S. P. (eds.), *Encyclopedia of Victimology and Crime Prevention*, SAGE Publications, p. 212



The principles are:

1. Natural observability.
2. Natural surveillance.
3. Territorial reinforcement.
4. Open, inclusive community spaces.
5. Child-friendly urban design.

Although the idea of restorative cities is gaining increasing attention worldwide, there are many difficulties and constraints in putting it into practice. Integrating restorative principles into urban design poses not only technical or financial challenges, but also deeper social, cultural and institutional challenges:

1. Urbanisation pressures.
2. Urban pressures.
3. Political and institutional barriers.
4. Difficulties in ensuring community participation.
5. Lack of resources.
6. Cultural barriers.
7. Ensuring special protection for children.

### **The National Crime Prevention Strategy and the Public Safety and Crime Prevention Concept of the City of Pécs**

In the foregoing, we wanted to provide a comprehensive overview of the restorative urban concept and its practical applicability. Based on the criteria of a comprehensive analysis, we would like to develop our arguments towards the adoption of good practice. As a local patriot, it was obvious to look at our city, Pécs, from this perspective. Our research was helped by the fact that as local residents we are familiar with the city's endowments and institutional network. However, in addition to the micro-environment,

it is also important to examine the supporting background of the normative environment in order to replicate the concept that has been successful abroad. At the end of 2023, the previous crime prevention strategy (hereinafter referred to as NBS) that had determined the direction and priorities of crime prevention in Hungary for the past 10 years expired<sup>20</sup>. The NBS has been replaced by a new Crime Prevention Strategy, which combines lessons learned, criminological research and international practice (hereinafter referred to as the Strategy)<sup>21</sup>. This Strategy was designed to create synergies between the measures aimed at implementing crime prevention activities, thus guaranteeing the efficiency and effectiveness of crime prevention work. It also provides a framework for the broadest possible coordination of the resources of the state, municipalities and other actors involved in crime prevention and for the efficient use of resources. Analysis and interpretation of the Strategy suggests that the national legal framework provides the basis for the introduction of the concept of the restorative city, by setting out its objectives and listing the measures necessary to achieve them (particularly in the field of architectural crime prevention).

The normative links identified in the Strategy are:

- It defines community prevention and situational (crime prevention) and victim-centred prevention as crime prevention orientations. In the area of community prevention, strengthening local governance (urban planning) and community building and development programmes (Neighbours for Neighbours) build on a restorative approach. Situational and victim-centred prevention focuses on comprehensive environmental and safety planning.

---

<sup>20</sup> See Government Decision 1744/2013 (X. 17.) on the National Crime Prevention Strategy (2013-2023)

<sup>21</sup> See Government Decision No. 1291/2023 (19 July 2013) on the National Crime Prevention Strategy (2024-2034) and the National Crime Prevention Strategy Action Plan 2024-2025

- Environmental development is a key area of intervention, with the aim of reducing crime incidents, building on the background of community and situational prevention. The underlying idea of architectural crime prevention is that crime incidents can be reduced by proper design of the built environment and by increasing community control. The basic principles of architectural crime prevention are natural surveillance, natural regulation of entitlement, marking of ownership, maintenance and upkeep, and strengthening social cohesion.
- The Action Plan attached to these objectives sets out practical options and programmes that are also compatible with the philosophy of the restorative urban concept . These include, in particular, improving the built environment (1.1), continuing peer support programmes (2.1.2), encouraging the development of a public safety and crime prevention strategy (3.3) and supporting crime prevention projects.

In 2024, the City of Pécs adopted its 10-year Concept for Public Safety and Crime Prevention (hereinafter referred to as the Concept). In its introduction, the Concept, in addition to the Local Government Act and the European Charter of Local Self-Government, explicitly refers to the Strategy and to the need to rethink the tasks, analyse and forecast the expected processes and make recommendations for the necessary actions in order to improve public safety and to join forces against crime. The aim of the Concept is to define strategic objectives and priorities on the basis of a concrete analysis of the situation and to provide an appropriate framework for broad cooperation and the effective implementation of common tasks.

Based on the data of the past years, the Concept sets out the following four objectives for the next 10 years:

- a change in approach to public safety (the introduction of a community safety management approach and methodology);

- reduction of crime (both quantitative and qualitative);
- policing public spaces and roads;
- meeting the public's expectations of security (launching and managing programmes and projects that have a positive impact on citizens' subjective perception of security).

The concrete measures proposed for the objectives are linked to the possibility of becoming a restorative city in several respects, even though the document does not explicitly use this concept:

1. Social cooperation and safety management: the Concept emphasises public safety as a shared social responsibility. Security is not the exclusive responsibility of the police or state agencies, but can be ensured through the participation of individuals, communities and civil society organisations - a basic principle of restorative justice.
2. Preventing re-offending: the Concept highlights the importance of preventing re-offending, for example through aftercare, patronage and support for family members. This is a practical application of restorative principles (reintegration, responsibility, community healing).
3. Community crime prevention and awareness-raising: the Concept emphasises community safety management, neighbourhood cooperation, the role of the neighbourhood watch and the involvement of the public. This is fully in line with the restorative city approach, where local communities are active players in crime prevention and conflict management.
4. Prevention of child and juvenile delinquency: the problems arising from the criminogenic environment of juveniles are closely linked to the restorative city approach. The Concept specifically focuses on strengthening child protection, school programmes, prevention, drug prevention and social intervention.

5. Victim support and mediation: the Concept mentions the institution of mediation and the development of a victim support system, which is also an essential element of restorative justice.

Thus, although the term restorative city is not used in the Concept, many elements of it are in harmony with this idea. Community-based crime prevention, the reintegration of offenders, social responsibility and victim support can all be foundations for building a restorative city model.

### **Instead of a conclusion: arguments in favour of Pécs becoming a restorative city**

The analysis of the Strategy and the Concept clearly shows that Pécs is well placed to become the 12th European city to be awarded the title of restorative city. This is supported by 12 factors:

1. The city has always been a symbol of peace, coexistence and cultural diversity, from the Roman Sopianae to the medieval bishopric to the urban communities of the Turkish era. These values resonate well with the principles of restorative justice, such as dialogue, community participation and building on historical lessons.
2. University City: theory meets practice, nations and generations live together. The University of Pécs is one of Hungary's largest and most colourful higher education institutions. The interdisciplinary knowledge base of the University allows a restorative approach to meet theoretical grounding, research and innovative programmes. In addition, the University's international student community and the presence of young people contribute to an inclusive, open and learning urban climate.
3. Population: Pécs' population of around 135-140,000 is the ideal size for a restorative city: large enough to accommodate a wide range of

social strata, challenges and services, but small enough for community relations, networking and informal solutions to work effectively.

4. This culture of cooperation provides an excellent basis for developing a broad social base for introducing and sustaining restorative approaches.
5. Partnering and professional cooperation between the criminal justice and child protection sectors: there are already several examples of inter-professional cooperation between child protection professionals and the justice system in Pécs. For example, good practices in child hearings or active links between family support services and the police and courts. This synergy is essential for the development of a restorative city.
6. This existing knowledge base is an excellent basis for expanding the restorative urban model.
7. The built environment and the natural environment allow for community connectivity: the structure of the city (historic city centre, community spaces, green spaces, connections between neighbourhoods) facilitates physical and social community building. The Tettye, the Mecsek slope or the Zsolnay Quarter are places that can be catalysts for community programmes, shared experiences and dialogue.
8. The highest level of justice in rural areas: Pécs has a court of justice, a court of law, an administrative and labour court, a district court (and at the same time prosecutor's offices, a police headquarters and a police headquarters), and a highly qualified legal profession (Bar Association, Faculty of Law).
9. This body can be a strategic partner in the concept of the restorative city, where a preventive, community and restorative approach can be emphasised rather than a targeted approach.

10. Pécs Public Safety and Crime Prevention Concept: as detailed above, Pécs has a separate concept for public safety and crime prevention which can provide a framework for the integration of restorative elements. This will not only allow new programmes to be launched, but also to adapt existing structures with a restorative approach.
11. Reaching tourists and international partners will enhance the international prestige of the city and could become a model initiative.
12. This institution could be a central pillar of the city's restorative structure, with model cooperation and sharing of experience.

Pécs' characteristics, its institutions, professional networks and community traditions all point in one direction: the city could be an ideal setting for the implementation of the restorative urban model. Existing structures can be further developed and theoretical knowledge can be combined with practical experience to make Pécs Hungary's first – and one of Europe's models – restorative cities .<sup>22</sup>

---

<sup>22</sup> The study was supported by the University of Pécs University of Pécs grant 001\_2025\_PTE\_RK/5.





**HERKE, ZSOLT**

## **The relationship between global warming and the number of violent crimes**

Global warming is one of the most serious problems of our time, which has a profound impact not only on environmental systems, but also on society as a whole. More and more research shows that climate change can - indirectly - increase the number of violent crimes. Although warming itself does not cause crimes, it can increase the social, psychological and economic factors that can lead to violent behavior. Heat significantly affects not only physical health, but also human behavior, often increasing aggression, reducing concentration and impairing social interactions. The human body and psyche are stressed by hot days, extremely hot days and tropical nights<sup>1</sup>, which significantly increases the risk of aggressive behavior and violent acts. This also poses a challenge in maintaining public safety. The fight against violent crime is a continuous, dynamic and complex task that requires the police to constantly adapt and seek innovative solutions, both in the field of prevention and law enforcement.

### **Global impacts of climate change**

According to a report by the World Meteorological Organization (WMO)<sup>2</sup>, after 2023, 2024 was also the warmest year globally since 1850. In Europe, 2024 was also the warmest year since 1850, replacing 2020, according to

---

<sup>1</sup> Hot days are days when the daily maximum temperature exceeds 30 °C, extremely hot days are days exceeding 35 °C, and tropical nights are days when the daily minimum temperature does not drop below 20 °C and the warm period can last for several days.

<sup>2</sup> Available at: <https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level>

Accessed: 09.07.2025

an analysis by the Copernicus Climate Change Service<sup>3</sup>. In Hungary, the average temperature in 2024 was 12.91 °C on a national average, thus being 2.16 °C warmer than the 1991-2020 climate normal<sup>4</sup>.

Climate change is causing quite profound economic and social changes. As a result of warming, the frequency of droughts and floods increases, and agricultural production decreases, leading to serious livelihood problems. Poverty, unemployment and hopelessness are factors that increase the risk of crime. Regions where the social safety net is weak and young people are easily attracted to criminal gangs are particularly at risk. Another important consequence is climate migration. Natural disasters, water shortages and desertification of agricultural lands are forcing millions of people to leave their homes. This mass migration can create social tensions in host countries, which do not always have the necessary means to integrate migrants.

Social exclusion, unemployment, and cultural differences can contribute to increased violence and crime.

Several studies have also examined the potential for climate change to trigger group conflicts. For example, a 2013 study by Solomon Hsiang, Marshall Burke, and Edward Miguel<sup>5</sup> found that changes in temperature and precipitation increase the likelihood of armed conflict.

It should not be overlooked that extreme weather events-such as heat waves, floods, or hurricanes-can greatly disrupt public order. In such situations, law enforcement agencies are overwhelmed and looting and robberies increase, as was the case in New Orleans after Hurricane Katrina in 2005<sup>6</sup>.

---

<sup>3</sup> Available at: <https://climate.copernicus.eu/global-climate-highlights-2024>  
Accessed: 09.07.2025

<sup>4</sup> Available at: [https://www.met.hu/eghajlat/magyarorszag\\_eghajlata/eghajlati\\_visszatekinto/elmult\\_evek\\_idojarasa/](https://www.met.hu/eghajlat/magyarorszag_eghajlata/eghajlati_visszatekinto/elmult_evek_idojarasa/)  
Accessed: 09.07.2025

<sup>5</sup> Hsiang, S. M. – Burke, M. – Miguel, E. (2013): Quantifying the Influence of Climate on Human Conflict. *Science*, 09. 13., pp. 1212–1213

<sup>6</sup> Barsky, L. – Trainor, J. – Torres, M. (2012/10): Disaster realities in the aftermath of Hurricane Katrina: Revisiting the looting myth. *Climate Change from a Criminological Perspective*, pp. 173–183

## Physiological and psychological effects of climate change

There is a lot of research on the physiological effects of heat worldwide, and there is increasing emphasis on extreme weather events such as heat waves caused by climate change. This research is multidisciplinary and operates at the boundaries of psychology, medicine, public health and climatology. Hypothesized mechanisms include dehydration, changes in blood supply to the brain, and disruption of nervous system function. Heat has a greater impact on cognitive functions in particular in the elderly and children, as demonstrated by a study<sup>7</sup> that found that an indoor temperature between 20-24°C is optimal for maintaining cognitive functions. Even a difference of 4°C can significantly increase the risk of attention deficit disorder.

Several studies have shown that high temperatures negatively affect cognitive performance. A study conducted by researchers at Harvard University<sup>8</sup> examined students in air-conditioned and non-air-conditioned dormitories. Students living in non-air-conditioned rooms had slower reaction times and lower scores on cognitive tests during heat waves than those living in air-conditioned environments. This research clearly demonstrated that heat impairs concentration, memory, and problem-solving skills.

Several studies and meta-analyses have found a positive correlation between higher temperatures and aggressive behavior, crime, and violence. A

---

<sup>7</sup> Baniassadi, A. – Yu, W. – Trivison, T. – Day, R. – Lipsitz, L. – Manor, B. (2025/4): Home Ambient Temperature and Self-Reported Attention in Community-Dwelling Older Adults. *The Journals of Gerontology*, pp. 286–292

<sup>8</sup> Cedeño-Laurent, J.G. – Allen, J. G. – Cao, J. G. – Cai, J. – Young, E. D. – Spengler, J. D.: Reduced cognitive function in students in non-air-conditioned buildings during a heatwave.

study<sup>9</sup> of baseball pitchers' aggression found that they pitch more aggressively and suffer more injuries in hot weather. Other studies<sup>10</sup> have also observed an increase in traffic aggression (e.g., honking) in hot weather.

The physiological stress caused by heat increases irritability and reduces self-control. According to the General Aggression Model<sup>11</sup>, heat acts as a “provocative” factor, increasing the likelihood of aggression. Concerns about climate change, such as prolonged heat waves, may increase not only individual aggression but also social tensions.

Additional research shows that high night-time temperatures significantly reduce the quality and quantity of sleep. An international study<sup>12</sup> that analyzed sleep tracking data from more than 47,000 people in 68 countries found that the average person loses 44 hours of sleep per year due to high temperatures, and there is no sign that people are adapting to this. This problem is particularly acute for the elderly, women, and those on low incomes, who may have less effective thermoregulation or lack access to adequate cooling solutions. Poor sleep quality directly affects mental health. It increases fatigue, irritability, anxiety, and depressive symptoms, and impairs daytime cognitive performance.

Prolonged heat increases the incidence of depressive symptoms and anxiety. According to a study<sup>13</sup> published in this regard, the number of people

---

<sup>9</sup> Larrick, R. P. – Timmerman, T. A. – Carton, A. M. – Abrevaya, J.: Temper, temperature, and temptation: heat-related retaliation in baseball

Available at: <https://pubmed.ncbi.nlm.nih.gov/21350182/>

Accessed: 24.05.2025

<sup>10</sup> Kenrick, D. T. – MacFarlane, S. W. (1986): Ambient temperature and horn honking – A field study of the heat hypothesis. *Environment and Behavior*, 18(2), pp. 179–191

<sup>11</sup> Allen, J. J. – Anderson, C. A. – Bushman, B. J. (2018): The General Aggression Model, *Psychology*, pp. 75–80

<sup>12</sup> Minor, K. – Schwegler, C. M. T. – Wu, X. – Obradovich, N. (2022): Rising temperatures erode human sleep globally. *One Earth* 2022. may 20., pp. 534–549

<sup>13</sup> Nori-Sarma, A.; Wellenius, G. A. – Weinberger, K. R.; Dominici, F. – Schwartz, G.J. – Lane, K. J. – Kelly, M. R. (2022): Association Between Ambient Heat and Risk of Emergency Department Visits for Mental Health Among US Adults from 2010 to 2019. *JAMA Psychiatry*, 2022. april 1., pp. 341–349

presenting to emergency departments with mental health problems (e.g., stress, anxiety disorders, schizophrenia, self-harm) increased by about 8% during heat waves. Rising temperatures can affect levels of neurotransmitters, such as serotonin, which play a key role in regulating mood. In addition, the physical discomfort and sleep disturbances caused by heat directly contribute to mood swings. Some research<sup>14</sup> has found a link between extreme heat and increased suicide rates, although this is a complex area with multiple factors at play.

It is not a direct psychological effect of heat, but the increasingly frequent and severe heat waves, as well as the broader effects of climate change (e.g., drought, forest fires) are increasing the incidence of so-called "eco-anxiety". This is a kind of chronic fear of environmental disasters caused by climate change, which can lead to anxiety, depression and hopelessness. This phenomenon is also being investigated by a growing number of psychological studies<sup>15</sup>.

### ***Climate change and the increase in the number of violent crimes***

#### ***Global overview***

The relationship between global warming and the number of violent crimes is the subject of a growing number of studies, and several studies have shown certain connections. Based on the research so far, a connection can

---

Thompson, R – Lawrance, E. L. – Roberts, L. F. – Grailey, K. – Ashrafian, H – Toledano, M. B. – Darzi, A. (2023): Ambient temperature and mental health: a systematic review and meta-analysis. *Lancet Planet Health* 2023. july, pp. 580–589

<sup>14</sup> Thompson, R. – Lawrance, E. L. – Roberts, L. F. – Grailey, K. – Ashrafian, H. – Toledano, M. B. – Darzi, A. (2023): Ambient temperature and mental health: a systematic review and meta-analysis. *Lancet Planet Health* 2023. july, pp. 580–589

Burke, M.; Hsiang, S.; Miguel, E. (2015/8.): Suicide and climate: A 10-year study of 2.2 million deaths in Mexico and the United States. *Nature Climate Change*, pp. 723–729

<sup>15</sup> Lawrance, E. L. – Young, L.; Howard, R. (2022): Climate change and mental health: an overview of the global evidence base and implications for population mental health interventions. *International Review of Psychiatry* 2022. 34/5, pp. 443–498

be observed between the increase in temperature and the increase in aggression. Higher temperatures can trigger stress, irritability and aggressive behavior in people. Psychological and behavioral research<sup>16</sup> suggests that higher temperatures increase people's irritability and frustration, which can lead to violent behavior. Some studies<sup>17</sup> have found that the frequency of violent attacks on people increases with increasing temperature.

A 2000 study<sup>18</sup> by Craig A. Anderson and colleagues found that violent crimes, such as homicides and assaults, increase on hotter days in the United States. Therefore, hot weather is not only unpleasant, but it can also increase the tendency to conflict.

A study in Finland<sup>19</sup> found that rising ambient temperatures have an effect on the number of violent crimes. Every 1°C increase in temperature leads to a 1.7% increase in the number of violent crimes. The researchers attributed this to increased serotonin levels, which can lead to increased impulsivity and aggression.

A 2020 study<sup>20</sup> found that global warming could lead to an increase in violent crime in the United States by 2.3 million to 3.2 million between 2020 and 2099, depending on emissions scenarios. The researchers found that for every 1.5°C increase in global temperature, there could be an additional 18,800 violent crimes per year. A 2013 meta-analysis of more than

---

<sup>16</sup> Miles–Novelo, A. – Anderson, C A. (2019): Effects of Rapid Global Warming on Violence and Aggression Climate Change and Conflicts. *Current Climate Change Reports* 2019. 5(1), pp. 36–46

<sup>17</sup> Heo, S – Foo, D. – Song, Y. – Stewart, R. – Son, J. – Bell, M. L. (2024): Temperature, Crime, and Violence: A Systematic Review and Meta-Analysis. *Environmental Health Perspectives* 2024. 132(10) 106001/ pp. 1–12

<sup>18</sup> Anderson, C. A. – Anderson, K. B. – Dorr, N. – DeNeve, K. M. – Flanagan, M. (2000): Temperature and aggression. *Advances in experimental social psychology* 2000/32., pp. 63–133

<sup>19</sup> Tiihonen, J. – Halonen, P. – Tiihonen, L. – Kautiainen, H. – Storvik, M. – Callaway, J. (2017/7.): The Association of Ambient Temperature and Violent Crime. *Scientific Reports*, pp. 1–7

<sup>20</sup> Harp, R. – Karnauskas, K. B. (2020): Global warming to increase violent crime in the United States. *Environmental Research Letters* 2020. march 15(3)., pp 1–8

60 studies<sup>21</sup> found that climate variability (temperature, precipitation) is statistically significantly associated with increased violent conflict and crime. Another study<sup>22</sup>, using US data, found that for every 1°C increase in temperature, violent crimes (such as robberies and assaults) on a given day increase significantly.

Australian researchers, based on an analysis of 18 years of data, have concluded<sup>23</sup> that the increase in the number of heat waves could lead to an additional 72,000 crimes per year, and a total of 1.64 million more crimes by the end of the century.

In addition to the above, not only heat waves in the summer, but also warmer winter months can significantly contribute to the number of violent crimes. It may not seem obvious, but several studies<sup>24</sup> show that climate change, and in particular unusually mild winters, can also affect crime statistics. On warmer winter days, people are more likely to spend more time outdoors, attending events or simply being out in public spaces. This increased social activity increases the possibility of interactions between perpetrators and potential victims, thereby creating more opportunities for crimes to be committed. This is especially true during the traditionally cold winter months, when an unexpectedly mild day suddenly changes people's usual routine and behavior.

#### Hungarian research

The relationship between climate change and crime has been less researched in Hungary, so there is currently no comprehensive, empirical research available in our country that would directly examine the relationship between global warming and the number of violent crimes. However, based

---

<sup>21</sup> Burke, M. – Hsiang, S. M. – Miguel, E. (2015): Climate and conflict. *Annual Review of Economics*, 7(1), pp. 577–617

<sup>22</sup> Tiihonen, J. – Halonen, P. – Tiihonen, L. – Kautiainen, H. – Storvik, M. (2017/7): The association of ambient temperature and violent crime. *Scientific Reports*, 6543., pp. 1–7

<sup>23</sup> Churchill, S. A. – Smyth, R. – Trinh, T.–A. (2023): Crime, Weather, and Climate Change in Australia. *Economic Record* 2023. march, pp. 84–107

<sup>24</sup> Available at: [https://www.google.com/search?q=https://papers.ssrn.com/sol3/papers-.cfm%3Fabstract\\_id%3D4594611](https://www.google.com/search?q=https://papers.ssrn.com/sol3/papers-.cfm%3Fabstract_id%3D4594611)

Accessed: 28.07.2025

on international trends, it can be assumed that the increase in temperature may also have an impact on the number of violent crimes in our country. Some previous domestic studies deal with the social effects of climate change, which may indirectly influence crime trends.

According to a study published in the journal *Hungarian Science*, climate change requires a general reorganization of societies' lifestyles, living and working conditions, and leisure habits. Meanwhile, social structural and territorial inequalities ensure only a differentiated modification of the necessary transformations. Climate change may therefore further increase social inequalities and reduce social security.

The Green Policy Centre's 2024 project<sup>25</sup> examined the relationship between climate change and security in Hungary. The study identified environmental challenges that could pose security risks in the medium and long term, such as climate migration, health and food security, and natural disasters. The project also formulated policy recommendations to address these challenges.

## **The relationship between the increase in average temperature and the number of violent crimes in Hungary over the past fifteen years**

### ***Methodology***

In this study, I specifically examine the impact of climate change/global warming on violent crimes, among its many consequences. The method of the study is to determine whether the increasing average temperature and the increase in the number of hot days - in direct connection with this - will also lead to an increase in the number of violent crimes. To determine this, I compared the number of violent crimes committed on hot days and on non-hot days for the period under review. The temperature data required

---

<sup>25</sup> Available: [https://www.greenpolicycenter.com/2024/04/15/klimavaltozas-es-biztonsag-magyarorszagon-szakpolitikai-javaslatok/?utm\\_source=chatgpt.com](https://www.greenpolicycenter.com/2024/04/15/klimavaltozas-es-biztonsag-magyarorszagon-szakpolitikai-javaslatok/?utm_source=chatgpt.com) Accessed: 14.05.2025



for this was obtained from the National Meteorological Service, and the crime statistics from the National Police Headquarters.

Due to lack of space, the data for four years are presented (2009, 2014, 2019, 2024) from the crime data of the past 15 years. In the tables below, I have plotted the temperature data for the summer months (June, July, August) of the given year. I have marked the values exceeding thirty degrees Celsius on the temperature graph separately. This can be used to determine how many hot periods occurred in the given period. I have also plotted the aggregated figures for violent crimes committed on the given day, on which I have also drawn a trend line. Based on the above, it can be determined by visual analysis of the graphs whether an above-average number of violent crimes were committed on the days of the given heat period.

Violence does not have a legal definition in Hungarian criminal law, its concept is determined by legal practice and legal literature. In the practice of the Curia, violence is the direct application of physical force to a person that breaks resistance. A violent crime is therefore a crime in which the perpetrator uses violence or threatens with the direct threat of violence, and thereby causes physical or mental injury or death, or creates such a threat.

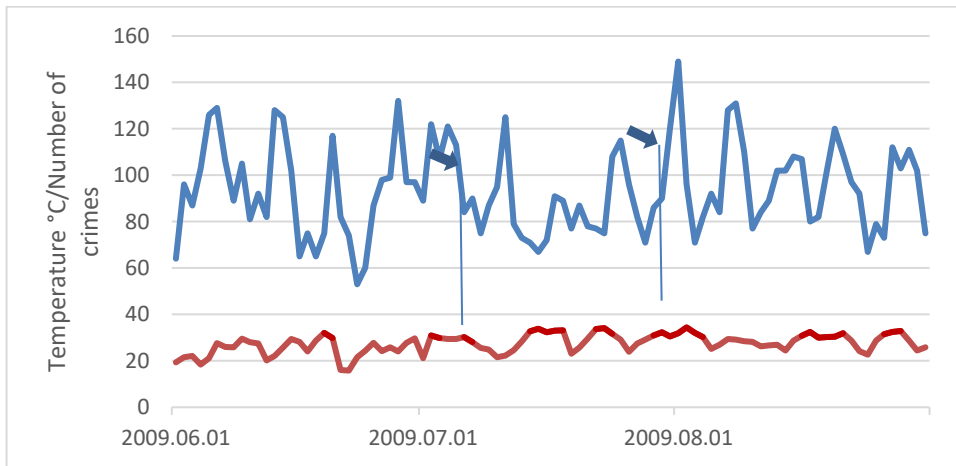
### ***Temperature data***

In the past two decades, the annual average temperature in Hungary has increased significantly, reflecting the domestic effects of global climate change. According to the latest data, 2024 was the warmest year in the country since 1901, with the annual average temperature on a national average of 12.91°C, which was 2.16°C above the 1991-2020 climate normal. An obvious sign of climate change in our region is the increasing frequency of extremes related to high temperatures, the increase in the duration and intensity of heat waves. Seasonal average temperatures also show an increasing trend. The average summer temperature increased by 2.1°C in the period 1981-2020 compared to the 1991-2020 average. Based on the data, it is clear that Hungary has experienced a significant increase in temperature over the past two decades, which poses a number of environmental and

social challenges. Long-term trends and regional differences also support the domestic effects of climate change.

### ***Crime data***

In the tables below, I have compared the temperature data for the summer months of a given year with the daily number of violent crimes committed during the period. Days with temperatures above 30°C (heat days) and longer periods of such temperatures (heat periods) have been marked with different colors on the temperature graph.



**Figure 1.**

Regarding the summer months of 2009, it can be stated that there was a total of 25 hot days in the given period. This number was divided into eight heat periods, of which six periods saw an above-average number of violent crimes.

An interesting fact, which can also be observed in the following tables, is that during persistently high temperatures, after the initial increase - the number of crimes decreases - even significantly. During heat periods last-

ing 3-4 days or longer, a fatigue effect can be observed, due to which activities with a higher energy investment, including violent crimes, become less frequent.

The other situation indicated by the arrow - also observed in all tables - is that when the temperature drops significantly after a heat period, in some cases an increase in the number of violent crimes can be observed. The reason for this has yet to be determined, but in some cases, it can be assumed that the underlying cause is the release and relief from heat stress, which again makes people more prone to committing such acts.

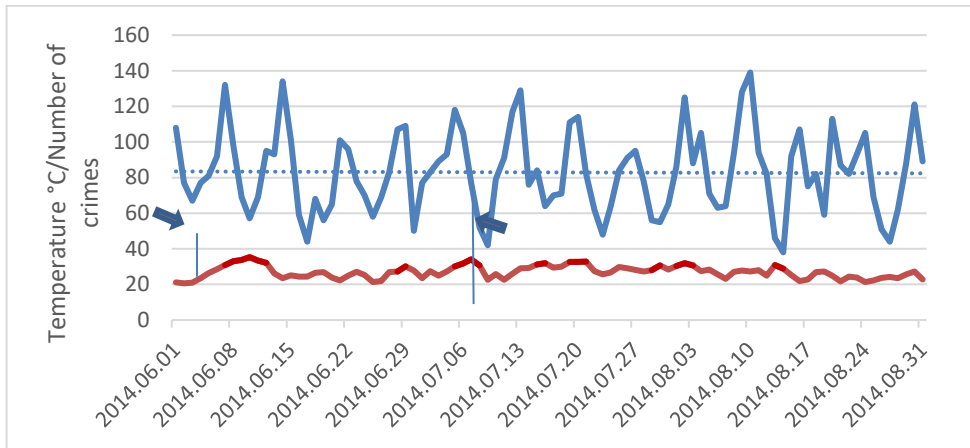
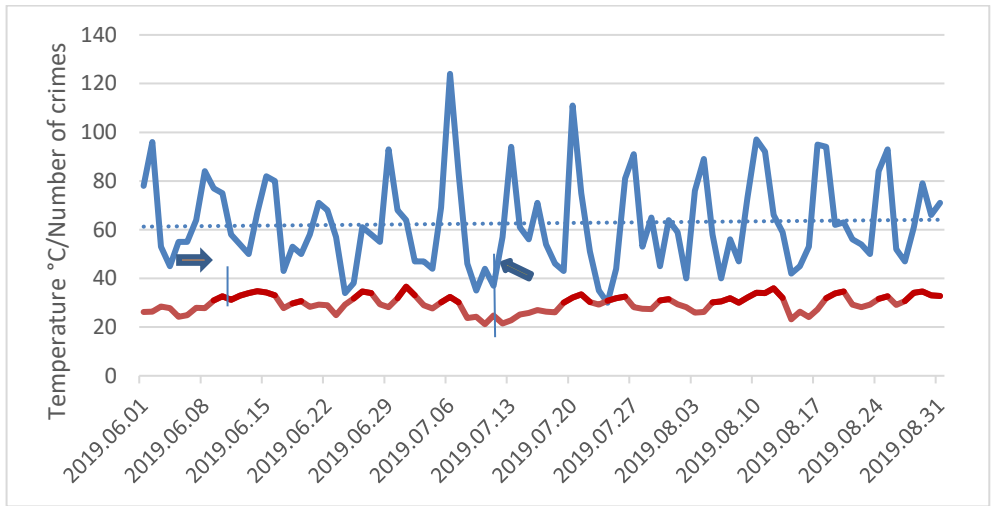


Figure 2.

For the summer months of 2014, there were a total of 21 hot days during the period. This number was divided into eight heat periods, five of which had above-average violent crime rates.

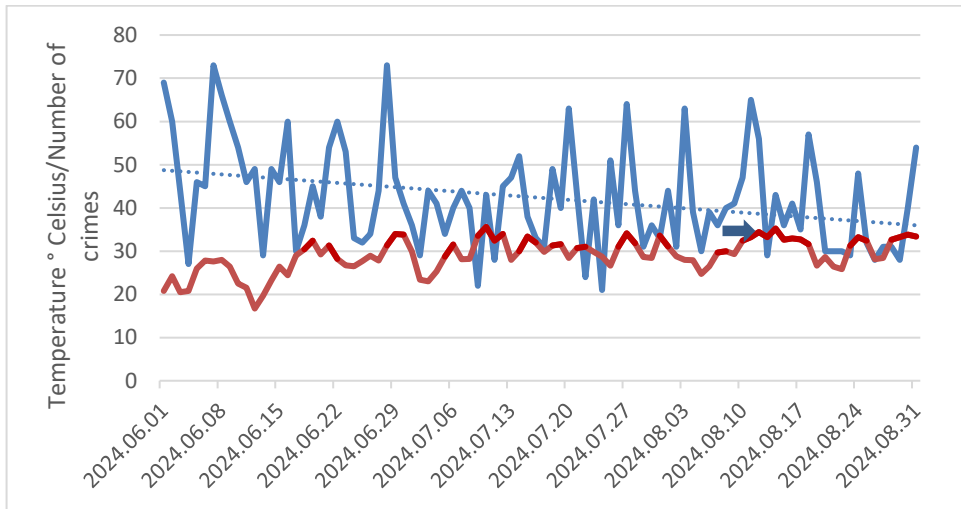
Here too, both the decline seen during the sustained heat period and the rebound during the cooling period following the heat period can be observed.



**Figure 3.**

For the summer months of 2019, there were a total of 46 hot days during the period. This number was divided into twelve heat periods, nine of which saw above-average violent crime.

This period also saw both a decline during the sustained heat period and a rebound during the cooling period following the heat period.



**Figure 4.**

For the summer months of 2024, it can be stated that there was a total of 40 hot days in the given period. This number was divided into fourteen hot periods, of which ten periods had an above-average number of violent crimes. During this period, a decline was observed during the long-term hot period.

It can be observed that while there were eight hot periods in the summer of 2009, there were already fourteen hot periods in 2024. During each hot period, violent crimes were committed in an above-average number of periods in 2009, while in 2024 there were already ten such periods.

## Summary

Based on the data shown in the graphs, it can be stated that the number of hot days and the number of violent crimes committed on such days is correlated in several cases. This observation, however, does not necessarily imply a causal relationship in all cases, but based on previous research, it is likely that global warming may have an impact on the number of violent

crimes, especially if other socio-economic factors also favor the development of conflicts.

Global warming is therefore not only an environmental problem, but also a serious social and security challenge. The increase in violent crimes is just one of the many consequences that climate change brings. Prevention requires not only environmental measures, but also a coordinated system of socio-political, economic and security policy measures. Society must prepare for these challenges and develop appropriate prevention and adaptation strategies in order to minimize the negative effects. Reducing the number of violent crimes is a complex task that requires multifaceted and coordinated measures from the police. It is not just about responding to crimes after they have occurred, but also about prevention, community partnerships and data-driven strategies.

The study suggests that police resources should be focused on areas and periods where violent crime is most prevalent. To this end, weather forecasting, through algorithmic decision-making and artificial intelligence, can be used to predict violent crime and optimise preventive police presence. This could include increased patrols and community policing. Police forces need to be able to respond quickly to sudden increases in temperature and the associated crime trends, for example by increasing staffing levels or making shift schedules more flexible. Police officers need training in heat stress management and in recognizing signs of heat-related irritability and aggression in public spaces and in responding effectively to such situations. Providing mental health support is essential for both police officers and the public, as prolonged heat stress can exacerbate psychological problems, increasing the risk of violent acts.

It is important that policing measures are not implemented in isolation, but are part of a comprehensive, interdisciplinary strategy. This includes cooperation with other authorities, such as social service providers, healthcare institutions and municipalities. Launching joint prevention programs that raise awareness of the dangers of heat and address aggression can make a significant contribution to preventing crime.

**KEMÉNY, BERTALAN**

## **Digital Knowledge Base for Supporting Migration Governance – An Opportunity for Interdisciplinary Research**

### **Introduction**

This study outlines the concept for the research-driven development of a multilingual, open-access digital information portal with a dual purpose. First, it aims to support third-country nationals in understanding and navigating residence, employment, and study permit procedures in Hungary. Second, it seeks to reduce the occurrence of administrative errors and omissions that may arise during the permit application process.

The proposed initiative centers on the development of a website designed to be both user-friendly and visually supportive. Its planned structure would feature a Frequently Asked Questions (FAQ) system, downloadable templates, animated explanatory videos, and interactive chatbot-based verification modules, all intended to assist applicants for entry and residence permits in obtaining accurate and accessible information. In this respect, the digital platform would not merely constitute a technological innovation; it would also embody significant social value by fostering lawful compliance and facilitating the social integration of applicants for entry and residence permits.

The interdisciplinary nature of the project is further underscored by the proposed survey-based research methodology, which would reveal micro-level, practice-oriented information, integrate the perspectives of multiple stakeholders, and enable the establishment of a long-term monitoring system. Furthermore, the data collection process would provide an opportunity to apply innovative methods of digital user analytics—such as

machine learning-based text analysis—thereby laying the foundation for interactive digital knowledge bases.

Finally, the results derived from the survey-based data collection are expected to carry direct policy implications. They may provide concrete recommendations for legislators and authorities aimed at simplifying permit procedures and enhancing the effectiveness of training programs for administrative officers. Consequently, the project should not be interpreted merely as a technological development, but also as an initiative reflecting a moral responsibility—one in which the active involvement of higher education institutions in public service is particularly justified.

### **Mitigating Information Asymmetry**

For third-country nationals in Hungary, one of the greatest challenges lies in maintaining the legality of their stay, securing access to employment opportunities, and ensuring the continuity of their student status. In pursuing these objectives, they face numerous legal, administrative, and linguistic barriers that significantly complicate procedural processes and may jeopardize the maintenance of lawful residence. The complexity of administrative procedures, the frequent changes in the legal framework, and the technical and linguistic challenges of digital systems further exacerbate the information asymmetry between clients and the case officers of the National Directorate-General for Aliens Policing (hereinafter: OIF). As a result, the system becomes overburdened, leading to a weakened sense of legal certainty.

The study examines the feasibility of developing an alternative, lower-cost, modularly expandable digital information platform with targeted functionalities. The objective is not to replace existing systems, but rather to complement them functionally—particularly by addressing the informational gaps of third-country clients through a user-friendly, scalable knowledge base.



## **Information Provision and Efficiency**

The initiative under examination has a dual set of objectives: on the one hand, it seeks to facilitate the ability of third-country nationals to navigate the administrative procedures related to residence, employment, and study permits in Hungary; on the other hand, it aims to reduce the number of applications submitted with formal or substantive errors, as well as those containing deficiencies. The latter objective could indirectly help to ease the workload of the administrative apparatus, thereby enhancing its operational efficiency and stability.

This study, grounded in empirical and regulatory theory, examines the legal, linguistic, and administrative barriers that hinder the integration of this target group, with particular emphasis on issues arising from informational deficiencies and language barriers that substantially affect actual access to administrative procedures.

Empirical evidence indicates that the primary challenge lies in the combined effect of language barriers and a lack of information, resulting in application forms being frequently completed incorrectly or incompletely. It is also not uncommon for applicants to attach inappropriate or irrelevant supporting documents. This imposes an additional burden on the case officers of the National Directorate-General for Aliens Policing (OIF), as the procedure often requires issuing deficiency notices and initiating further communication with clients. This process not only slows down case processing but also increases the vulnerability of the individuals concerned.

The problems are not confined to the clients' side. Employers, educational institutions, and their authorized representatives do not always possess precise knowledge of the current legal requirements. This situation not only undermines the legal certainty of individuals but also impedes their social integration.

The Enter Hungary platform constitutes a key element of Hungary's migration administration digitalization; however, its current operation can-

not be considered sufficiently user-friendly. A lack of familiarity with procedural steps and formal requirements often results in erroneous or incomplete applications, the correction of which generates additional administrative burdens for the authorities, prolongs processing times, and diminishes client confidence. The complexity of the situation is heightened by the fact that the issue is not purely technological in nature but also carries deeper social and institutional dimensions. Public and private actors who engage with third-country nationals share the responsibility of ensuring access to accurate information and the conditions necessary for lawful administrative procedures within a constantly changing legal environment.

These experiences underscore the necessity of a digital information platform that simplifies, structures, and provides procedural information in a clear, accessible format across multiple languages. Such a tool would not only enhance applicants' awareness and understanding but, in my view, could also contribute to reducing the workload of case officers, improving the efficiency of the administrative system, and strengthening the legal certainty of those concerned.

### **Reducing Errors and Enhancing the Client Experience in Migration Administration**

The digitalization of procedures related to foreign nationals constitutes one of the key areas of public administration modernization worldwide. Nevertheless, in my view, the issues of information deficits on the user side and the quality of the digital client experience have remained relatively under-explored in the Hungarian context.

Several digital solutions may be considered relevant for addressing the outlined set of problems. Particularly promising is the introduction of an interactive, step-by-step online form submission system that prevents the finalization of an application in the absence of required documents. This could be complemented by a real-time intelligent checklist and an integ-

rated chatbot function that provides information on requirements and common errors during the compilation of the application. In addition, automated deficiency-handling mechanisms could enable the immediate feedback and correction of errors, thereby significantly reducing the workload on the administrative side. The integration of multiple digital solutions may also be justified:

- A modern, interactive form-filling system that guides users step-by-step through the administrative process, preventing the most common formal errors.
- Built-in validation algorithms within the system would ensure that applicants can only finalize their submissions if all mandatory data fields are completed and the required documents are attached.
- User support could be further enhanced through a real-time, intelligent checklist and a multilingual chatbot function capable of providing automatic yet personalized responses to frequently arising procedural questions.
- In addition, consideration should be given to the introduction of an automated pre-screening mechanism employing the tools of artificial intelligence to conduct preliminary formal and substantive checks.
- Through the implementation of these technological innovations, the proportion of erroneous applications can be reduced, as can the number of deficiency procedures, leading to a more efficient utilization of administrative capacities. In this way, human resources can be focused primarily on more complex cases that require substantive decision-making.

It can be observed in international comparison that even advanced public administration systems face similar challenges. Issues such as system overload, the high frequency of client-side errors, and data security concerns are present across these systems. At the same time, their operation

already incorporates integrated solutions such as machine learning-based document analysis, predictive error detection, and chatbot-based client support. These developments not only enhance procedural efficiency but also significantly improve the overall user experience.

European Union and Anglo-Saxon public administration practices may offer relevant insights for developments in Hungary. For the adaptive modernization of domestic systems, it is of particular importance to design a more transparent and intuitive user interface, develop multi-layered information structures, and systematically collect and analyze user feedback. A dynamically upgradable system established in this manner would not only contribute to reducing administrative errors and enhancing client satisfaction but could also, in the long term, strengthen legal certainty and the social legitimacy of public administration.

## **Digital Innovations in Migration Case Management**

At the core of the proposal outlined in the title lies an exploration of the types of informational gaps that hinder third-country nationals in navigating administrative procedures in Hungary, as well as an examination of how these problems might be addressed through a purposefully designed digital knowledge base. The empirical foundation of the study is provided by a multi-phase research design. In the first phase, a questionnaire-based survey would generate quantitative data on the informational difficulties experienced during administrative processes. One target group of the survey would consist of professionals who deal with immigration cases on a daily basis and thus have direct experience with the most frequent errors made by applicants. The other target group would comprise both applicants and case officers, enabling an assessment of the causes of misunderstandings and the shortcomings of existing information structures.

The questionnaire phase would be complemented by an in-depth interview study, providing an opportunity to qualitatively and contextually exp-

lore several recurring problems. This method aims to uncover the underlying causes and interpretations behind these issues. The research would also be supported by a content analysis of official documents and websites, through which the accessibility, language, structure, and visual presentation of the information could be examined.

The research also aims to map which types of information delivery formats—such as textual summaries, infographics, videos, or interactive guides—are considered most effective by professionals and stakeholders. These preferences could fundamentally shape the structure, menu system, and user-friendly operation of the digital knowledge base. In my view, it would be necessary to involve experts already in the early stages of the development process, as their contribution could greatly facilitate the practical applicability of the project and increase the acceptance of the system.

The questionnaire-based data collection could significantly contribute not only to the foundation of a digital information platform but also to broader scientific and policy-oriented discourses by providing substantial empirical data. The systematic analysis of user-side data related to immigration administration addresses a relatively underexplored area within Hungarian migration research. The results obtained in this way could serve not only as the basis for applied developments but also for the design of further targeted research initiatives and policy interventions.

First, the questionnaire can serve as a tool for the empirical identification of practical problems, with particular attention to micro-level administrative difficulties that occur repeatedly during immigration procedures. Recurring errors, misinterpretations of legal provisions, incompletely attached supporting documents, and shortcomings in the operation of official communication channels constitute problem areas whose empirical mapping is essential for targeted system development. Second, the questionnaire-based methodology could enable the involvement of various stakeholder groups—such as applicants for entry and residence permits, customer service staff, licensing authorities, inspectors, and employer representatives—thereby allowing for the interpretation of the same problem

from multiple perspectives. This approach fosters an intersectional and systemic understanding, which may contribute to uncovering deeper causal relationships.

As a long-term outcome of the research, the creation of an indicator-based monitoring system could be proposed, capable of identifying and addressing the most critical administrative problems through the time-series tracking of empirical data. The current Hungarian immigration administration system lacks such a feedback mechanism; thus, the establishment of an experience-based, target group-oriented monitoring structure could represent a novel policy innovation. Furthermore, the processing of questionnaire responses—particularly through the application of machine learning and natural language processing (NLP) technologies—could enable the development of a new, data-driven client profile analysis system. The structured knowledge thus obtained could not only serve a decision-support function but might also be integrated in the future into automated customer service tools, such as chatbot systems or intelligent search interfaces, thereby contributing to the creation of a more user-friendly digital environment.

Finally, the data collection could also serve a policy feedback function. The aggregated results may contribute to the development of legislative simplification proposals, the rationalization of administrative protocols, and the modernization of public service training systems. Thus, the study could serve not only developmental purposes but also strengthen the scientific and policy foundations of immigration administration.

## **The Research Methodological Framework**

The methodological framework of the research is based on a three-stage approach that integrates both qualitative and quantitative elements. In the first phase—as noted above—a structured questionnaire survey will be conducted, using both closed and open-ended questions to map the infor-

mational experiences of applicants for entry and residence permits, employees, and case officers. This will be followed by semi-structured interviews to provide qualitative depth, enabling the interpretation and conceptualization of the identified problem areas. The third stage of the research will apply content analysis to evaluate the structure, clarity, and accessibility of currently available digital informational materials—such as websites, FAQ pages, and client portals.

The aim of the study is to lay the foundation for a prototype of a digital platform that would initially operate as a simple, responsive website or mobile application but could be scaled and further developed in the long term—for example, through AI-assisted form validation or integration with official databases. Based on user feedback, the system could be gradually fine-tuned and adapted to practical needs.

From a functionality perspective, interactivity and user support are of paramount importance for the platform. In addition to visually structured, multi-step informational flowcharts, it would be advisable to employ dynamic tools—such as automatically generated checklists—that display document requirements tailored to the specific case type. A multilingual chatbot function would enable the prompt and clear answering of frequently recurring questions, particularly in relation to deficiency procedures, document translation, and deadlines.

One of the key findings of the preliminary survey is the need to establish an open-access, multilingual digital knowledge base that provides transparent, step-by-step structured information to assist third-country nationals in navigating the most important residence and employment procedures. Interactive content—such as FAQs, downloadable document lists, and audiovisual guides—would also play a crucial role in informing users. The content structure of the website would be based on target group-oriented empirical research aimed at systematically identifying the most common misunderstandings and informational gaps.

The significance of the development extends beyond technological innovation, as the digital information system could also serve an important

social function. In my view, state and immigration authorities have a normative obligation to provide the tools necessary for informed decision-making to those concerned, particularly within a complex and frequently changing regulatory environment that, in itself, can pose substantial interpretative challenges.

## **Digital Guides Tailored to Specific Audiences**

Based on the results of the proposed research, it would be possible to identify those areas of public administration where third-country nationals, employers, and case officers most frequently encounter misunderstandings or informational gaps. In response to these issues, it would be justified to develop targeted, step-by-step digital guides that use clear and simple language and are tailored to the informational needs of different target groups. For the sake of efficiency, these materials should be published in a multilingual format, taking into account the linguistic diversity of communities applying for entry and residence permits.

The information-use context of different target groups—such as third-country nationals, administrative case officers, and employers—varies significantly; therefore, the differentiated application of communication strategies would be essential. Audiovisual tools and process flowcharts can effectively illustrate the logic of individual procedural steps (e.g., the process of submitting a residence permit application or the necessary actions in the event of a deficiency notice). In addition, interactive functions—such as search interfaces, FAQ sections, instructional videos, chatbots, and document checklists—can substantially increase the comprehensibility of information and the efficiency of administrative processes, while also reducing the proportion of erroneous applications.

In my view, effectively reaching the target groups would require the simultaneous use of multiple communication channels. Third-country nationals typically obtain information through informal sources—such as social media, personal networks, or civil society organizations—thus, targeted



presence on community platforms and collaboration with civil partners would be of key importance. For employers, relevant channels may include economic chambers, internal corporate newsletters, or the mailing systems of consultancy firms. Among public administration actors, effective means of information dissemination include intranet platforms, internal circulars, as well as professional training sessions and workshops.

The long-term practical adoption of the digital platform could only be ensured if it reflects genuine user needs. In this regard, targeted initial promotion could play a key role in establishing broad awareness and fostering the system's organic growth.

### **Higher Education's Role in Digital Innovation in Public Administration**

Higher education institutions—particularly a public service-oriented university such as the Ludovika University of Public Service—can play a key role in the conceptual design, development, and initial operation of a targeted digital information system. The higher education sector holds significant potential for accommodating such innovation initiatives, as it possesses scientific expertise, an interdisciplinary professional background, and the infrastructural resources necessary for research and development activities. Moreover, the public service mission and the institutional values of the university ensure that the development process is implemented in a socially embedded, public interest-driven, and professionally grounded manner. The university environment is particularly suitable for the initial phases of the development process—such as conceptual planning, methodological groundwork, and the testing of pilot projects. Higher education institutions can function as innovation incubators, providing a safe, experimental environment in which new ideas can be tested. Should the results of the pilot phase confirm the viability of the concept, the university can act as a strategic partner in collaboration with governmental or market actors for the full-scale implementation of the system.

This phased model facilitates the progression of the development process toward practical implementation in a scientifically grounded and technologically validated form. In subsequent stages, the sustainable operation of the system could fall within the remit of state or semi-state actors—such as the National Directorate-General for Aliens Policing (OIF)—with particular attention to ensuring data management, regulatory compliance, and up-to-date content.

The flexibility and cost-efficiency of the project could be further enhanced by involving university students in the development process, thereby partially utilizing educational capacities for practical work. This approach would not only ease the financial burden of the project but also contribute to the practice-oriented training of future public administration professionals.

The proposed platform is not intended to replace existing public administration systems but rather to provide functional support to them. The suggested development model therefore represents a hybrid structure based on collaboration between the higher education and public administration sectors. Through its scientific foundation, technological scalability, and low cost level, the system offers an innovative solution that simultaneously addresses practical challenges and promotes the modernization of public administration.

## **Conclusion**

The aim of this problem statement is to provide the conceptual and scientific foundation for a digital information platform that offers an effective, cost-conscious, and practice-oriented solution to the informational gaps observed in Hungary's immigration administration processes. The proposed development is not intended to replace existing central systems but rather to complement them functionally, with particular emphasis on imp-

roving the access to information for users—including third-country applicants, employers, and case officers—and on reducing the administrative burdens arising from procedural errors.

Building on empirical research, the proposed development concept would enable the platform to address real-world problems by providing clear, multilingual, and user-friendly guidance to help clients navigate complex legal and administrative procedures. The university environment is particularly well-suited to hosting the early stages of this initiative, as it can offer the necessary interdisciplinary expertise and infrastructural background during the research, development, and prototype-building phases. The subsequent maintenance and institutional integration of the system could be carried out with the involvement of state or mixed actors, thereby ensuring long-term sustainability and official validation.

In my view, the proposed development would contribute to enhancing the transparency of the public administration system, improving accessibility, and strengthening legal certainty. The platform would serve not only as a tool but also as a practical manifestation of public service responsibility, with particular regard to the state's obligation to provide information to citizens seeking to exercise their rights.

An additional advantage of the concept is that it could be launched with a relatively modest budget, particularly if developed with the involvement of students as a practice-oriented university project. Anticipated impacts include a reduction in the number of erroneous applications, increased self-sufficiency among clients, and a decrease in the workload of case officers—all of which would directly contribute to improving the efficiency and service quality of the immigration system.

Overall, the study argues that digital information provision is not merely a technological development but also a space for interdisciplinary research and social collaboration that deserves due attention in shaping future migration and public administration policies. The initiative would not only serve to improve access to information but could also reflect the moral res-

possibility of state actors. In my view, institutions that facilitate the admission of third-country nationals are obliged to ensure that they have access to clear, comprehensible, and multilingual information necessary for lawful administrative procedures—particularly in a dynamically changing regulatory environment that can, at times, pose significant interpretative challenges even for the administrative staff of domestic employers or institutions.

**NAGY, ÁGNES**

## **Digital threats: trust and manipulation in cyberspace**

*“Because nothing is as easy to sell as hope.” (S. Márai)*

### **Introduction**

The rapid development of the online space affects every segment of society: economic life, communication, public services, and of course the world of crime too. The spread of the internet and the everyday use of smart devices have made it possible for an ever-greater part of people's lives to be transferred into the digital space. This change brought advantages of convenience, but at the same time also created new risks. Online frauds have by now spread to such an extent that they affect not only individual victims, but also represent a significant economic, social, and security policy problem.

According to the Internet Organised Crime Threat Assessment (IOCTA) 2025 report of Europol, data has become the central element of digital crime, which by now has grown into one of the most important commodities on the online black market. Criminals are continuously developing their methods, and are applying artificial intelligence (AI)-based tools more and more frequently, with which they generate communications that appear authentic, or even create deepfake contents.<sup>1</sup> The application of AI has not only increased the number of attacks, but also their sophistication and efficiency, thereby raising users' vulnerability to an unprecedented level.

---

<sup>1</sup> Europol: Internet Organised Crime Threat Assessment (IOCTA) 2025

Available at: [https://www.europol.europa.eu/cms/sites/default/files/documents/Steal-deal-repeat-IOCTA\\_2025.pdf](https://www.europol.europa.eu/cms/sites/default/files/documents/Steal-deal-repeat-IOCTA_2025.pdf)

Accessed: 30.05.2025

In Hungary, on 1 October 2023, the police launched the Matrix Project, one of the most important results of which was the establishment of a nationwide cyber-investigation unit called Kiber300. The task of the unit is to conduct procedures related to online fraud, to dismantle the perpetrator circles involved, as well as to provide specialised training for investigators and to ensure the necessary technological background.<sup>2</sup> In addition, the CyberShield (KiberPajzs) programme was also established, the aim of which is to provide the population with up-to-date information on newly spreading forms of fraud, and thereby to promote prevention.

Online frauds represent one of the most serious security challenges of our days. The complexity of the problem lies in the fact that technological development and the adaptive capacity of crime proceed almost hand in hand, and thus law enforcement authorities must continuously keep pace with the changes.

## Historical Overview

The history of online fraud is closely intertwined with the development of the internet and the spread of digitalisation. At the beginning of the 2000s, the first mass fraud attempts launched from abroad also appeared in Hungary, the most well-known of which were the so-called “Nigerian letters.” In these messages, the perpetrators promised the victims a significant amount of money, inheritance, or lottery winnings in exchange for the prior transfer of smaller “administrative costs.” Although the method may seem primitive, many people were nevertheless deceived, because at that time the majority of society had not yet encountered the concept of online fraud and did not possess sufficient digital awareness.

In the following years, the forms of online fraud constantly expanded: in addition to simple e-mail approaches, abuses committed on marketplaces

---

<sup>2</sup> Matrix projekt for cybersecurity 20.10.2023

Available at: <https://www.police.hu/hu/hirek-es-informaciok/legfrissebb-hireink/zsarumagazin/matrix-projekt-a-kiberbiztonsagert>

Accessed: 30.05.2025

and auction platforms became increasingly common. Kollár's research also points out that fraudsters consciously build on the psychological weaknesses of victims, particularly on trust and on the hope of quick profit.<sup>3</sup>

In the 2010s, frauds stepped to a new level. Banking phishing e-mails appeared, which tried to obtain users' login data by copying the appearance of domestic financial institutions. In many cases, users were unable to distinguish the forged pages from the real banking interfaces, thus significant losses occurred. At this time, the Hungarian police also increasingly encountered online crimes, and the authorities had to adapt to the rapidly changing environment.

In the 2020s, the nature of online fraud once again changed significantly. Criminals combined classical methods (for example, e-mail phishing) with modern technologies, thus targeted spear phishing attacks appeared, in which the perpetrators collected information about the victim in advance and then contacted them with personalised messages. With the spread of artificial intelligence, it also became possible to create deepfake video calls, during which the perpetrators imitated the voices and faces of real persons, thereby creating situations that seemed authentic.

In Hungary, in parallel with all this, QR code phishing attacks also appeared. Fraudsters placed fake QR codes, for example on parking meters, which, after scanning, directed the victim to a phishing website. This method is particularly dangerous, because it exploits the trust associated with QR codes, and victims often cannot verify the authenticity of the link behind the code.<sup>4</sup>

Overall, it can be said that the historical development of online fraud clearly shows: perpetrators always adapt to new technologies and to the social environment.

---

<sup>3</sup> Kollár, Cs. (2018): Key features of online frauds in Hungary. Analysis of relevant criminal cases committed between 2013 and 2016, Internal Affairs Review 2018/10., pp. 56-70

<sup>4</sup> "Warning! A new type of fraud is spreading at parking meters." 17.03.2025

Available at: <https://kiberpajzs.hu/hirek/figyelem-uj-csalasi-modszer-terjed-a-parkoloautomataknal-legyen-ovatos-figyelmeztetes>

Accessed: 30.05.2025

## **Modus Operandi**

One of the most characteristic features of online fraud is that the methods of commission are continuously developing and adapting to technological possibilities. The spread of the internet and mobile communication, as well as the advance of digital financial services, created new attack surfaces to which criminals quickly reacted.

In the past two decades, the nature of fraud has significantly transformed. In the early years, simpler, mass-sent e-mails dominated, the aim of which was to reach as many people as possible and, although at a low rate, to cause financial damage on a large scale. In recent years, however, targeted attacks have come increasingly to the forefront, applying much more sophisticated psychological and technological tools.

In addition to classic e-mail phishing, scams spreading on social media platforms, fake prize games, and romance frauds have also appeared. In these cases, perpetrators attempted through emotional manipulation to get victims to transfer money or share their personal data. Romance frauds particularly affected older, lonely people, and in many cases caused significant financial damage.

In the 2020s, with the further advance of digitalisation, criminals no longer attacked only through e-mails and social media, but also in the form of telephone calls and SMS messages. In the methods known as smishing (SMS phishing) and vishing (voice phishing), the perpetrators pretended to be bank clerks, authority officials, or representatives of courier services. Victims were often induced through fear-mongering to hand over confidential data or to carry out money transfers.<sup>5</sup>

Online frauds have long surpassed the level of individual perpetrators. Today, in many cases, criminal organisations stand in the background, op-

---

<sup>5</sup> Europol: Internet Organised Crime Threat Assessment (IOCTA) 2023

Available at: [https://www.europol.europa.eu/cms/sites/default/files/documents/IOCTA%202023%20-%20EN\\_0.pdf](https://www.europol.europa.eu/cms/sites/default/files/documents/IOCTA%202023%20-%20EN_0.pdf)

Accessed: 30.05.2025



erating with a well-organised structure and division of labour. In its international operation called “First Light” launched in 2024, Interpol arrested 3,950 perpetrators in 61 countries and seized assets worth about 257 million US dollars, which clearly shows the global dimension of the problem.<sup>6</sup>

Cryptocurrencies, such as Bitcoin, Ethereum, or Monero, have become especially favoured tools of online fraudsters. The reason for this is that transactions are fast, decentralised, and provide a certain degree of anonymity. Although blockchain technology is traceable, with the help of cryptocurrencies perpetrators are often able to hide the origin and path of money.

A particularly worrying development is the spread of deepfake technology, which makes possible the manipulation of audio and video recordings. In 2024 in Hong Kong, the financial director of a multinational company was deceived in this way and induced to transfer 25 million dollars.<sup>7</sup> The danger of the method lies in the fact that for the victim the forged video appears almost completely convincing.

Artificial intelligence has fundamentally changed the nature of online fraud. With the help of AI, perpetrators are able to generate authentic communications, process large amounts of data, and launch personalised attacks. According to a 2025 study by TechRadar, more than half of security experts experienced AI-generated social engineering attacks, and the number of deepfake frauds directed against executives increased by 51 percent in a single year.<sup>8</sup>

---

<sup>6</sup> Interpol: USD 257 million seized in global police crackdown against online scams 27.06.2024

Available at: <https://www.interpol.int/News-and-Events/News/2024/USD-257-million-seized-in-global-police-crackdown-against-online-scams>

Accessed: 30.05.2025

<sup>7</sup> Company worker in Hong Kong pays out £20m in deepfake video call scam

Available at: <https://www.theguardian.com/world/2024/feb/05/hong-kong-company-deepfake-video-conference-call-scam> 05.02.2024

Accessed: 30.05.2025

<sup>8</sup> Addressing the new executive threat: the rise of deepfakes

## International Dimension

By their very nature, online frauds do not recognise national borders. Perpetrators often live on a different continent from their victims, and the financial systems or cryptocurrency exchanges used in transactions also conduct operations through several countries. This global nature makes the work of law enforcement authorities particularly difficult, since investigations require international cooperation.

According to the 2023 report of the Internet Crime Complaint Center (IC3), operating within the FBI in the United States, the losses resulting from reported cybercrimes exceeded 12 billion US dollars.<sup>9</sup> The greatest damage was caused by Business Email Compromise (BEC) type frauds, when perpetrators, using falsified or hacked e-mail accounts, instructed the financial departments of companies to make transfers.

In the European Union, Europol publishes the Internet Organised Crime Threat Assessment (IOCTA) report every year, which analyses in detail the continent's cyber threats. The 2024 edition highlighted that frauds connected to cryptocurrencies, ransomware attacks, and deepfake scams carried out with the use of artificial intelligence represent the greatest challenges for European law enforcement authorities.<sup>10</sup>

The international operations of Interpol also clearly illustrate the scale of the problem. In the already mentioned "First Light 2024" operation, thousands of police officers cooperated worldwide, and several hundred

---

Available at: <https://www.techradar.com/pro/addressing-the-new-executive-threat-the-rise-of-deepfakes>

Accessed: 30.08.2025

<sup>9</sup> FBI (2023): Internet Crime Report 2023

Available at: [https://www.ic3.gov/AnnualReport/Reports/2023\\_IC3Report.pdf](https://www.ic3.gov/AnnualReport/Reports/2023_IC3Report.pdf)

Accessed: 30.05.2025

<sup>10</sup> Europol (2024): Internet Organised Crime Threat Assessment (IOCTA) 2024

Available at: <https://www.europol.europa.eu/cms/sites/default/files/documents/Internet%20Organised%20Crime%20Threat%20Assessment%20IOCTA%202024.pdf>

Accessed: 30.05.2025

organised criminal networks were dismantled.<sup>11</sup> This example clearly shows that effective action requires rapid information exchange built on trust between member states.

It can be stated that online frauds must be treated as a global phenomenon. No single country is capable of providing effective protection on its own, therefore international cooperation is of key importance. This means not only the exchange of information and joint operations between law enforcement authorities, but also legal harmonisation, the coordination of regulations, and joint research and development programmes.

### **Criminological Analysis – The Psychology of Victimisation**

The key to the success of online fraud is to be found not only in the technological background, but also in human factors. According to criminological studies, one of the most important weapons of perpetrators is deception, for which they apply psychological manipulation, fear-mongering, or the exploitation of the victim's emotions.<sup>12</sup> The essence of social engineering is that perpetrators attack human gullibility and trust instead of technological systems, since even the most secure IT system is vulnerable if the user voluntarily gives away their data.

Based on research, a difference can be observed in the propensity to become a victim among different age groups. Members of the older generation are typically less experienced in the digital world, and thus more prone to fall for telephone or e-mail scams which arrive in the name of authorities or bank employees. In contrast, younger, more technologically skilled users are rather the targets of scams spreading on social media, such as fake prize games and investment offers.

---

<sup>11</sup> Operation First Light Seizes \$257m in Global Scam Bust 27 June 2024  
Available at: <https://www.infosecurity-magazine.com/news/operation-first-light-seizes>  
Accessed: 30.05.2025

<sup>12</sup> Lieutenant Christopher (2010): *Social Engineering: The Art of Human Hacking*, Wiley, Hoboken.14

Trust plays an important role in the psychology of victimisation. People are fundamentally inclined to believe communications that appear official, especially if they create a pressing situation. Fraudsters often use the tactic of placing the victim under time pressure (“transfer immediately, otherwise your account will be blocked”), thereby minimising the time available for suspicion.<sup>13</sup> In addition to urgency, another effective method is when perpetrators create fear, for example by threatening the victim with police procedures or tax authority fines.

Another widespread tactic is emotional involvement. Romance scams are typical examples of this, when perpetrators build a trust-based relationship with the victim over several months, and then ask for financial support. Victims of romance scams often form an idealised image of their online partner, and are unwilling to recognise the signs of fraud even when their environment warns them.

The appearance of artificial intelligence has raised psychological manipulation to a new level. AI is capable of creating audio and video materials that are almost completely convincing, so victims often fall for them even if they were previously security-conscious. According to a 2024 survey by Entrust, deepfake attacks occur on average every five minutes worldwide, and in most cases they successfully influence the decision-making of the targeted person.<sup>14</sup> The effectiveness of manipulation is greatly increased by influencing the emotional state: perpetrators consciously use the tools of fear and trust-building while also exploiting the cognitive load of victims.<sup>15</sup> Research has also shown that the success of deception in

---

<sup>13</sup> Lea, S – Fischer, P. – Evans, K.M. (2009): The psychology of scams: Provoking and committing errors of judgement. Office of Fair Trading (OFT), London. p. 22

<sup>14</sup> Rise of Sophisticated Fraud and Deepfakes at Scale 22 November 2024  
Available at: <https://www.entrust.com/blog/2024/11/rise-of-sophisticated-fraud-and-deepfakes-at-scale>  
Accessed: 30.05.2025

<sup>15</sup> Jagodics, I. –Kollár, Cs.(2023): Social engineering attacks of the 21th century, defence and organisational effects in Europe, Internal Affairs Review, 2023/2, pp. 233–255

online frauds is based not only on technical methods, but also on the psychological vulnerability and decision-making patterns of victims. The analysis of domestic cases between 2013 and 2016 also pointed out that fraudsters consciously build on people's tendency to trust, as well as on the attractiveness of the promise of quick financial gain.<sup>16</sup>

From a criminological point of view, online frauds are therefore not only technical, but also psychological phenomena. To understand victimisation, it is indispensable to thoroughly analyse human behaviour, trust, and manipulation techniques. This also forms the basis of prevention, since the raising of awareness in society, awareness-raising campaigns, and education play a key role in preventing frauds.

### **New Tools in Criminalistics**

The detection and proof of online fraud is an especially complex task, since a significant part of these crimes is cross-border in nature, perpetrators often use the infrastructure of several countries, and cryptocurrencies are applied during transactions. Therefore, the success of investigations greatly depends on the technical background, the training of experts, and the effectiveness of international cooperation.

Digital forensic tools play a key role in proving online frauds. These make possible the recovery of deleted data, the breaking of encrypted contents, as well as the analysis of system logs.<sup>17</sup> Modern forensic laboratories are capable of examining entire hard drives, mobile phones, and cloud services, during which they find traces of the perpetrators' communications, financial movements, and technical devices.

During investigations, special analytical software is also often applied, such as Maltego or Analyst Notebook, with the help of which relationship networks and transaction chains can be mapped. These programs display

---

<sup>16</sup> Kollár, *Ibid.*

<sup>17</sup> Casey, E. (2011): *Digital Evidence and Computer Crime*. Academic Press, San Diego., pp. 55–63

data through visual diagrams, thus the criminal structures become easier for investigators to understand. The literature highlights that classic intelligence tools – such as Open Source Intelligence (OSINT)<sup>18</sup> or SOCMINT<sup>19</sup> – can be applied especially effectively in cyberspace, and open up new possibilities during investigations.<sup>20</sup> Other studies emphasise that open-source data – for example, information originating from social media – can not only assist rapid information gathering in criminal procedures, but in certain cases also the substantiation of evidence.<sup>21</sup>

The tracing of cryptocurrency has become an especially important field in recent years. Although the decentralised system of cryptocurrencies makes investigations more difficult, blockchain analysis tools developed by Chainalysis and Elliptic make possible the tracing of transactions and the identification of money laundering processes.<sup>22</sup> While these tools are not able in every case to reveal the final beneficiary, they provide significant assistance in identifying perpetrators.

International cooperation is also of key importance. Europol's SIRIUS project, for example, makes it possible for member states to quickly request data from foreign providers, such as social media companies or e-mail service providers. This is particularly important, since evidence is often accessible only for a short time, and without rapid data preservation requests they may easily be destroyed.

---

<sup>18</sup> obtaining data available from public sources, processing it into information, and providing it to the customer in the form of knowledge

<sup>19</sup> information gathering method using social media websites

<sup>20</sup> Dobák, I. –Tóth, T.(2021): Old methods in cyber space? (CYBER-HUMINT, OSINT, SOCMINT, Social Engineering). *Europe Internal Affairs Review*, 2021/2., pp. 195–212

<sup>21</sup> Tóth, M.M.(2024): Some challenges of digitalization in criminal proceedings. *Internal Affairs Review*, 2024/2., pp. 185–210

<sup>22</sup> Chainalysis (2023): *Crypto Crime Report*, February 2023

Available at: [https://hkibfa.io/wp-content/uploads/2023/02/Crypto\\_Crime\\_Report\\_2023.pdf](https://hkibfa.io/wp-content/uploads/2023/02/Crypto_Crime_Report_2023.pdf)

Accessed: 30.05.2025

In Hungary, a significant development of the investigative toolkit was the introduction of the DANTE system (Digital Data Analysis and Investigation Support Unit). Its aim is the rapid identification and blocking of money transfers originating from crimes. The essence of the system is that banks send real-time notifications about suspicious transactions, and the police have four working days to take the necessary measures.<sup>23</sup>

Closely connected to this is the Central Fraud Filtering System (KVR), introduced by the Hungarian National Bank. The KVR performs risk assessment of transactions within the GIRO system with the help of artificial intelligence, and makes it possible for banks to filter out suspicious transfers.<sup>24</sup> One of the greatest advantages of the system is that it collects and analyses data at a central level, and thus is capable of identifying patterns of fraud much more effectively than the independent systems of individual banks.

Overall, it can be said that the continuous development of investigative and criminal tactical tools is indispensable for effective action against online frauds. The combined application of digital forensics, special analytical software, cryptocurrency analysis technologies, as well as international and domestic cooperation mechanisms may provide a solution against the increasingly sophisticated methods of criminals.

## **Prevention and Recommendations**

The fight against online fraud cannot be limited exclusively to repressive steps, that is, to investigation and the bringing of perpetrators to justice.

---

<sup>23</sup> DANTE 4 October 2024

Available at: <https://www.police.hu/hu/hirek-es-informaciok/legfrissebb-hireink/helyi-hirek/dante>

Accessed: 30.05.2025

<sup>24</sup> Central bank uses artificial intelligence to combat financial cybercrime 1 July 2025

Available at: <https://www.mnb.hu/sajtoszoba/sajtokozlomenyek/2025-evi-sajtokozlomenyek/mesterseges-intelligenciat-vet-be-a-jegybank-a-penzugyi-kiberccsalasok-visszaszoritasaert>

Accessed: 01.07.2025

Prevention is at least as important. International and domestic experiences show that raising awareness in society, education, and the involvement of the civil sphere play a prominent role in reducing the number of victims.<sup>25</sup> In Hungary, the CyberShield (KiberPajzs) programme plays a prominent role in the prevention of online fraud. The programme was established through the cooperation of the Hungarian National Bank, the police, the banking sector, and several civil organisations, and its aim is to continuously warn the population about newly spreading fraud methods. The campaign regularly issues informative materials in plain language, and seeks to reach all age groups of the population through both online and offline platforms.

Another key tool of prevention is education. In several European countries – for example in Estonia and Finland – the development of digital security awareness is already part of the school curriculum, during which children learn to recognise suspicious e-mails, links, and messages.<sup>26</sup> It would also be justified to introduce this more widely in Hungary, since the young generation, as digital natives, is particularly exposed to the dangers of cyberspace.

Media campaigns also play an important role in increasing social awareness. In the United Kingdom, for example, the campaign called “Take Five to Stop Fraud” encourages the population to stop, think, and check the source before every suspicious transaction. Such initiatives contribute to citizens having greater self-defence capabilities against fraud.

At the international level, strategic partnership between law enforcement agencies, financial institutions, and technology companies is of prominent importance. Effective action against online fraud is inconceivable without close cooperation between banks, social media platforms, and internet service providers with the authorities. Several projects of the Euro-

---

<sup>25</sup> Wall, D.S.(2015): *Cybercrime and Society*, Polity Press, Cambridge. pp. 101–105

<sup>26</sup> (2022): Organisation for Economic Co-operation and Development (OECD): *Digital Security and Resilience in Education Systems*, Paris. pp. 14–16



pean Union – for example the *No More Ransom* initiative – are built precisely on this partnership, and in recent years have helped thousands of victims recover their data after ransomware attacks.<sup>27</sup>

The development of the legislative environment is also indispensable. Despite the continuous changes and reactions of the normative background, it is often lagging behind compared to the technological dynamism of crime. Perpetrators adapt quickly to existing regulations; therefore, legislators must also provide continuously up-to-date responses. This not only means the creation of new criminal categories, but also the fine-tuning of existing legislation, for example in the areas of combating money laundering, data protection, or the regulation of cryptocurrencies. Particularly important is the flexibility of legislation, as well as that law enforcement authorities and courts also possess up-to-date expertise in the interpretation of the phenomena of digital crime.

In summary, it can be stated that prevention rests on several pillars: the broad dissemination of information to the population, the strengthening of education, media campaigns, international and domestic partnerships, as well as continuous legislative adaptation. Only the combined enforcement of these can ensure that society is able to act effectively against online fraud.

## Summary

In the past two decades, online fraud has become one of the most dynamically developing areas of crime. The simpler, mass-sent e-mails at the beginning have by now been replaced by sophisticated, targeted attacks, during which perpetrators apply not only technological but also psychological tools.

---

<sup>27</sup> Europol IOCTA (2023) Ibid.

The methods are continuously changing: besides phishing, smishing, and vishing, today the greatest challenges are posed by deepfake contents generated by artificial intelligence and frauds built on cryptocurrencies.<sup>28</sup>

In Hungary, the Matrix Project, the DANTE system, and the Central Fraud Filtering System are important steps towards effective action, yet due to the adaptability of criminals, defence must also continuously evolve. Co-operation between the police, financial institutions, and civil society is indispensable both in prevention and in investigation.

At the international level, the reports of Europol, Interpol, and the FBI clearly show that online frauds represent a global threat. Without joint actions and cross-border information exchange, law enforcement authorities would have almost no chance against organised criminal networks. It has also become clear that the legislative environment must be flexible and up-to-date, otherwise perpetrators quickly exploit legal loopholes.

From a criminological point of view, the psychology of victimisation points out that technological protection alone is not sufficient. Increasing the security awareness of society, the training of users, and awareness-raising campaigns are at least as important as technical and legal tools. Victims often make mistaken decisions under the effect of trust, fear, or urgency, which could be prevented through proper information and education.

One of the greatest challenges of the future is artificial intelligence. While AI can be an effective tool in the prevention of frauds and in the recognition of suspicious patterns, at the same time it has also become a strong weapon in the hands of perpetrators. Therefore, legislators, technology companies, and law enforcement authorities must jointly develop solutions that create a balance between protection and freedom.

Overall, it can be stated that the fight against online fraud is a never-ending process, which requires constant adaptation. The key to success lies

---

<sup>28</sup> Europol (2024): Internet Organised Crime Threat Assessment (IOCTA) – challenges of AI and cryptocurrency-based fraud.

in a complex approach: in technological development, international cooperation, continuous updating of the legal environment, and the strengthening of social awareness. Only the combined enforcement of these can ensure that digital development will mean an advantage, and not cause damage.



**NÉMETH, ÁGOTA**

## **The path of drugs today**

### **Introduction**

Drug trafficking and consumption pose serious social, economic, and health problems at both the global and local levels. Today, the path of drugs—from production to consumption—has changed significantly in response to technological advances, geopolitical changes, and the dynamics of supply and demand. In addition to traditional smuggling routes, the online space is playing an increasingly important role, particularly the dark web and the use of cryptocurrencies, which make it difficult for authorities to investigate.

International drug trafficking is growing steadily and becoming increasingly sophisticated. Organized crime groups are using new routes and methods to evade law enforcement. The spread of synthetic drugs poses a significant challenge, as they are produced from cheap and easily accessible raw materials. The use of the dark web and cryptocurrencies further complicates the tracking and prevention of drug trafficking.<sup>1</sup>

### **Organized drug crime**

Today, organized crime groups operate across borders in an attempt to gain power and influence and accumulate significant wealth. The abolition of border controls within the EU has made this even easier for criminals. This is why good cooperation between Member States is extremely important in order to dismantle criminal networks.

---

<sup>1</sup> Kiss, T. (2021): Miért népszerű a darknetes kábítószer-kereskedelem [Why is darknet drug trafficking so popular?]. Magyar drogfigyelő, 1. évf. 7. sz.

## International situation assessment

Drug crime is a collective term in criminology for offenses related to the illegal use of drugs.<sup>2</sup>

International crime experts divide the main areas of organized crime into seven major groups, each of which contains several categories of crime. One of these main groups is drug trafficking. Even in cases where this is not the main profile of the perpetrators, drugs may still appear at the consumer and distributor levels.<sup>3</sup>

Drug trafficking has become one of the most dangerous crimes today. The offense itself does not stop at making various drugs illegally available to an increasingly wide range of society, but the money generated from it is also used to finance other, more serious crimes, including acts of terrorism.<sup>4</sup>

Europol prepares the Serious and Organized Crime Threat Assessment (SOCTA). This document analyzes current and future threats to the European Union and sets criminal priorities. According to the 2021 SOCTA, drug trafficking accounts for 38% of known crime, making it the largest area of organized crime. The illegal drug market is estimated to be worth €31 billion, with cannabis leading the way with a 39% share.

Cannabis is mainly transported to Europe from North Africa, particularly Morocco, via the Mediterranean Sea, but significant quantities are also

---

<sup>2</sup> Lévai, M. (1991): A kábítószer-probléma és a bűnözés összefüggései – Kandidátusi disszertáció [The relationship between drug abuse and crime – Doctoral dissertation]. Miskolc. 199

Available at: <https://real-d.mtak.hu/49/1/Le1.pdf>

Accessed: 12.01.2024

<sup>3</sup> Bodor, L. (2020): A 3. évezred kihívásai a kábítószer bűnözés elleni küzdelemben [Opening of the Border Guard Memorial (Memorial Room)] In: Közbiztonság Ed: Ruzsonyi, P., Ludovika Egyetemi Kiadó, Budapest. p. 693

<sup>4</sup> Szendrei, F. (2010): A pénzmosás PhD értekezés Pécsi Tudományegyetem Állam- és Jogtudományi Kar Doktori Iskola, Pécs.

Available at: <https://docplayer.hu/708325-Szendrei-ferenc-a-penzmosas.html>

Accessed: 03.12.2020

produced within the EU, for example in Spain and the Netherlands. Consumption and seizures are at an all-time high. The cocaine market is not far behind (37%), with sources in South America and Africa.

The drug market is dominated by sophisticated criminal organizations that use corruption, technological innovation, and encrypted communication tools. The 2021 report of the United Nations Office on Drugs and Crime (UNODC) also analyzed the situation of global drug markets and examined the effects of Covid-19. According to the 2024 global report, 292 million people worldwide already use illegal drugs, with cannabis remaining the most widely used.

The cocaine trade has boomed in recent years, with South American production increasing by 20%. Shipments mainly arrive through the ports of Belgium, Spain, and the Netherlands, but increasingly also through smaller northern ports. Opium production, on the other hand, has fallen dramatically in Afghanistan due to the 2022 drug ban (-95%), with synthetic opioids partially replacing heroin.

Amphetamines, methamphetamines, and synthetic cathinones are mainly found in Central and Eastern Europe. Cathinones are shipped from India, but local production is also increasing. MDMA use is on the rise again after the pandemic, with distribution mainly from the Netherlands. The number of new psychoactive substances is constantly growing, with the precursors needed for their production mostly coming from China and India. Nitazines pose a new threat, especially in the Baltic states.

According to SOCTA 2025, drug trafficking remains one of the biggest threats, associated with violence, corruption, and infiltration of the legal economy. The market for cocaine and synthetic drugs is dynamic, with routes and methods changing rapidly. The EU is both a source, transit point, and destination market for drugs: while cannabis and synthetic drugs are produced locally, other drugs are imported and processed within the Union.

Cocaine production is increasing in Latin America, while European demand is growing in parallel. Smugglers are increasingly using smaller shipments and multiple entry points to reduce the risk of detection. The trade

in cannabis is growing steadily, and the production of synthetic drugs has made the EU a global hub. The number of deaths related to nitazene is rising, while demand and supply for heroin remain moderate due to the Afghan opium ban.

The EUDA's 2025 report highlights that the drug market is rapidly adapting to geopolitical changes, globalization, and technological advances. Criminals are using online platforms, social media, and surface websites for trafficking and precursor sales. The darknet is being pushed into the background as law enforcement has disrupted encrypted networks. Stimulants are a particular concern: there have been significant seizures in several countries, with large quantities of amphetamine and methamphetamine precursors seized in the Netherlands and Hungary in 2023, for example.

Drug production, trafficking, and consumption are truly global problems, present in almost every country, regardless of the various sanctions, laws, and countermeasures, as detailed in Table 1.



<b>A kábítószeres bűncselekmények/törvénysértések száma</b>									
<b>Country</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Austria			40299	43329	41044	42610	36235	32907	30250
Belgium	53504	52262	56332	56645	54749	51774	49416	47083	48727
Bulgaria	2979	3326	2795	2865	2382	2433	4886	4195	9340
Croatia	9166	8984	9430	11181	11179	11353	11551	9551	9999
Cyprus	1017	861	853	1053	1168	945	895	948	1082
Czechia							5564	5549	7438
Denmark	29612	26914		31598	29139	26717			26290
Estonia	3130	3620	3701	3998	4505	5809	5653	4982	4162
Finland	25206	28276	37124	32343	29176	27825	25085	23393	21754
France								208479	206614
Germany	354813	375379	364685	358951	344947	325102	302594	292227	282177
Greece						17995	17741	23748	22422
Hungary	7907	7504	7113	7081	8591	6959	6473	6617	6487
Ireland	17307	20074	23240	21448	18296	16767	16021	15047	15861
Italy	59273	61997	64214	75818	75023	73804	65679	61145	62845
Latvia	3895	4063	4826	6706	7024	5173	6488	7521	6244
Lithuania	3092	3013	2962	3078	3218	2622	2288	2524	2730
Luxembourg	1899	3006	3558	3533	2284	2525	2624		
Malta	126	282	283	447	626	739	775	472	537
Netherlands	16450	18695	17900	19107	18064	18687	21118	20503	21387
Norway	14954	17518	25798	28793	31633	33585	36184		48152
Poland	37572	36050	34056	34366	30873	32600	31008	30638	29060
Portugal	15578	8308	7728	11900	12901	16970	17073	16102	14105
Romania	9243	7819	6610	8101	8487	4952	4002	4224	2407
Slovakia	1312	1718	1494	1247		1692		969	1147
Slovenia	1382	5363	5287	5945			4235		4519
Spain	414551	364908	361886	416047	395233	389229	405348		415354
Sweden	113475	118105	124044	113071	106521	100447	90883	94035	95324
Türkiye	246237	215771	159268	148821	144819	118482	81222	73017	77664
United Kingdom						108027	106862	115377	128260

**Table 1:**  
**Number of drug-related crimes in Europe**  
**Source: EUDA**

## Domestic situation

Numerous analyses have been made of domestic drug-related crimes, the most significant of which are the annual reports of the National Drug Focal Point. Based on European standards, these reports summarize the domestic drug situation in eight areas and provide information to decision-makers, experts, the general public, and the EU Drug Agency (EUDA).<sup>5</sup> The Center's latest available report contains data for Hungary for the year 2022.<sup>6</sup>

According to the report, the domestic drug market has undergone a major restructuring since 2010. In addition to classic drugs, new psychoactive substances have appeared, which are constantly changing, with new substances always emerging. Domestic production is not typical, with only a few laboratories and small plantations becoming known.

In terms of transport routes, in recent years there has been a change in the direction of marijuana trafficking, with most of it arriving in Hungary from Italy and Slovenia. Röszke is the first Schengen external border crossing point on the Balkan smuggling route by road, but very little cannabis has been seized here. There has been no significant change in the procurement, smuggling, and distribution of synthetic drugs. Smaller distributors continue to procure drugs directly by establishing contacts in the Netherlands. Among them, we find both organized and ad hoc groups.

The transport of drugs by parcel delivery and courier services is also becoming increasingly widespread, especially from the Netherlands. Methamphetamine originating in the Czech Republic is only found in counties bordering Slovakia in Hungary. Heroin use has also declined in Hungary, with users increasingly switching to other drugs. There has been a clear increase in cocaine use in recent years. Cocaine arriving in Europe comes

---

<sup>5</sup>On July 2, 2024, the European *Monitoring* Centre for Drugs and Drug Addiction (EMCDDA) officially became the EU Drugs Agency and adopted the name EDUA

<sup>6</sup> EMCDDA report 2022.

Available at: [https://drogfokuszpont.hu/wp-content/uploads/EMCDDA\\_jelentes2022\\_HU\\_final.pdf](https://drogfokuszpont.hu/wp-content/uploads/EMCDDA_jelentes2022_HU_final.pdf)

Accessed: 31.10.2024).

to Hungary by road from Spain and the Netherlands. However, it is also smuggled by air using the so-called swallowing method. New psychoactive substances are ordered online, in closed groups on social media, and on the darknet, primarily from China and India. Drug smuggling by road takes place in passenger cars and trucks.

In the case of drugs arriving from the Balkan region, specifically Serbia, it seems clear that Hungary is not only a transit country but also a destination country. Dealers find places anywhere in the country to hand over smaller quantities of drugs, most commonly at gas stations and shopping center parking lots, while larger shipments are handed over in closed spaces, such as apartments. Hungary continues to be a transit country and a destination country for cannabis, amphetamines, designer drugs, and MDMA.

### **Action against drug-related crime**

One of the specific features of drug trafficking is that the division of "operating areas" between different criminal groups is usually not based on territory, but on the type of drug. In other words, individual criminal organizations usually sell different types of drugs peacefully side by side.<sup>7</sup>

One of the most sensitive aspects of international drug trafficking is the movement of goods. This may be one of the reasons why criminal groups involved in the smuggling of traditional drugs tend to be closed, with their members observing strict rules of conduct and concealing their criminal activities, in addition to external and internal conspiracy. As a result, effective police action against them – undercover operations or monitoring shipments – is almost impossible.<sup>8</sup> The geographical scope of cooperation

---

<sup>7</sup> Mátyás, Sz. (2020): A kábítószer–bűnözés elleni küzdelem, mint stratégiai kihívás a magyar bűnüldözésben. [The fight against drug crime as a strategic challenge in Hungarian law enforcement]. NKE, Budapest. p. 73

<sup>8</sup> Szendrei, F. (2019): A magyarországi szervezett bűnözés a 2000–es évektől napjainkig. [Organized crime in Hungary from the 2000s to the present day]. In: Antalóczy–Gáspár–Istvanovszki–Nyeste–Pátó–Szendrei–Szűcs: A nemzetközi és honos szervezett bűnözés

is also unlimited, with the consumer market spanning several national borders.<sup>9</sup>

Within the EU framework, Europol,<sup>10</sup> Eurojust<sup>11</sup> and Frontex<sup>12</sup> play a key role in the institutional system of joint action against drug crime, while Interpol and UNODC are important players at the global level. The task and common interest of each of these organizations is to take effective action against organized crime, which can only be achieved through joint efforts. For all organizational units, the watchwords are information sharing, coordination, and cooperation. Taking into account the principle of subsidiarity, Member States can first cooperate among themselves on the basis of bilateral or multilateral agreements, and if necessary, EU institutions can also become involved in solving the problem. If this goes beyond the scope of the EU, it is possible to call on Interpol.

Among the institutions, I would like to highlight the role of Europol and Interpol, as they are important players in the fight against international organized crime. Not only is it essential to support Member States' efforts to combat organized crime by using the wealth of information in their databases, but it is also important to highlight their strategic reports.

In Hungary, several organizational units are involved in the fight against drug crime, with the police playing a key role. The activities of the county police headquarters, the Airport Police Directorate, the law enforcement units of the National Bureau of Investigation, and the special organizational units involved in the fight against drug crime are particularly important. Prosecutors and courts also play a significant role, as their proceedings re-

---

története, XX. századi fejlődése és várható tendenciái [Organized crime in Hungary from the 2000s to the present day, its development in the 20th century, and expected trends]. pp. 251–280

<sup>9</sup> Berta, K. (2006): A szervezett bűnözés [Organized Crime]. In Gönczöl, K.: et al. (ed.): Kriminológia–Szakkriminológia, Budapest. Complex kiadó, pp. 424–426

<sup>10</sup> Europol: European Police Office

<sup>11</sup> Eurojust: European Union Agency for Criminal Justice Cooperation

<sup>12</sup> Frontex: European Border and Coast Guard Agency

sult in final decisions in criminal cases. The National Security Service primarily provides technical support for covert information gathering, the use of undercover devices, and criminal proceedings. Other agencies are responsible for facilitating domestic and international information exchange and coordination. Rapid information flow, close coordination, and harmonized cooperation are essential for the success of joint action.

## **Delta Program**

In his annual review speech on February 22, 2025, the Prime Minister said that in our country, *"there are alarming data on the increase in drug trafficking and consumption. There is a problem here. Cheap, toxic concoctions and synthetic drugs have flooded the country. We must curb this. At any cost. Literally at any cost."*<sup>13</sup> This announcement marked the beginning of a comprehensive campaign against drug-related crime in our country, in which all segments of society, from legislators to the general public, are participating.

The fight against drug crime gave rise to the so-called Delta Program on March 1, 2025. The program is specifically designed to prevent and detect drug-related crimes and thereby improve public safety in Hungary. The program is an abbreviation for an action plan, a complex task in which not only the police but also all social and civil organizations have a role to play.

On May 1, 2025, the aforementioned Office for Combating Drug Crime was expanded at the departmental level within the National Bureau of Investigation of the Standby Police, a unit tasked with coordinating the fight at the national level. Approximately 450 members of the police force are specifically tasked with investigating and detecting drug-related crimes.

---

<sup>13</sup> Viktor Orbán's annual review speech

Available at: <https://kormany.hu/beszedek-interjuk/miniszterelnok/orban-viktor-evertekelo-beszede-20250222>

Accessed: 27.06.2025

In the first phase of the action plan, the analysis and evaluation units of the police forces prepared situation assessments for each county, which identified the main areas of intervention where more effective action was needed. During the three months, 1,850 enhanced checks and 558 checks of entertainment venues were carried out, and 1,023 people were caught committing drug-related crimes. Based on public support, more than a thousand reports were received on the green number. In the first three months of the program (March 1–May 31), more than 3,000 investigations were ordered, of which 826 cases resulted in indictments. Criminal proceedings were initiated mainly in the most affected areas, in Budapest, Pest, Hadú-Bihar, Borsod-Abaúj-Zemplén, and Heves counties. More than half a ton of drugs, approximately 250 million forints in cash, and a total of nearly 100 million forints worth of movable property were seized from the criminals, as well as nearly 100 vehicles used for distribution. As a result of the initiative, not only local distributors but also large-scale criminal organizations with international connections and industrial-scale production were exposed, leading to a reduction in the amount of drugs in the country, a decline in consumption, and fewer new users.

The police also pay due attention to crime prevention. A risk analysis of municipalities has been completed, taking into account the program aimed at catching up with some 300 disadvantaged municipalities, where prevention plays a key role. The awareness-raising program carried out in public institutions is also important in this area, with the National Crime Prevention Council actively participating.<sup>14</sup>

The measures taken in the next cycle of the program will already be implemented within the amended legal framework, which provides for even stricter action against violations of the law.

---

<sup>14</sup> PoliceHungary: Press conference on the results of the DELTA Program launched in March 2025 to combat drug trafficking  
Available at: <https://www.youtube.com/watch?v=T5YysSQDAQQ&t=283s>  
Accessed: 27.06.2025

## Legislative amendments

The 15th amendment to the Fundamental Law prohibits the production, use, distribution, and promotion of drugs at the constitutional level, thereby ruling out the possibility of legalization and creating a clear legal basis for strict preventive and punitive measures.<sup>15</sup>

Act XIX of 2025, effective as of June 15, 2025, significantly tightened criminal law regulations on drugs. The definition of drugs has been expanded to include new psychoactive substances and certain mind-altering substances (such as inhalants). The abuse of mind-altering substances has been introduced as a new criminal offense.

Penalties have been increased, and in the case of drug trafficking, the institution of exclusion has been introduced (<sup>16</sup>), and it has become possible to confiscate real estate and vehicles used in the commission of the offense. The institution of diversion has been tightened: the offender has a disclosure obligation ( ), and the option can be used no more than twice.<sup>17</sup> Repeat drug dealers in particular cannot be released on parole.

A new aggravating circumstance has been established for multiple offenses if the offense is committed under the influence of drugs or for the purpose of obtaining drugs. In addition, new legal institutions have been introduced, such as supervision for the purpose of crime prevention (<sup>18</sup>), public security detention for persons under the influence of drugs (<sup>19</sup>), and the blocking of websites that enable online drug orders.<sup>20</sup> Under the amended law on organized crime, the notary public may temporarily close shops where proceedings are repeatedly initiated for drug-related crimes.<sup>21</sup>

---

<sup>15</sup> Article 22 of the Fundamental Law of Hungary

<sup>16</sup> Act C of 2012 on the Criminal Code (hereinafter: Btk.) Section 177/A

<sup>17</sup> Section 180(1) of the Criminal Code

<sup>18</sup> Act XC of 2017 on Criminal Procedure (hereinafter: CPP) Chapter XLVI/A, Sections 295/A–295/G

<sup>19</sup> Act XXXIV of 1994 on the Police (hereinafter: Rtv.) Section 37(1)

<sup>20</sup> Rtv. Section 3

<sup>21</sup> Act LXXV of 1999 on the rules for combating organized crime and related phenomena and on related amendments to other acts Section 5(1)(b)

The aim of the changes is to curb drug trafficking and consumption, to establish a more uniform and stricter criminal law framework, and to strengthen public safety and the protection of minors.

### **Summary, findings**

According to the latest reports from SOCTA and EUDA, there is still a huge amount of drugs in Europe today, including Hungary. Our country is trying to combat this with measures implemented under the Delta Program in line with the zero tolerance policy announced this year. The results and successful operations described above illustrate the extent to which they have prevented new drugs from entering our country and reaching the streets.

The aim of the stricter laws and amendments is to enable even broader action against drug distributors and dealers, who will face stricter penalties if caught.

The next three months of the Delta Program will take place after the legislative amendments described above come into force. The summer months are a time for various events and outdoor activities, which are given special attention by the police for other reasons as well. Drugs may also be present at these events, and the online trade and sale of drugs takes place regardless of the season.

The authorities still have a lot of hard work ahead of them, supported by social cooperation and the preventive work of various agencies.

Several experts involved in the fight against drug crime are convinced that increased police action and measures are having an impact, especially in consumer countries. The problem perceived by the population is decreasing, but this effect is temporary and often accompanied by geographical shifts. In terms of legal consequences, according to criminological literature, it is not the severity of the punishment that counts, but the likelihood of legal consequences. Severity is associated with adaptation rather than



deterrence.<sup>22</sup> According to criminological literature, targeted, complex, and community-based interventions that are implemented in a coordinated manner in cooperation with actors outside law enforcement agencies have proven to be more effective.<sup>23</sup>

In Hungary, strict legislation and other conditions are in place to ensure effective results in the fight against drug-related crime.

---

<sup>22</sup> Marer, L. – Dixon, D. (2001): The Cost of Crackdowns: Policing Cabramatta's Heroin Market

Available at: <https://www.austlii.edu.au/au/journals/CICrimJust/2001/15.pdf>

Accessed: 28.05.2025

<sup>23</sup> Mazerolla, L. – Soole, D. – Rombouts, S. (2007): Drug Law Enforcement: A Review of the Evaluation Literature

Available at: <https://journals.sagepub.com/doi/10.1177/1098611106287776>

Accessed: 28.05.2025



**PERGER, ÁDÁM**

## **The EU Legal Aspects of Cybercrime**

### **Introduction**

The rapid development of digital technology over the past two decades has fundamentally changed the way society functions. However, alongside the advantages of the information society, new and previously unknown risks have also emerged. Crimes committed in cyberspace – collectively referred to as cybercrime – pose a particular challenge to the criminal justice systems of Member States, as traditional concepts of crime and principles of jurisdiction are difficult to apply in a cross-border, decentralised and anonymous environment. Over the past two decades, the European Union has taken several steps to harmonise the legal systems of its Member States and strengthen cooperation between law enforcement authorities. However, combating cybercrime is not merely a legal technicality: it directly affects the enforcement of fundamental rights, the functioning of the digital economy and citizens' sense of security. The aim of this study is to present the development of EU legislation on cybercrime, explore the most important dogmatic and practical dilemmas, and examine the challenges arising from the latest EU legal sources, in particular Directive 2017/1934 (NIS 2), Directive 2024/1385 and the draft CSA Regulation on combating the sexual exploitation of children online.

### **Conceptual uncertainties and jurisdictional dilemmas**

The definition of cybercrime remains a controversial issue in both legal literature and legislation. The diversity of terminology – ‘cybercrime’, ‘computer crime’, ‘electronic crime’, ‘digital crime’ – indicates the uncer-

tainty surrounding the concept, which also hinders the uniformity of regulation. Although the Council of Europe's 2001 Budapest Convention attempted to establish uniform terminology, EU and Member State regulations have still not developed a uniform use of terms<sup>1</sup>. The literature often distinguishes between cybercrime in the "narrow" and "broad" sense. The former refers to direct attacks on information systems, such as hacking, unauthorised access and denial-of-service attacks, while the latter category includes all acts carried out via a computer or the internet, including online fraud, child pornography, harassment and hate speech<sup>2</sup>.

Jurisdictional dilemmas pose an even more complex challenge. The essence of cybercrime is that the elements of the act may be linked to several states: the perpetrator is located in one country, the server operates in another, and the victim lives in a third state. Traditional principles of jurisdiction – territoriality, nationality – are of limited application in this environment<sup>3</sup>.

The European Union first attempted to address this problem in Framework Decision 2005/222/JHA. Article 10 of the Framework Decision established several grounds for jurisdiction and introduced rules of priority for dealing with parallel jurisdictions<sup>4</sup>. Directive 2013/40/EU, which replaced the Framework Decision, further expanded the possibilities for jurisdiction: in addition to nationality and territoriality, it allowed jurisdiction to be established, for example, where the offence was committed against a legal person registered in a Member State or where the perpetrator was habitually resident in that Member State<sup>5</sup>.

---

<sup>1</sup> Council of Europe (2001): Convention on Cybercrime, Budapest. 23 November ETS No. 185

<sup>2</sup> Clough, J (2015): Principles of Cybercrime. Cambridge University Press, pp. 18–24

<sup>3</sup> Koops, B.-J. (ed.) (2006): Cybercrime and Jurisdiction. T.M.C. Asser Press, The Hague

<sup>4</sup> Council Framework Decision 2005/222/JHA on attacks against information systems, OJ L 69, 16.3.2005, pp. 67–71

<sup>5</sup> Directive 2013/40/EU of the European Parliament and of the Council on attacks against information systems, OJ L 218, 14.8.2013, pp. 8–14

However, the practical enforcement of jurisdiction remains difficult. Access to electronic evidence often requires lengthy international legal assistance procedures, which cannot keep pace with the rapid changes in digital data. To remedy this, the so-called "e-evidence" package has been created, which would give law enforcement authorities direct access to data stored by service providers<sup>6</sup>. Although the draft is still in the process of being adopted, it clearly shows that reconciling effective criminal law enforcement and state sovereignty in cyberspace remains an unresolved problem.

### **The development of EU regulation**

Among the historical precedents for EU regulation against cybercrime, the Budapest Convention, developed by the Council of Europe in 2001, should be highlighted first. Although the European Union is not a contracting party, the document has had a significant influence on Community and Member State legislation<sup>7</sup>. The convention was ground-breaking in defining unauthorised access to computer data, violation of the integrity of data and systems, and computer fraud as criminal offences. In addition, it contained detailed procedural provisions that enabled the rapid seizure and preservation of electronic evidence.

The European Union's first autonomous regulation was Framework Decision 2005/222/JHA, which required Member States to take criminal law measures against attacks against information systems<sup>8</sup>. The Framework Decision required Member States to criminalise unauthorised access, data manipulation and denial-of-service attacks. Although it represented a step

---

<sup>6</sup> European Commission: Proposal for a Regulation on European Production and Preservation Orders for electronic evidence in criminal matters, COM(2018) 225 final

<sup>7</sup> Council of Europe (2001): Convention on Cybercrime, Budapest, 23 November, ETS No. 185

<sup>8</sup> Council Framework Decision 2005/222/JHA on attacks against information systems, OJ L 69, 16.3.2005, 67–71

towards harmonisation, it had several shortcomings: it did not regulate aggravating circumstances in a uniform manner and paid little attention to organised crime. A significant innovation was the introduction of rules on jurisdiction, which established a sequence of priority in cases of parallel jurisdiction of several states<sup>9</sup>.

The Framework Decision was replaced by Directive 2013/40/EU, which contained more modern and detailed rules<sup>10</sup>. The Directive precisely defined the concepts of 'information system' and 'computer data' and extended the scope of punishable conduct. A new feature was the specification of aggravating circumstances, in particular where the offence was committed as part of a criminal organisation or involved critical infrastructure. It also clarified the rules on jurisdiction, allowing Member States to take action even if the offence was committed against a legal person registered in their territory or if the perpetrator was habitually resident there<sup>11</sup>.

In addition to criminal law provisions, the European Union has also sought to establish a comprehensive institutional framework for cybersecurity. Directive 2016/1148 (NIS 1) required Member States to introduce mandatory security requirements and incident reporting obligations for operators of network and information systems<sup>12</sup>. However, as implementation was uneven and the regulation was only applicable to a narrow range of operators, the system was modernised. This resulted in Directive 2022/2555 (NIS 2), which significantly extended its scope, set uniformly high security requirements and established the EU-CyCLONe network for a coordinated response to serious cyber incidents<sup>13</sup>. Another innovation

---

<sup>9</sup> Ibid., Article 10

<sup>10</sup> Directive 2013/40/EU of the European Parliament and of the Council on attacks against information systems, OJ L 218, 14.8.2013, pp. 8–14

<sup>11</sup> Ibid., Article 12

<sup>12</sup> Directive (EU) 2016/1148 of the European Parliament and of the Council on security of network and information systems, OJ L 194, 19.7.2016, pp. 1–30

<sup>13</sup> Directive (EU) 2022/2555 of the European Parliament and of the Council on security of network and information systems, OJ L 333, 27.12.2022, pp. 80–152

of NIS 2 is the European cybersecurity certification system, which promotes the development of uniform market standards.

In recent years, EU action against cybercrime has also extended to social phenomena. Directive 2024/1385, for example, specifically mentions online harassment, which is becoming an increasing problem in the digital environment, in the context of combating violence against women and domestic violence<sup>14</sup>. This marks a shift in EU regulation from narrowly defined IT attacks to addressing cyber threats with social implications.

With regard to the online sexual exploitation of children, the European Commission has proposed a draft CSA Regulation, which could bring about a paradigm shift in regulation. The aim of the draft is to make it mandatory for service providers to identify and remove such content<sup>15</sup>. However, this raises a conflict of fundamental rights, as the right to protect children directly conflicts with the right to privacy and the inviolability of encrypted communications. The debate clearly shows that the regulation of cybercrime is no longer just a law enforcement issue, but also a matter of fundamental rights and social policy.

## **Empirical data and overview**

Empirical data is essential for assessing EU cybercrime regulation and law enforcement practices. According to a 2021 Eurostat survey, nearly one-third of small and medium-sized enterprises reported having experienced a cyber incident, and a further 32 per cent feared becoming victims of financial fraud or phishing<sup>16</sup>. This clearly shows that digital threats affect not only large companies and public institutions, but also SMEs, which form the backbone of the economy. The problem is exacerbated by the fact that

---

<sup>14</sup> Directive (EU) 2024/1385 of the European Parliament and of the Council on combating violence against women and domestic violence, OJ L 202, 24.5.2024, pp. 1–34

<sup>15</sup> European Commission: Proposal for a Regulation laying down rules to prevent and combat child sexual abuse, COM(2022) 209 final

<sup>16</sup> Eurostat (2021): ICT Security in Enterprises

smaller companies have limited resources, often use outdated IT infrastructure, and their employees are not sufficiently security-conscious. A single successful cyberattack can be enough to cripple the operations of a medium-sized enterprise, posing a systemic risk to the digital economy as a whole.

According to the European Union Agency for Cybersecurity (ENISA) 2024 threat report, the most common forms of attack are denial-of-service (DDoS) attacks, followed by ransomware attacks<sup>17</sup>. DDoS attacks are particularly dangerous because they paralyse the basic functioning of digital services, while ransomware attacks seriously affect not only economic operators but also public service providers, healthcare institutions and education systems. ENISA emphasises that threats have become more professional, with organised criminal groups and even state-sponsored actors behind them in many cases. According to the report, cybercrime is now a strategic security challenge for the EU, increasingly targeting critical infrastructure.

Online harassment has become one of the most serious social problems in recent years. According to Eurostat data, nearly half of young people aged 16 to 29 have encountered hateful or hostile messages on the internet<sup>18</sup>. In some Member States, such as Estonia, Denmark, Finland and France, this proportion exceeded two-thirds, suggesting that the problem is particularly acute in advanced digital societies. Online harassment can cause psychological damage, self-esteem issues and social isolation, and in extreme cases can lead to suicide. This phenomenon does not only affect young people: female politicians, journalists and human rights activists are also often the targets of organised online attacks, which can undermine the entire democratic discourse.

---

<sup>17</sup> ENISA (2024): Threat Landscape Report 2024. European Union Agency for Cybersecurity, Amsterdam

<sup>18</sup> Eurostat (2023): Online harassment among young people in the EU



According to Europol's 2023 report, the sexual exploitation of children affects the European Union to a significant extent on a global level<sup>19</sup>. Based on the report's data, more than 60 per cent of such content is located within the EU, which clearly indicates shortcomings in regulation and law enforcement. More than half of young people regularly use online forums and chat rooms, and one in eight of them are also active on the darknet. This trend makes them extremely vulnerable to sexual abuse. However, the sexual exploitation of children is not limited to the online space: in many cases, relationships formed on the internet lead to physical abuse, and recordings posted on the web cause lifelong trauma for victims due to the logic that "the internet never forgets".

Empirical data clearly shows that cybercrime poses a threat to the European Union in several dimensions. In addition to economic damage, it also seriously threatens social cohesion and the enforcement of human rights. This justifies EU legislation not only thinking in normative terms, but also responding continuously to experience and real statistical data.

### **Dogmatic issues and conflicts of fundamental rights**

One of the biggest challenges in combating cybercrime is dealing with conflicts between fundamental rights. The development of digital technologies has created situations in which traditional fundamental rights standards cannot be applied unequivocally. This is particularly true in cases where the right to security and the protection of privacy directly conflicts with each other. The example of combating the sexual exploitation of children illustrates this dilemma well. The European Commission's draft regulation (CSA Regulation Proposal) submitted in 2022 would require service providers to identify and remove content depicting the sexual abuse of children<sup>20</sup>. However, this would also mean that encrypted communications

---

<sup>19</sup> Europol (2023): Internet Organised Crime Threat Assessment (IOCTA)

<sup>20</sup> European Commission: Proposal for a Regulation laying down rules to prevent and combat child sexual abuse, COM(2022) 209 final

could be filtered, which would fundamentally affect users' rights to privacy and confidentiality of communication. The debate is not merely technical, but also theoretical: to what extent is it permissible to restrict private communication in order to protect children?

In order to increase the effectiveness of law enforcement, in 2018 the European Union proposed the so-called e-evidence package, which would allow Member State authorities to directly request electronic evidence from service providers<sup>21</sup>. This proposal offers a solution to efficiency problems while raising serious concerns from the perspective of the rule of law. If law enforcement authorities were able to access user data without prior judicial authorization, this would seriously violate the protection of privacy.

The criminalisation of online harassment also poses dogmatic difficulties. Online harassment has become so widespread in recent years that legislators have been forced to respond. Directive 2024/1385 explicitly mentions this phenomenon, the regulation of which, however, requires a delicate balance<sup>22</sup>. The protection of human dignity and personal safety requires legal intervention, but the principle of freedom of expression may impose limits on excessive criminalisation. The key question is to what extent online expression – even if it is offensive – can be considered an expression of opinion, and at what point it constitutes conduct that warrants criminal prosecution. The removal of hate speech and terrorism-related online content creates further conflicts with fundamental rights. The Digital Services Act (DSA) obliges service providers to respond quickly to reports of illegal content, but in practice this carries the risk of excessive content restriction<sup>23</sup>. Service providers often remove questionable content as a pre-

---

<sup>21</sup> European Commission: Proposal for a Regulation on European Production and Preservation Orders for electronic evidence in criminal matters, COM(2018) 225 final

<sup>22</sup> Directive (EU) 2024/1385 of the European Parliament and of the Council on combating violence against women and domestic violence, OJ L 202, 24.5.2024, pp. 1–34

<sup>23</sup> Regulation (EU) 2022/2065 of the European Parliament and of the Council on digital services (Digital Services Act), OJ L 277, 27.10.2022, pp. 1–102

cautionary measure to avoid sanctions. However, this can lead to unjustified restrictions on freedom of expression, which can have serious consequences for the functioning of a democratic society.

Another source of dogmatic dilemmas is the relationship between criminal law and technological development. The rigid structures of criminal law make it difficult to keep up with new types of criminal behaviour emerging in the digital space. Legislation is a time-consuming process, and it can take months or years before a new type of crime is regulated. However, technological innovations often create entirely new methods of attack within weeks or months. Legislators are constantly lagging behind, while the requirement for legal certainty continues to demand clarity of norms. This duality – the tension between flexibility and legal certainty – is one of the fundamental problems of regulating cybercrime.

Overall, it can be said that EU action against cybercrime requires a constant search for balance from a fundamental rights perspective. Reconciling the protection of children, respect for privacy, freedom of expression and the right to security will remain a key issue in the future. It is the task of the European Union to create a regulatory framework that both guarantees the fundamental rights of citizens and provides effective tools for combating cybercrime.

## **Conclusions and de lege ferenda proposals**

Cybercrime poses a challenge to the European Union in terms of law enforcement, the economy, society and fundamental rights. Regulatory developments over the past two decades show that the EU has been able to respond to new threats in cyberspace, but legislation and law enforcement continue to face serious dilemmas. The development curve from the Budapest Convention through Directive 2013/40/EU to the NIS 2 Directive clearly shows the scope of regulation, from classic computer attacks to socially relevant phenomena such as online harassment and child sexual exploitation. 's experience shows that there are two fundamental directions

emerging in EU action. On the one hand, there is a need for ever greater harmonisation of Member States' criminal law, as parallel jurisdictions and differing Member State regulations hinder effective law enforcement. On the other hand, regulations aimed at ensuring cybersecurity – in particular NIS 2 – demonstrate that preventive mechanisms based on institutional cooperation are at least as important as repressive criminal law responses<sup>24</sup>.

In the future, it will be essential for EU regulations to establish uniform reporting and incident management systems. Without rapid and effective reporting of cyber incidents, law enforcement and risk management cannot be effective. Similarly, it is necessary to strengthen coherent cooperation between Member State institutions, in particular by further expanding the coordinating role of Europol and Eurojust<sup>25</sup>.

Addressing conflicts between fundamental rights will also be crucial in the coming years. The protection of children, respect for privacy, confidentiality of communications and freedom of expression are fundamental rights that may conflict with each other and between which legislation must strike a delicate balance. The draft CSA Regulation clearly showed that the conflict between child protection and the protection of privacy is not merely theoretical, but very practical in nature<sup>26</sup>. Among the *de lege ferenda* proposals, the role of restorative justice should be highlighted. Victims of cybercrime often suffer psychological trauma that cannot be remedied by criminal sanctions alone. Harm management mechanisms and restorative procedures can contribute to the reintegration of victims, while also offering offenders an alternative route to reintegration into society. Ultimately, the success of the fight against cybercrime depends on the European Union's ability to simultaneously protect fundamental rights and provide law enforcement authorities with effective tools. The future of regulation will be determined by the harmonisation of normative, institutional and

---

<sup>24</sup> Directive (EU) 2022/2555 of the European Parliament and of the Council on the security of network and information systems, OJ L 333, 27.12.2022, p. 65

<sup>25</sup> Europol (2023): Internet Organised Crime Threat Assessment (IOCTA)

<sup>26</sup> European Commission: Proposal for a Regulation laying down rules to prevent and combat child sexual abuse, COM(2022) 209 final

social considerations. Cyberspace security can only be guaranteed within a legal framework that is capable of meeting the requirements of the rule of law, the protection of fundamental rights and technological realities.

## **Summary**

The article examines the European Union's legal framework and policy responses to cybercrime, highlighting both the historical development and the present challenges of regulation. The study first addresses the conceptual uncertainties surrounding the definition of cybercrime and the jurisdictional dilemmas arising from the inherently transnational nature of digital offences. It then provides an overview of the evolution of EU legislation, from the Council of Europe's 2001 Budapest Convention, through the 2005/222/JHA Framework Decision and the 2013/40/EU Directive, to the more recent regulatory measures such as the NIS 2 Directive, the 2024 Directive on combating violence against women, and the draft CSA Regulation. Drawing on empirical data from Eurostat, ENISA and Europol, the paper illustrates the concrete social, economic and security risks posed by cybercrime, with particular emphasis on the vulnerability of SMEs, the rise of online harassment, and the alarming prevalence of child sexual exploitation material within the Union. The analysis further explores the fundamental rights dilemmas created by EU responses, such as the tension between child protection and the right to privacy, or between freedom of expression and the obligation of online platforms to remove harmful content. The study concludes that the European Union faces a constant balancing act between ensuring effective criminal justice responses and safeguarding fundamental rights. Future reforms should strengthen coherence among Member States, improve reporting and incident management mechanisms, and integrate restorative justice elements to address the victimological dimensions of cybercrime. Only a comprehensive approach, combining normative, institutional and social considerations, can provide sustainable solutions to the challenges of cybercrime in the digital era.



**PETRÉTEI, DÁVID**

***A review of "Fenyvesi: The Past, Present  
and Future of Criminalistics"***

This paper is a short review of Professor Csaba Fenyvesi's new book, "The Past, Present, and Future of Criminalistics".<sup>1</sup>

"Criminalistics", in the Hungarian scientific approach, is the general methodology of fact-finding for the enforcement and adjudication of laws in civil, criminal, and administrative matters. It may also be described as "the science of investigation", but only if "investigation" is understood to encompass more than criminal procedures and the activities of police investigators. In this broader sense, criminalistics is relevant across the entire spectrum of law enforcement and justice, synthesizing knowledge ranging from investigative data collection, surveillance, and crime scene examination and analysis to data mining, interrogation and confrontation, crime reconstruction, and the work of forensic experts.<sup>2</sup>

Professor Fenyvesi's monograph, "The Past, Present, and Future of Criminalistics", undertakes a thorough review of the theoretical foundations of this diverse body of knowledge.

The book is a revised, updated, and expanded version of the author's Hungarian-language work published in 2014. At that time, the work was a concentrated theoretical monograph that filled the gaps in the general issues of criminalistics, and as such, it remains of enduring significance. The English-language monograph, published by the Romanian publishing house

---

<sup>1</sup> Fenyvesi, Cs. (2025): The Past, Present and Future of Criminalistics. Forum Iuris, Cluj-Napoca (Romania), ISBN 978-606-9061-74-9

<sup>2</sup> Petretei, D.: Criminalistics, police science, forensic sciences – reflections on the anniversary of the Hungarian Association of Police Science. *Belugyi Szemle*, 72(5), pp. 893-908

"Forum Iuris", is now available to the international professional community.

The introductory chapters, as is customary in comprehensive and general monographs, clarify the conceptual foundations: the internal system, division, place, and role of criminalistics among the other criminal sciences. The author does this with the greatest possible thoroughness and the broadest immersion: in addition to the results of the Soviet (rooted) science and the continental (Western-European) approach, overseas concepts from the United Kingdom and the United States are also included, and their content is analyzed, compared, and synthesized.

After a comprehensive overview of the antecedents and modern history of forensics, the author identifies five milestones of modern forensics, which are in chronological order: fingerprints, blood, neutron activation analysis (NAA), DNA, and digital data. These milestones also shed light on the developmental trends of modern forensics in the past century. It is no exaggeration to state that this pictorial theory of milestones will be unavoidable in future publications on the history of criminalistics or forensic science. The few criticisms I can formulate include the exclusive elevation of neutron activation analysis, since it is only one segment of modern analytical chemistry. NAA was developed in 1936; however, the first transmission electron microscope was built in 1933, chromatography dates back to 1903, and Raman spectroscopy to 1928. Thus, NAA is not even the earliest chemical analytical method. The author's apparent preference is nevertheless forgivable, as NAA was developed by the radiochemist George Charles de Hevesy, who was born in Hungary as Hevesy Károly György, and who was awarded the Nobel Prize in Chemistry in 1943.

The second milestone is the blood, in a broader sense, so it incorporates the toxicology, and in this chapter, many other biological evidence and trace evidence are also covered. However, I feel the omission of bloodstain pattern analysis unfortunate. The field of classical serology became outdated by DNA during the first decade of the new millennium, while the



bloodstain pattern analysis, as the analysis of the morphological characteristics of the bloodstains, in order to reconstruct the events and motions, is still a relevant field of crime scene analysis. Also, a bit problematic is the term “material remains”, because the English literature usually does not use it. “Material remains” is a collective term for the biological, other organic, and inorganic trace evidence, distinguishing the other collective term of the book, the “clues”. In the Hungarian scientific approach, every piece of physical evidence can be classified as an *exhibit*—an object or item relevant to the criminal case; as a “clue” or “trace”—a two- or three-dimensional alteration that typically conveys information through its morphological features (such as a fingerprint, bite mark, or toolmark); or as “material remains”—any remnant that physically or chemically represents its origin (e.g., DNA, paint, glass, or human scent).

Regarding the fourth milestone, the DNA, the author introduces the concept of second-generation evidence, partly following Erin Murphy<sup>3</sup>, but in some parts significantly expanded and supplemented. It is a remarkable idea that second-generation evidence is protected by copyright, unlike fingerprint identification. However, I find the approach that second-generation evidence is more difficult for criminals to get rid of to be overly optimistic. In my view, the ability to eliminate evidence is only a matter of time, as evidenced by the disposable phones of serial criminals who commit fraud, or the voice imitation achieved with the help of generative artificial intelligence. Nevertheless, the model proposing that certain types of evidence bridge the first and second generations. According to the author, such types include voice identification, neutron activation analysis, and AFIS-supported fingerprint identification. Again, I would only add the following comment: the author's findings are true for many other chemical analytical methods besides NAA.

---

<sup>3</sup> Murphy, E. (2008): Inferences, Arguments, and Second Generation Forensic Evidence. *Hastings Law Journal* 2008/5., pp. 1047-1076  
Available at: [https://repository.uclawsf.edu/hastings\\_law\\_journal/vol59/iss5/4](https://repository.uclawsf.edu/hastings_law_journal/vol59/iss5/4)  
Accessed: 15.08.2025

Chapter Four presents the pyramid model of criminalistics, which can be called a novel and clear approach. The clear, logical explanation of the three levels (fundamental questions – mediators – focus) and the “building blocks” that make up each level, illustrated with practical examples and abundant literature, elevates this chapter to one of the most important parts of the volume. The pictorial, easy-to-understand pyramid model will certainly not be avoided in any comprehensive criminalistics-related work in the future. The seven fundamental questions are a well-known phenomenon of criminalistics, but in this book, their order is also relevant. First is “what?”, because without answering “what had happened?” or “what is the relevant event?”, there is no reason to ask the other questions. In my opinion, unlike the author’s, the second should be the “who?”. If there is no answer to “who?”, the case will remain a cold case, and no one can be charged.

In describing the mediators (“clues”, “material remains”, testimonies, documents, and digital data), emphasis is placed on analysing their development, strengths, weaknesses, and tendencies. The metaphor of calling material remains “partisans” is vivid, as these remnants are likewise almost invisible, difficult to eradicate from surfaces, and capable of appearing in the most unexpected places. Moreover, when used wisely and tactically, they can often “defeat” even a prepared perpetrator. This does not change the fact that, in the twenty-first century, there are no longer “good” partisans, only “evil” terrorists—though further reflection on this lies outside the scope of a forensic work. One subsection also addresses Bayesian analysis, presented in language that is easy to understand even for lawyers and investigators who are less versed in the hard sciences or mathematics.

The subsection on confessions, one of the mediators, deals with the topic of forensic nursing. This is significant because Europe, the eastern part of the EU in particular, is lagging behind the UK and especially the US in this field. Not to mention the rest of the world. However, the forensic nurse is extremely important in terms of protecting victims, ensuring their dignity, and providing them with psychological and emotional support. But it is

equally important that the forensic nurse can obtain relevant information first-hand about the crime and the perpetrator by talking to the victim. And of course, it is equally important that the forensic nurse can immediately begin the professional seizure of physical evidence, such as clothing or medical swabs.

It is perhaps unusual that the principles of criminalistics are only explained after this, in the fifth chapter. These principles are also completely novel in their construction and their abstraction from the entire field of criminal justice and the forensic sciences. And since they rely heavily on the concepts and models developed in the previous chapters in a logical sequence, their discussion in a later chapter is certainly justified. The first principle is the seven questions of criminalistics, shown above, the basis of the pyramid model. The second principle, relying on the results of philosophy and psychology, states that the past can be known, can be cognized. The author unassailably points out that the essence, the theoretical basis, and the entire methodology of the entire forensic science rest on this proposition. The past can be cognized, and from a forensic point of view, it can be interpreted as answers to the seven basic questions.

The third principle states that every crime leaves a trace, including both physical evidence and “psychological evidence” (memories). E. Locard’s century-old theorem has not only retained its validity but continues to serve as one of the theoretical foundations of criminalistics. The fourth principle emphasises the importance of information and data collection, illustrating this with detailed practical examples—from the significance of databases to the role of covert information gathering. The fifth principle is the “first strike”: the critical importance of a timely response to crime, as the passage of time generally works against investigators.

Last but not least, the sixth principle provides the philosophical foundation of identification: nature never repeats itself. Here I must again offer a critical remark. The original Latin saying “*natura non facit saltus*”—“nature does not leap”—means that there are no sudden jumps in nature; pro-

cesses occur step by step. This is a crucial principle, as reconstructive reasoning is based on it: because of this principle, one can infer the events that produced certain remnants and alterations. The exclusion of repetition is merely one consequence of this broader principle.

The following chapter examines forensic errors: clustering, revealing the causes, evaluating possible consequences, preventing errors, and reducing their impact. As a practical illustration of forensic errors, numerous notorious foreign and some Hungarian cases are presented, the latter are not as well known internationally. The Author presents in more detail the most typical and serious errors and the possibilities of preventing them. Thus, the presentation procedure for the most serious, most difficult to remedy, and unfortunately, very often occurring erroneous line-up recognition is explained. In addition, the mistakes of witnesses, the flawed expert opinions or human scent identification, the false confession, and the errors of confrontation are explained, as well as the persevering insistence on the wrong investigative hypothesis.

The author argues convincingly that a mistaken "first strike" is a serious error in itself and is difficult to remedy later. This provides yet another justification—already outlined in the previous chapter—for elevating the importance of the first strike to a fundamental principle.

The seventh chapter presents a comprehensive overview of current global trends in forensic science. The subchapters examine the individual processes in a logical order, outlining their tendencies and illustrating them with numerous practical examples. These trends include the primacy of forensic sciences over interrogations; "expertization", that is, the increasingly extensive and complex use of various forensic experts; and "specialization", marking the end of the era of polymaths. In addition, the strengthening of forensic science has led to miniaturization and higher levels of probability. This is eloquently summarized as sharpening the pictures, referring to a deeper and more accurate understanding of past events.

It is also worth noting the spread of computerization, the advancement of cyber intelligence, and the growing importance of covert tools and methods. Further trends include an emphasis on teamwork, internationalization, and privatization—the emergence of the private sector in forensic activities. Another development is the proliferation of emergencies, that is, situations that endanger the work of forensic specialists, such as terrorism, pressure from criminal organisations, and crime scenes that pose risks to life or health. The author clearly demonstrates how these tendencies follow from or reinforce one another.

The final chapter covers the future possibilities and challenges of criminalistics. Research aimed at instrumental identification of human scent can be considered as such. Promising tools for lying or honesty testing are currently also under research or development: functional MRI, instruments measuring stress indicators of speech, thermal imaging of the face, or eye temperature measurement. Handwriting examination is also receiving an increasingly serious computer background, which may lead to the creation of validity based on mathematical foundations. The handwriting may be used as a lie indicator as well. The Author supports with numerous pieces of evidence that a laboratory installed at a crime scene and DNA identification during a crime scene investigation are the reality of the near future. Digital techniques will permeate criminalistics more and more deeply. The importance of secret information collection will remain significant, and in our digital age, this requires the deployment of spyware and ethical hackers. Developing voice analysis and identification also has a serious future.

In the brief conclusion of the monograph, the Author almost poetically states that, despite technical progress, the irreplaceable pillar of criminalistics is the practitioner, the effective investigator, the "great warrior." I find this idea extremely convincing, worthy of further consideration, and a guiding principle for future works. Especially nowadays, when the one-sided

presentation of forensic experts' bias is also a global trend,<sup>4</sup> and many scholars are calling for the "solution" of downplaying the human factor.

I intentionally do not praise the physical appearance of the monograph, as the photograph on the cover was taken by me.

In summary, it can be stated that the book is of gap-filling significance primarily due to its summary and systematization, since, as a theoretical monograph presenting this discipline most comprehensively, it builds a new paradigm in several elements, and is therefore indispensable for those dealing with the theory of the field. However, it can also have an inspiring effect on all those works that conduct in-depth, detailed examinations of certain areas of criminalistics, because it places the utilization of their results in a systematically structured, broad, and well-founded system. However, this work deserves special attention not only from the point of view of scientific research and analysis, but can also be extremely useful for those who wish to become more familiar with the modern theory of criminalistics, and theoretical background of forensic science, and the current state of these disciplines. The book's plain language, clear and understandable wording, and rational structure make it widely applicable in education, and it also conveys up-to-date and thorough knowledge to readers interested in criminalistics.

---

<sup>4</sup> Champod, Ch. (2014): Research focused mainly on bias will paralyse forensic science. *Science and Justice*, 54(2), pp. 107–109.  
Available at: <http://dx.doi.org/10.1016/j.scijus.2014.02.004>

## VÖLGYESI, LEVENTE

### **The circumstances of the creation of Act VIII of 1903 on the Border Police and its contemporary relevance**

#### **Objectives**

The peculiarity of the science of legal history is that it provides guidance for the future by presenting the past and drawing its lessons within the framework of political and legal science, more specifically constitutional and administrative law, thus serving the mapping of possible paths of institutional development.<sup>1</sup>

The period outlined in this article is the second period of the Austro-Hungarian Monarchy, when the Kingdom of Hungary sought its place in a pan-imperial context, defending its sovereignty and, in the case of its division, its autonomy in the given territories. The parallel is given, since in the European Union, Hungary, aware of its sovereignty, is part of a larger unit, the external and internal borders of which exist, and thus the parallelism of tasks and the drawing of lessons from the past are justified.<sup>2</sup> From the beginning of the twentieth century, therefore, the laws on border police, or more precisely, a package of laws, provided an advanced regulatory framework, the fine-tuning of which could be effectively managed by ministerial decrees.

---

<sup>1</sup> Horváth, P. (1991): Általános jogtörténet [General legal history]. Tankönyvkiadó, Budapest. p. 10

<sup>2</sup> Parádi, J. (2004): A történelmi Magyarország határőrizeti tapasztalatai 1867 – 1913. In: Mezey, B. (ed.): Eckhart, F. emlékkönyv. Gondolat, Budapest. p. 357

## Introduction

In 2013, Hungary celebrated the 110<sup>th</sup> anniversary of the birth of the law on border police. In honour of this, a separate volume of studies was published, in which renowned authors, such as György Nagy, József Parádi, János Sallai, Zoltán Hautzinger and Gergely Virányi, praised the illustrious event from the point of view of law enforcement history.<sup>3</sup> The present study does not wish to repeat what was written there, but only seeks to enrich the previous ones with a few additions.

The question also has constitutional historical implications. To draw a parallel with the current situation, when Hungary is a member of the European Union, after the Compromise of 1867, the Kingdom of Hungary had limited sovereignty, given that it did not decide on certain issues independently, but jointly with the Austrian Empire, and this so-called real union also prevailed in areas that affect the topic we are currently discussing.<sup>4</sup> The question is further complicated by the question of whether border guarding belongs to the field of defense administration or is part of the internal affairs administration. It is a fact that both ministries are present in the history of the Hungarian armed forces, and in addition, the direction and supervision of the Minister of Finance is also present, associated with the Finance Guard.<sup>5</sup>

The other question is to what extent the management of the armed forces can be considered part of the state's tasks and to what extent it is the area

---

<sup>3</sup> Gaál, Gy. (2013) – Hautzinger, Z. (eds.): A modernkori magyar határrendészet százttíz éve [One hundred and ten years of modern Hungarian border control]. MRTT Határrendészeti Tagozat, Budapest.

<sup>4</sup> Eckhart, F. (2000): Magyar alkotmány- és jogtörténet [Hungarian constitutional and legal history]. Osiris, Budapest. p. 359

<sup>5</sup> Mezey, B. – Gosztonyi, G. (2020): Magyar alkotmánytörténet [History of the Hungarian Constitution]. Osiris, Budapest. p. 436



of administration of the municipalities.<sup>6</sup> In this regard, centuries-old traditions had to be rewritten, and this caused considerable difficulties and challenges for legislators.<sup>7</sup> It is evident that the protection of the borders was initially provided by the border counties, later by the border castle system, and then – focusing primarily on the southern ends – by the military border guard regions. This was therefore a strictly military, bellic administrative task, and it had to be replaced by armed forces of civilian character. The transformation of the internal policing is a similarly noteworthy issue: this task was specifically linked to municipalities, and its complete elimination had to wait until the period after the Soviet Republic, when it was replaced by the state police alongside the gendarmerie.<sup>8</sup>

On the basis of the above reasons, it was not clear to the society whether the case belonged to the military administration of the Compromise Act at the time of the birth of the Border Police Act in 1903, whether it would be under the supervision of the Minister of the Interior, and whether the performance of tasks was a municipal or state task. The question is not only theoretical, as the border gendarmerie service, the finance guard and the chief servitor's office in the border areas were simultaneously present in the era.<sup>9</sup>

---

<sup>6</sup> Sarlós, B. (1976): Közigazgatás és hatalompolitika a dualizmus rendszerében [Public administration and power politics in the dualist system]. Akadémiai Kiadó, Budapest. pp. 170–172

<sup>7</sup> Stipta, I. (1995): Törekvések a vármegyék polgári átalakítására [Efforts to transform the counties into civil entities]. Osiris, Budapest. p. 143

<sup>8</sup> Parádi, J. (1996): A magyar rendvédelem története [The history of Hungarian law enforcement]. Osiris, Budapest. p. 98

<sup>9</sup> Virányi, G. (2013): Határrendészeti/határőrizeti tisztképzés 1903-1967 [Border guard/border control officer training 1903–1967]. In: Gaál, Gy. – Hautzinger, Z. (eds.): A modernkori magyar határrendészet száz tíz éve [One hundred and ten years of modern Hungarian border control]. MRTT Határrendészeti Tagozat, Budapest. p. 227

## **The relationship between common affairs and the exercise of sovereign power**

One of the most sensitive points of the Austro-Hungarian and Croatian-Hungarian compromises was the military issue. Within its framework, therefore, the question arose whether the individual armed forces belonged to the sphere of a confederation or whether they could be treated as an independent internal affair of each nation. Military affairs were therefore basically a common issue affecting the whole of the Monarchy. Both the Hungarian Parliament and the Reichsrat in Vienna voted on the budgets of the joint army and navy, and they were agreed on through delegations sent from the bosom of the two parliaments.

The joint Ministry of War of the two states (the Austrian Empire and the Kingdom of Hungary) led the joint army and navy from Vienna. The common army was the main armed force of the Austro-Hungarian Monarchy, in a unified organization, with German as a common language. At the same time, the Compromise made it possible for the two states to have separate forces in addition to the common army. Article XL of 1868 on the Defence Forces made provisions on the Defence Forces in the eighth and ninth sections, denominating the Defence Forces and the Popular Uprising. Of course, Austria set up its own internal defense organization in the same way. These were national forces of secondary importance, being auxiliary forces in peacetime to maintain internal defense and order, but in time of war they were subordinated to the common army.<sup>10</sup>

The Act on Defence Forces could only fit into the constitutional order if its creation was based on the Compromise Act, i.e., Sections 12-14 of Act XII of 1867.

The Kingdom of Hungary has maintained its previous rights to supplement the Hungarian Defence Forces, the right to recommend recruits, and

---

<sup>10</sup> Bibó, I. (2004): *Eltorzult magyar alkat, zsákutcás magyar történelem* [A distorted Hungarian character, a dead-end Hungarian history]. In: Cieger, A. (ed.): *A kiegészítés*. Osiris, Budapest. p. 325

the determination of the length of service both among the legislature and the executive power. The establishment or transformation of the protection system for Hungary could only be done with the consent of the Hungarian legislature at all times. However, where Austrian interests were also affected, the delegations of the two parliaments consulted. In the civil relations of the members of the Hungarian Defence Forces, the Hungarian government took action.<sup>11</sup>

In addition to the Defence Forces Act, Act XLI of 1868 on the Defence Forces was drafted on the basis of the authorisation of the Compromise Act, which contained the detailed rules. This was supplemented by Act XXX of 1868 on the Compromise with the Croats, which sanctioned its own right to guard the border by mentioning twelve border guard regiments in Article 66.

Article III of 1881 on the organization of the public security service established the Hungarian Royal Gendarmerie, where the Minister of Defense was authorized to deal with personnel issues, while the Minister of the Interior was authorized to command.<sup>12</sup>

After the Compromise, the former military border guard region was liquidated, and border guarding became a law enforcement task, so it was managed by the Hungarian Ministry of Internal Affairs and, due to the finance guard mentioned later, by the Hungarian Ministry of Finance.

## **Reasons for the need for the law**

The era of Dualism is usually referred to as the "happy times of peace", characterized by the rapid start of civilization and economic development. The results of the Industrial Revolution brought with them the need for the development of law enforcement administration, thus the transformation

---

<sup>11</sup> Csizmadia, A. (1976): A magyar közigazgatás fejlődése a XVIII. századtól a tanácsrendszer létrejöttéig [The development of Hungarian public administration from the 18th century onwards: the council system]. Akadémiai Kiadó, Budapest. p. 192

<sup>12</sup> Section 8 of Act III of 1881

and development of border guarding, because the municipal, as well as internal affairs and financial forces were no longer able to perform their tasks with sufficient force.<sup>13</sup> By the turn of the century, therefore, there was a serious need for reform. The ministerial explanatory memorandum showed in detail the domestic and foreign policy features and sociological developments that made it necessary to create a modern legislative package.<sup>14</sup>

The first spectacular element is that the societal layer of farmers, which had been soil-bound so far, has been liberated. Here we can think not only of the complete abolition of the soil-bound status of farmers in 1848, but also of the social transformation that took place with the Industrial Revolution. Until now, farmers belonged to a specific estate, and they had to fulfil their obligations towards that estate, either in the form of a land terrier or with the obligation to perform similar land lease contracts. Of course, this does not mean that during the neo-absolutism and dualist period, the Hungarian economy would have completely switched to industrial production. A significant part of the population continued to support themselves from agriculture. But the often harsh conditions, such as the fragmentation of farmer lands through inheritance, and the impossibility of living on dwarf estates, have valorized the fact that instead of being soil-bound, *the freedom of movement* could now be perceived in a present way, which appeared not only in the form of internal migration, but often also in the form of emigration, where for many the only goal was to take advantage of the

---

<sup>13</sup> Beér, J. – Csizmadia, A. (1966): Történelmünk a jogalkotás tükrében. Sarkalatos honi törvényeinkből 1001-1949. [Our history as reflected in legislation. Key domestic laws from 1001 to 1949.]. Gondolat, Budapest. p. 422

<sup>14</sup> Act IV of 1903 on Emigration; Article V of the Act on the Residence of Foreigners in the Territory of the Countries of the Hungarian Crown; Article VI on passports; Article VII on the establishment of three new gendarmerie districts; Article VIII on the Border Police; Article IX [...] on the outskirts of Spiš county and Gácsország, in the area around the so-called Fishpond, in the matter of the incorporation of the arbitral award made by the arbitral tribunal established in accordance with Act II of 1897 for the establishment of the national boundary line. In detail: Sallai, J.: A határrendészet első kézikönyve [The First Handbook of Border Control]. In: Gaál, Gy. – Hautzinger, Z. (eds.) (2013): A modernkori magyar határrendészet százötz éve [One hundred and ten years of modern Hungarian border control]. MRTT Határrendészeti Tagozat. Budapest. p. 61

better opportunities provided by abroad. During a stay abroad, one could have collected enough funds to buy a land and a house at home, thereby creating a decent farmland to ensure financial well-being. Thus, however, it became necessary to regulate the increased willingness to cross the border by law enforcement and administrative means, as well as to control it in a way that is relevant to our topic.<sup>15</sup>

Until the middle of the 19th century, Hungary was notorious for its disastrous highways and famous for the traffic of stagecoaches. However, only a few people could travel on these vehicles, and few undertook to travel in the harsh conditions. In 1847, the first railway track was built, which was followed by the enterprises of several railway companies in the following decades.<sup>16</sup> The railway network soon reached the borders of the country and connected to the international lines.<sup>17</sup> In the same way, river steam boating also made it possible to leave the country quickly or enter the country, and to get into the interior of the country in a short time. The transport revolution was therefore the second reason that required the professionalization of border policing tasks.

As already mentioned, the border policing tasks were divided between the joint Ministry of War, the Hungarian Ministry of Defence, the Ministry of Finance and the Ministry of the Interior, and the municipal administration was also added to this. In fact, individual organizations, such as gendarmes, finance guards, chief servant judges, soldiers, etc., coordinated their activities and provided mutual assistance to each other, but there was no independent state organization available for the performance of border police tasks, which could have focused exclusively on this task as part of

---

<sup>15</sup> Cieger, A. – Egry, G. – Klement, J. (2021): Kérdések és válaszok a dualizmus kori Magyarországról 1867–1918. Kérdések és válaszok [Questions and answers about Hungary during the dualist era, 1867–1918.]. Napvilág, Budapest.p. 103

<sup>16</sup> Gergely, A. (1982): Egy gazdaságpolitikai alternatíva a reformkorban. A fiumei vasút [An economic policy alternative during the reform era. The Fiume railway]. Akadémiai Kiadó, Budapest. p. 21

<sup>17</sup> Pogány, M. (1980): Vállalkozók, mérnökök, munkások a magyar vasútépítés hőskorában, 1845-1873. [Entrepreneurs, engineers, and workers in the heroic age of Hungarian railway construction, 1845–1873.]. Akadémiai Kiadó, Budapest. p. 22

the internal affairs administration, despite the fact that there was a great demand for this by the beginning of the twentieth century.

Although the trauma of Trianon was still a decade and a half away, Hungary's critical geographical location and transit zone nature justified increased border protection. The ministerial justification emphasized that, in contrast to the internal borders, we encountered foreign cultures on our external borders that often had a hostile attitude towards the Kingdom of Hungary, and the infiltration of not only political but common criminals, endangered the peace of the population, the filtering of which and the keeping away of undesirable elements or their expulsion also became in the interest of the state. In addition, in the southern territories, the liquidation of the military border guard area, the withdrawal of militant forces, and the transformation of administration in a civilian manner began in the 1870s. Since this area had one of the longest external borders, its protection in the direction of the "Balkan powder keg" was also a priority state interest.<sup>18</sup>

### **Categories of boundaries to be protected**

The government has divided the border lines to be protected into four danger zones. By far the mildest security risk was the border with Austria, so the deployment of any kind of internal affairs armed unit to secure the western border strip or at least to perform law enforcement tasks was not included in the government's plan, not even in the long term. It is another matter that history completely rewrote this intention with the birth of the Kingdom of Hungary, independent of Austria in 1919. In the north, the Kingdom of Hungary bordered primarily Poland. According to criminal statistics, this border crossing area did not carry significant risks, the analysis of which was not covered in the Minister's justification, but only stated as a fact that a lower risk could be expected in this area as well, even if the Hungarian state power was less intensively present in the control of border crossings.

---

<sup>18</sup> The Minister's justification for the general part of the draft law.

They could not be so optimistic about the north-eastern border strip. Here there is a significant risk that people whose presence is undesirable will arrive in the country. And the legislators could not have guessed that in just over a decade, after the neighboring communist takeover, that border section would still deserve special attention due to bad neighborly relations in the coming peacetime.

The fourth border area, to which the legislator focused the most, primarily, was the problematic nature of the Romanian and Serbian border sections, and the Balkan areas in general. Since the appearance of the Turkish power aspirations, the southern and south-eastern zones required constant readiness, and after the expulsion of the Turks, the military border guard district, administered directly from the Court War Council in Vienna, required constant attention, and after its dualistic liquidation and the establishment of civil administration, the establishment of an independent organization became urgent for the internal affairs government instead of or in addition to the above-mentioned substitute solutions, which was represented by the establishment of the border police.

In the plans of the Ministry of the Interior, we can read the list of the first planned police stations, which, if we place them on the map, can be seen that in the first round they were intended to be located in the places that most need supervision: Pancsova, Orsova, Predealal, Szolyva, Csaca, Királyhida, Čakovec, Rijeka, Zengg, Új-Gradiska, Zimony.<sup>19</sup>

---

<sup>19</sup> The list of police stations finally implemented can be read in the following place: Nagy, Gy. (2013): A Magyar Királyi Határrendőrség felállításának okai, máig ható jelentősége [Reasons for establishing the Hungarian Royal Border Guard, its significance to this day]. In: Gaál Gyula – Hautzinger, Z. (eds.): A modernkori magyar határrendészet száz tíz éve [One hundred and ten years of modern Hungarian border control]. MRTT Határrendészeti Tagozat. Budapest. p. 19

## Staffing and funding

At the beginning of the era, the rules for the recruitment and training of personnel were still contingent. It is enough to trace the history of the regulation of quality standards for prison guards, which resulted in a serious headache for the Minister of Justice.<sup>20</sup> The situation of the Minister of Defence and the Minister of the Interior was so much simpler that the aforementioned Defence Forces and the Defence Act already contained provisions on qualification, and in addition, there were centuries-old traditions of training and directing the personnel of the army, whereas the armed corps of the civil administration only had a system of traditions (e.g. municipal policing) that no longer represented a modern alternative for the era under discussion.

At the turn of the century, a tried and tested system was already in force: several sections of Act I of 1883 on the qualification of civil servants dealt with those positions and the qualification requirements related to them.<sup>21</sup> Given that the modern performance of law enforcement tasks had a history of at least two decades until the entry into force of the Act on the Border Police, the replenishment, training and deployment of the personnel could already proceed on a well-trodden path.

Regarding the deployment, it is worth mentioning the management: this was realized directly through the Minister of the Interior, who regulated the tasks, rights and duties of the personnel in a service directive.<sup>22</sup>

The control of the activities of the border police within the internal affairs administration has arisen as a constitutional issue: how can the executive power be limited in this area? The framework law gave the Ministry of the Interior a wide scope for the establishment of individual police stations. Here, however, the concern arises as to how the control of the legis-

---

<sup>20</sup> Parádi, J.: *op. cit.*, 91

<sup>21</sup> Act I. of 1883 §§ 5, 23, 27

<sup>22</sup> Circular Decree No. 91.000/1905 of the Ministry of the Interior: Instruction on the Implementation of Act VIII of 1903 on the Border Police



lature is realized. The Minister's reassuring answer to this was that the financial framework is included in the current annual budget, so the number of staff can only be increased or new police stations can be established if additional resources are available for this. And the additional funds can exclusively be provided by the National Assembly.

### **Tasks to be performed by the border police**

The performance of tasks was diverse and could be divided into seven major categories. During the Estates era, vagabonds were a serious danger, who, in the absence of permanent work, soon found themselves in the forbidden and formed a group of subsistence criminals. Therefore, during immigration checks, all those who did not have local jurisdiction or could not credibly prove that they were traveling were prosecuted and the appropriate measures were applied to them (e.g., imprisonment, expulsion, etc.). Thus, a trip had to be certified by a passport in each case.<sup>23</sup> The modern age brought with it the freedom to move around, everyone could freely leave their place of residence and even choose a new home for themselves, either in another settlement or in another part of the country. However, this freedom could not only be used but also abused. Even the criminalized elements could move freely, hide in larger cities, and in case of excessive notoriety, they could even change their homeland. Thus, in the case of certain persons or specific activities, the state could impose a passport requirement.<sup>24</sup>

It already followed from the Defense Forces Act that recruiting was only ensured if the conscripts were in the territory of the country and could be found. Mapping the conscription situation and preventing people from

---

<sup>23</sup> Kállay, I. (1996): Városi bírászkodás Magyarországon 1686-1848. jelentősége [The significance of municipal jurisdiction in Hungary between 1686 and 1848.]. Osiris, Budapest. p. 162

<sup>24</sup> Murber, I. – Nagy, A. (2024): Kerülőúton. Az osztrák-magyar határ 20. századi történet [Detours. The history of the Austro-Hungarian border in the 20th century]. Kronosz, Pécs. p. 48

leaving the country was a border police task. In the same way, the emigration of those who were on the run had to be prevented, their personal freedom restricted, restrained and produced for criminal proceedings or the prison system.

It was a serious task to find and eliminate individual or even networks of smugglers of people leading a criminal lifestyle.<sup>25</sup> A special task was to eliminate the opportunities and routes that arose, to make their mission impossible, to put out illegal immigrants, especially to identify people smugglers.

White slave traffic is an institution similar to human trafficking, which is still flourishing today. According to the minister's presentation, gullible girls were promised a well-paid decent job in the hope of a better life. The end of the sad story was usually always the same: the gullible girls were soon enslaved, their money and documents were taken and the number of prostitutes in one of the brothels in the Balkans was increased. The task of the border police was even more difficult here, because contrary to general human trafficking, the commission of a crime is not obvious at first sight, so it was only possible to take effective action after mapping the criminal organization.<sup>26</sup>

In addition to humans, the illegal migration of things was at least as much of a problem. In addition to traffic routes, it was also a task to keep an eye on side roads or seemingly impassable calamities by patrolling. The interception, confiscation and possible quarantine of smuggled goods, and in some cases the involvement of public health and veterinary officials also came into the sights of the border police.<sup>27</sup>

---

<sup>25</sup> A case when the aggrieved parties did not act by the authorities, but settled the case in the framework of self-justice: *Farmers' Journal*, 24 July 1903, Vol. II, No. 30, p. 5; another case when the authority proceeded: *Nyírvidek*, 1 January 1905, Vol. 26, No. 1, 5

<sup>26</sup> Ernyes, M. (2003): A határrendőrség bűnmegelőzési feladatai a XX. század első negyedében [The crime prevention tasks of the border police in the first quarter of the 20th century]. *Pécsi Határőr Tudományos Közlemények II.* Pécs. p. 187

<sup>27</sup> Rácz, I. (1980): A paraszti migráció és politikai megítélése Magyarországon 1849-1914. [Peasant migration and its political assessment in Hungary between 1849 and 1914.]. *Akadémiai Kiadó*, Budapest. p. 162

The Minister of the Interior also entrusted the border police with keeping the *persona non grata* elements away from the country, so it was a task to carry out expulsion and to eliminate illegal migration, primarily by preventing the immigration of dispossessed ethnic elements.<sup>28</sup> Thus, it became absolutely clear that the immigration procedure is no longer the primary task of municipalities, but that it must begin at the border, preventing elements that are not legally desirable from infiltrating the interior areas of the country.<sup>29</sup>

With regard to the fact that in 1903 Article XL of 1879 had been in force for two decades, the Criminal Code of Misdemeanours (Kbt.), the first section of which provided that certain acts could be declared an offence by law or ministerial decree. In the case of an offence, the border police were given the authority of the first instance to commit an offence. From there, an appeal could be made to the vice-chancellor in the second instance, and then the Minister of the Interior decided in the third instance.

The passing of the law on 14 March 1903 did not mean the implementation of the law.<sup>30</sup> The professional preparation was time-consuming, so the first units only started their service on 15 January 1906.<sup>31</sup> The challenges of the development of modern regulations are well illustrated by the

---

<sup>28</sup> Katus, L. (2021): A modern Magyarország születése. Magyarország története 1711-1914. [The birth of modern Hungary. The history of Hungary from 1711 to 1914.]. Kynosz Pécs. p. 624

<sup>29</sup> Pomogyi, L. (2004): Prevenção a rendészeti igazgatásban: a toloncolás jogintézménye [Prevention in law enforcement: the legal institution of deportation]. In: Mezey Barna (ed.): Eckhart Ferenc emlékkötet. Gondolat, Budapest. p. 410

<sup>30</sup> Hautzinger, Z. (2013): Prevention in law enforcement: the legal institution of deportation. In: Gaál, Gy. – Hautzinger, Z. (eds.): A modernkori magyar határrendészet száztíz éve [One hundred and ten years of modern Hungarian border control]. MRTT Határrendészeti Tagozat. Budapest. p. 179

<sup>31</sup> Parádi, J. (2013): A dualizmus kori Magyar Királyság határrendőrsége [The border police of the Kingdom of Hungary during the dualist era]. In: Gaál, Gy – Hautzinger, Z. (eds.): A modernkori magyar határrendészet száztíz éve [One hundred and ten years of modern Hungarian border control]. MRTT Határrendészeti Tagozat. Budapest. p. 46

fact that in the second year of operation, a serious compilation source material was published in order to perform the tasks efficiently and professionally.<sup>32</sup>

## Conclusion

The development of the dualistic system can be divided into several phases. The foundations were laid by the Compromise of 1867 and the direct road leading to it. It was here that the principles had to be defined, which meant the assignment of the armed forces of Austria and Hungary to joint and member state competence. Although this division appeared in military and defense issues, the border police, which is relevant to our topic, was clearly subordinated to the internal affairs administration, thus becoming part of the sovereign legal order of the Kingdom of Hungary.

Given that the establishment of the body took place in the first decade of the twentieth century, it was possible to determine organizational and operational issues and work out the rules of cooperation with co-law enforcement agencies based on the experience of the past almost thirty years. With this, it became clear that immigration policing is primarily a state task, and it was also explicitly stated that the basic task of border control is that potential problems coming from abroad do not have to be dealt with by the country's internal administrative bodies, but decisions can be made within the framework of border control, thus preventing undesirable and at the same time illegal acts.

---

<sup>32</sup> Pavlik, F. – Laky, I. (1907): A határrendészet kézikönyve [The Border Guard Handbook]. Pátria, Budapest

## Summary

### **Ázsoth, Szilvia: A new weapon in combating violence against women and domestic violence**

This study, in addition to presenting Directive (EU) 2024/1385 on combating violence against women and domestic violence, examines within a comparative framework the similarities and differences between the Directive and the Council of Europe Convention No. CETS 210, opened for signature on 11 May 2011, on preventing and combating violence against women and domestic violence. By doing so, it aims to highlight the trajectory of the evolution of responses to such forms of violence.

### **Chvojkané, Török Eszter: Changes in Hungarian crime prevention strategies with regard to children and young people**

This article analyses the issue of the prevention of juvenile delinquency in the light of Hungarian crime prevention strategies, with particular regard to the practical implementation of preventive measures, the content of the programmes used and the social challenges encountered in their implementation.

### **Dudás-Boda, Eszter: The role of forensic anthropology in the forensic excavation of clandestine graves**

Forensic anthropology assists criminal investigations through the examination of human remains. During the forensic excavation of clandestine graves, the professional and systematic recovery of remains is crucial, and forensic anthropology plays a key role in this process. Proper documentation of the scene and the uncovered remains provides important information for subsequent laboratory analyses as well as for criminal proceedings.

**Fábián, Vanessza: The potential role of the forensic nurse in Hungarian criminal procedure - criminalistic and procedural aspects**

This study explores the potential role of the forensic nurse in the Hungarian criminal justice system, drawing on international practices, particularly from the United States. It examines the forensic nurse's interdisciplinary function at the intersection of healthcare, law, and criminalistics - focusing on their contribution to evidence preservation and victim support. The study also analyzes the current legislative framework in Hungary and proposes legal and educational reforms to facilitate the integration of this professional role. The goal is to enhance procedural fairness and strengthen victim-centered justice in criminal proceedings.

**Herke, Csongor – Herke-Fábos, Barbara Katalin: Social cohesion and community justice: the restorative city potential of Pécs**

The paper examines the concept of restorative cities as a new opportunity for urban crime prevention. It presents the application of the principles of restorative justice in urban spaces, with a particular focus on community participation, conflict management, and strengthening social cohesion. The authors present international best practices and urban planning principles, and then analyze the potential for Pécs to become a restorative city based on these.

**Herke Zsolt: The relationship between global warming and the number of violent crimes**

Global warming is one of the most serious problems of our time, which has a profound impact not only on environmental systems, but also on society as a whole. More and more research shows that climate change may - indirectly - increase the number of violent crimes. Although warming itself

does not cause crimes, it can increase the social, psychological and economic factors that can lead to violent behavior.

According to psychological and behavioral research, higher temperatures increase people's irritability and frustration, which can lead to violent behavior. According to some studies, for example, the frequency of homicides, assaults and domestic violence increases with increasing temperature.

This review of the available international and domestic research reveals that no Hungarian study has yet analyzed the data related to this issue, making this study a foundational contribution to the field.

### **Kemény, Bertalan: Digital Knowledge Base for Supporting Migration Governance - An Opportunity for Interdisciplinary Research**

The study presents the concept of a multilingual digital portal to be developed as a university initiative, designed to support third-country nationals in administrative procedures, thereby reducing errors and easing the burden on authorities. The platform would assist orientation through an FAQ system, templates, videos, and chatbot modules. Its operation would be grounded in interdisciplinary research and digital analytical methods, complemented by policy recommendations and integration objectives.

### **Nagy, Ágnes: Digital threats: trust and manipulation in cyberspace**

This study explores the phenomenon of online fraud, tracing its evolution from the early "Nigerian letters" to modern scams that exploit artificial intelligence and deepfake technologies. It analyses the transformation of criminal methods, the international dimension of cybercrime, the psychological aspects of victimisation, and the investigative and preventive measures applied in Hungary and worldwide. Particular attention is given to the Hungarian Mátrix Project, the DANTE system, and the Central Fraud Filtering System, highlighting their role in combating online fraud. The study

argues that an effective response requires a multidisciplinary approach that integrates technological, legal, criminological, and social perspectives.

### **Németh, Ágota: The path of drugs today**

This study examines current trends in drug trafficking and consumption at the global and domestic levels. It presents the transformation of drug markets, particularly in light of technological developments, geopolitical changes, and the emergence of new trade routes and methods. It focuses on the role of organized crime, the significance of the dark web and cryptocurrencies, and the presence of the most common drugs—such as cannabis, cocaine, synthetic drugs, and new psychoactive substances—in Europe and Hungary. The author provides a detailed picture of the domestic situation and the legislative and law enforcement responses, with particular reference to the Delta Program launched in 2025 and the related legislative tightening. The study highlights that effective action can only be achieved through broad social and institutional cooperation, while emphasizing that repressive measures alone are not sufficient to address the drug problem in the long term.

### **Perger, Ádám: The EU Legal Aspects of Cybercrime**

The study examines the legal aspects of cybercrime in the European Union, focusing on conceptual uncertainties, jurisdictional dilemmas, and the evolution of EU legislation. Drawing on empirical data, it highlights the social and economic impact of cyber threats, as well as the fundamental rights conflicts arising between security and freedom. The conclusions emphasize the need for further harmonisation of EU regulation, stronger cooperation among Member States, and the safeguarding of a delicate balance between effective law enforcement and the protection of fundamental rights.



**Petrétei, Dávid: A review of "Fenyvesi: *The Past, Present and Future of Criminalistics*"**

The paper is a short review of Professor Csaba Fenyvesi's new book, *The Past, Present, and Future of Criminalistics*, which was published by the Forum Iuris Publisher of Cluj-Napoca (Romania) in 2025, as a thoroughly revised, updated, and expanded version of the author's Hungarian-language work published in 2014. The work is of groundbreaking significance primarily due to its summary and systematization, since, as a theoretical monograph presenting this discipline most comprehensively, it builds a new paradigm in several elements, and is therefore indispensable for those dealing with the theory of the field. However, it can also have an inspiring effect on all those works that conduct in-depth, detailed examinations of certain areas of criminalistics, because it places the utilization of their results in a systematically structured, broad, and well-founded system.

**Völgyesi, Levente: The circumstances of the creation of Act VIII of 1903 on the Border Police and its contemporary relevance**

This study examines the creation of the first Hungarian law on border police. The first question is why this new organization was needed. It was also a question of whether the Kingdom of Hungary could create such an armed body in the relationship between Austria and Hungary. The reader can learn about the historical circumstances that led to the renewal of the protection of the country's border.