

UDC 343.1

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## RASTER INVESTIGATION

### Introduction

From time to time the investigative bodies perform general screenings in the law enforcement registries. In case of a normal inquiry the registry usually offers a sufficient amount of information, while in case of a special criminal act or organised crime further analysis and evaluation is necessary for which the so called civil registries may be useful. If the civil registries are not in use, e.g. when the authorities do not know the contents of the registry, data loss may occur which may jeopardize the success of the inquiry. That is why the introduction and a practical approach is important regarding this type of registry.

Data retrievable from the civil registry could help implementing procedure and coercive measures. The retrieved data may have a crucial role in criminalist thinking and setting up scenarios.

The study discusses that the understanding and availability of civil registries are inevitable for the investigative bodies to conduct crime fighting, investigative and preventive tasks. Furthermore, this paper points out the logical information chains though examples, as well as discussing how to reach one

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registry based on information from another and how to use the retrieved data during the tasks of an inquiry.

During our everyday life we provide a lot of information about ourselves which is recorded electronically via a computerised system. During an inquiry and a demonstration of a past event many questions arise, e.g.

- Where is the suspect's permanent residence? Is the vehicle in question in his possession or in his use?
- Can we establish the name and headquarters of the suspect's employer?
- Where does the suspect hold a bank account?
- Which satellite maps and ground plans can help implementing coercive measures?

In most cases the answer to these questions lies in the civil registries which can help implementing the tasks of an inquiry.

Based on paragraph 71 of Act XIX of 1998 on Criminal Procedure (hereafter referred to as "CP") investigative bodies are authorized to request state and local governmental organisations, authorities, public bodies, commercial entities, foundations, public foundations and associations to provide information, to present and to hand over data as well as papers. The requested organisation is bound to fulfil the appeal or state the obstacles of fulfilment, unless otherwise specified by law. The requested body is bound to provide data, including data processing, data recording, either electronically or in writing and data transmission, free of charge. An inquiry is a way to get to know the facts during data collection from various registries and archives. As it is stated in paragraph 178 (1) of the CP, after the investigative body has launched an inquiry it can perform data collection in order to establish whether evidence is available and if so, where. During data collection they can use law enforcement database of the investigative organisations specified by law. Based on the rules and

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regulations about data requests they may ask for documents and information about anybody.

Act CXII of 2011 on the Right of Informational Self-Determination and the Freedom of Information (hereafter referred to as “Avtv.”) contains the principles and legal basis of data management, the rules of data transmission abroad, the limits of data management and the rules of data processing.

The aim of the act is *to define the basic rules of data management in order to make sure data managers respect the privacy of natural persons, to make sure the transparency of public affairs and to fulfil the right to know and distribute public data.*

Based on the data management principles of the “Avtv.” act:

- Personal data can only be requested in order to exercise right and to fulfil obligations. Data management must match the purpose of data management. The collection and management of data must be fair and legitimate.

- Only such personal data may be managed that is essential to achieve the purpose of data management and is appropriate to reach the aim of the management. Personal data can be used only to the extent and for the time necessary to achieve the aim of data management.

- Personal data preserves its quality during data processing until its connection with the person concerned can be restored. This is only possible, if the data manager has the technical conditions necessary for restoration.

- During data management the accuracy, completeness and – if it is necessary regarding the aim of data management – timeliness of the data must be ensured. It is equally important that the person concerned can be identified only as long as it is necessary for the purpose of data management.

- The management of personal data must be regarded as fair and legitimate, in order to ensure the right to freedom of expression, if a person

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willing to know the opinion of the person concerned visits them at their residence, but only if the personal data of the person concerned has been managed in accordance with the provisions of this act and the personal visit is not for business purposes. A personal visit cannot happen on bank holidays specified in the Labour Code.<sup>1</sup>

## **I. Registries in an Investigation**

### **1. Law enforcement registries**

The investigative body uses the criminal records during prosecution the most. Members of the investigative body access the registry via their own computers, accelerating the data flow. However, there are many registries that can only be reached by sending a written request, hence the reply (and the available data) may take several days to arrive. Only after this process can the information checks start.

The most commonly used criminal records system consists of

- the registry of identification data and photographs and
- the criminal records.<sup>2</sup>

The purpose of the management of the identification data and photographs in the criminal records as well as the data available in the criminal and law enforcement biometric registries is to identify the person concerned when admitted to a detention facility or custody suite.

#### **1.1. Criminal records**

Criminal records consist of the following registries:

- records of criminal offenders,

<sup>1</sup> Paragraph 4 of Act CXII of 2011.

<sup>2</sup> Act XLVII of 2009 on Criminal Records System, registry of the decisions made by the courts of European Union Member States against Hungarian citizens, as well as the registry of law enforcement and criminal biometric data.

- records of persons who has not been convicted but are currently under penalty,
- records of persons under prosecution,
- records of persons under coercive measures and
- records of persons under restrictions to travel abroad.

### **1.2. Automatic Face Recognition and Identification System (3AR)**

This system has been in use based on the 58/2010 (OT 33) command by the National Police Department (ORFK) since 1 March 2011. Accessing the services of 3AR is possible for the authorized employers of the criminal service via the Robocop-Neo (*Robotzsaru-Neo*) system. This system automatically receives and stores the nationality, identification data (name, sex, place and date of birth) and photograph of the person questioned on reasonable suspicion of intentional offense in order to identify them with the image, mosaic portrait or sketch of an unknown person.<sup>3</sup>

The purpose of this system is to facilitate the identification of the person, living or dead depicted on a photograph, sketch or mosaic portrait. (This is a special forensic computer programmed registry based on mathematical algorithms and biometric identification.)

### **1.3. Net-cop**

Amongst law enforcement registries the Net-cop (*Net-zsaru*) database plays a crucial role because in this registry it is possible to filter and search in every ongoing investigation and document, therefore between telephone numbers and vehicle registration numbers retrieved from the public registry. The importance of the system is to filter whether in the vehicle registry the owner of the vehicle and the actual keeper of the vehicle are the same. A report on an identity check (e.g. in case of a wanted person or increased checks), which was recorded in the Net-cop database, may play an important role as it may occur

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<sup>3</sup> The system is currently under development and not in use.

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that the persons using the vehicle are committing or have committed a crime and the vehicle was a tool in the criminal offense. Identity checks can occur before or after the crime has been committed, that is why it is important to check the recognized registration number during the checks recurrently. In most cases the keepers of the vehicle have no knowledge that the police are aware of the registration number of the vehicle used during a criminal offense (via civil registries). It is advisable to try and cunningly interview the owner of the vehicle without revealing our true intentions. The interviewees (e.g. owner of the vehicle or neighbours) are uncertainty factors because we cannot know what kind of relationship (friendship, relatives) the culprits have with the owner of the vehicle or with the neighbours. In the inquiry plan the tasks may vary from case to case. Setting up a different task order is also possible, as the inquiry process is influenced by many things, various solutions are at hand.

The 18/2011. (IX. 23.) command by the National Police Department (ORFK) on the integrated and compulsory use, authorisation levels, data protection and system development of the Robocop integrated electronic data managing and processing system contains the definition of Net-cop and Robocop.

Net-cop system: a digitalised, criminal and law enforcement database which contains, in a form of structured database, the relevant data of the cases recorded in the Robocop NEO system until a case is discarded. From this interface data is retrievable for statistical purposes and searching, researching and managing tasks can be carried out within the framework of the Robocop system authorisation levels.

Robocop system: the basic system of the law enforcement bodies. A group of such IT applications that contains all electronic data and document coming from the ongoing police operations in a comprehensive system. By ensuring the specific user-friendly authorisation levels set for police work and

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for the work of specific user groups, it provides a complex support for the law enforcement bodies via electronic document management, data service and process. Document library, Net-cop and Robocop NEO systems are part of this system.

The law enforcement bodies must record every open data, document and evidence available during their work.

During the criminal usage of the Robocop system the criminally relevant data are the following:

- a) *event in a criminal offense;*
- b) *the historical and legal facts of the event;*
- c) *identification details of the persons concerned in the cases;*
- d) *the relation of the persons concerned in the cases and the criminal offense;*
- e) *the description, photographs, photographic ID, finger and palm prints ID and DNA sampling ID of the suspect;*
- f) *details and unique identifier of objects related to the case;*
- g) *in case of counterfeiting and issuing counterfeit money the data of the counterfeit money;*
- h) *in drug-related cases the characteristics of the drugs known at the beginning of the inquiry;*
- i) *in drug-related cases the characteristics of the drugs in the expert report;*
- j) *the substantive part of the expert report, in which the expert answered the question(s);*
- k) *the geographical coordinates (GEO code) of the offenses committed in Hungary which are related to a specific location;*
- l) *in case of crimes committed against property and economical offenses the value of the offense, the caused damage;*

- m) *tools and methods of the committed crimes;*
- n) *clues and photographs recorded at the crime scene;*
- o) *evidence managed in connection with the criminal offense.*<sup>4</sup>

Criminally relevant data must be recorded in the following cases:

- a) *death under exceptional circumstances;*
- b) *criminal inquiries;*
- c) *occupational accidents;*
- d) *suicide attempts;*
- e) *disappearances;*
- f) *wanted person or object;*
- g) *documents of private prosecution cases;*
- h) *reports on counterfeit money;*
- i) *warrant of apprehension;*
- j) *locating place of residence;*
- k) *public road, water, railway or aviation accidents;*
- l) *public service announcements, investigating complaints.*<sup>5</sup>

#### **1.4. Personal data and address registry**

Personal data and address registry may help to identify the offenders or the witnesses. The identified culprit's address is also retrievable from the address registry, which might locate a possible search of the premises.

The registry contains the citizen's:

- name
- sex
- place and date of birth
- mother's maiden name
- personal ID

<sup>4</sup> Paragraph 31 of 18/2011. (IX. 23.) command by the National Police Department (ORFK).

<sup>5</sup> Paragraph 22 of 18/2011. (IX. 23.) command by the National Police Department (ORFK).

- place and date of death (the declaration of death or the judicial declaration of death)
- address
- limit or prohibition of data disclosure
- indication of regular data disclosure from their personal data
- marital status, place of marriage or legal partnership
- photograph and – if 14 or above and entitled to have an ID card – signature
- identification number of the ID card, ID number card and address card.<sup>6</sup>

Registry of persons with the right of free movement and residence contains the person's:

- name
- Hungarian or foreign nationality, statelessness, the loss of nationality, refugee or subsidiary protection status, immigration or settlement status, in case of a person with the right of free movement and residence the fact of this status, and in case of a citizen living abroad the fact of naturalization or repatriation
- sex
- place and date of birth
- mother's maiden name
- personal ID
- place and date of death (the declaration of death or the judicial declaration of death)
- address
- limit or prohibition of data disclosure
- indication of regular data disclosure from their personal data

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<sup>6</sup> Paragraph 11 (1) of Act LXVI of 1992

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- signature
- identification number of the ID and address card.<sup>7</sup>

### **1.5. Vehicle registry**

The registry consists of the following:

- a) permission registry;
- b) vehicle registry;
- c) registry of origin checks;
- d) archives;
- e) registry of parking IDs;
- f) registry of preliminary authenticity checks.<sup>8</sup>

Vehicle registry contains the identification and mechanical data of the vehicles registered in Hungary, the data of the vehicle owner and keeper, the data of the documents of the vehicle, as well as the data changes (data history). The data history of the vehicle registry contains every data and data changes of the vehicle owner (keeper) and the vehicle subject to the law.

## **2. Civil registries**

### **2.1. National Health Insurance Fund Registry**

During an inquiry the registry of the National Health Insurance Fund (OEP) is of great importance.

#### *2.1.1. Social Security Number (TAJ) Registry:*

The Social Security Number (TAJ) Registry contains the following details:

- personal details (name, maiden name, mother's maiden name, place and date of birth)

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<sup>7</sup> Paragraph 11 (2) of Act LXVI of 1992

<sup>8</sup> Paragraph 7 of Act LXXXIV of 1999

- sex, marital status, nationality, permanent residence (temporary residence), social security number (TAJ)

#### *2.1.2. Registry of the legal status of declared persons*

Registry of the legal status of declared persons is necessary to claim the health insurance benefits. It also contains the legal status of Hungarian citizens living in Hungary and citizens of foreign nationality who match the legal criteria. The registry contains the following details:

- name, social security number (TAJ), the employer's name, headquarters and registration number;
- claim of the legal status, Standard Classification of Occupations (FEOR), duration of contractual relationship and weekly working hours.

#### *2.1.3. Registry of funded health care records*

- Out-patient care and caretakers, in-patient care institutions, GPs' activities
- Dental specialist practice

#### *2.1.4. Registry of data managed during an inquiry on health insurance cash benefits, sick pay after accidents and travel expenses*

- This registry contains personal data, data on employer and income;
- personal details (name, maiden name, mother's maiden name, place and date of birth);
- personal details of the child (childcare benefit, pregnancy aid, and data in case of childcare benefit claim);
- nationality, permanent residence (temporary residence);
- social security number (TAJ);
- data on employer;
- data on income to establish the type of care.<sup>9</sup>

<sup>9</sup> [http://www.oep.hu/portal/page?\\_pageid=34,12980076&\\_dad=portal&\\_schema=PORTAL](http://www.oep.hu/portal/page?_pageid=34,12980076&_dad=portal&_schema=PORTAL)

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Based on the National Health Insurance Fund Registry it is possible to locate the suspect's workplace, address, place of healthcare treatment (hospital, GP's office), place where prescriptions have been redeemed (pharmacy), to get to know the data recorded during using childminder services, further data collection (surveillance and interviewing) and to perform inquiry tasks. (E.g. a child's mother is bound to state her temporary location and phone number before giving birth and after that to be able to use child-minder consultation and home visit services. She is also bound to report any data changes which will also be recorded.) If a parent is under an arrest warrant and their temporary residence has been changed, it is advisable for the authorities to visit the child-minder services to get the new address. Healthcare data is defined by law, so in light of the definition authorities can obtain further new information from the archives.

## **2.2. Registry of telephone companies and Land Registry (Takarnet)**

Telephone companies and Land Registry (Takarnet) play an important role in an inquiry, which usually provides information on the movement and temporary residence of the person concerned.

### **2.2.1. Registry of telephone companies**

In connection with checked telephone numbers it contains:

- data on the subscriber's surname, first name, date and place of birth, mother's maiden name, address and mailing address;
- in case the subscriber is a non-natural person, the name and headquarters of the company, the company representative's surname and first name;
- in case of a mobile phone service the ID number of the mobile devices (IMEI) used by the communicating partners during the use of the services and the mobile subscription ID number of the subscriber (IMSI);
- in case of a mobile phone service the service provider's network and cell identifier at the start of the communication and data on the time of the

provision of services to assess the actual geographic location of cell with the cell ID;

- in case of online mailing and telephone services or the combination of these, data listed in point *d*) regarding the communication started with the intended recipient;

- in case of Internet access, online mailing and telephone services or the combination of these the type of the electronic newscast service, the date, opening and closing time of service usage by the subscriber or user, the IP address used, user ID and phone number;

- in case of Internet access, online mailing and telephone services or the combination of these data to be able to track the alterations made by the electronic newscast service on the subscribers' and users' unique technical IDs (IP address, port number);

- in case of prepaid, anonymous mobile phone service the first usage date and time of the services and the activation cell ID.<sup>10</sup>

Phone number used by the criminals does not always have attached subscription data, the offenders usually use a telephone number subscribed by someone else. In this case it is advisable to ask the telephone company in a written request what the IMEI number is of the device in which the telephone number in question is in use and the IMSI number of the card inserted in the device. It may occur that in a certain IMEI numbered device the offenders swap the SIM cards making it easier for the authorities to receive new information. It is advisable to run a search in the Internet browser on the phone numbers retrieved based on the IMEI number because usually an advert or contact details on a social network page is connected to the phone number.

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<sup>10</sup> Paragraph 159/A & 129 (5) a) of Act C of 2003, Law on Electronic Communications.

### 2.2.2. Records of the Land Registry (Takarnet)<sup>11</sup>

From the registry many relevant data may be retrieved such as:

- Ground plan of the property (may help in arresting the offender or in the search of the premises);
- background information of the property (details of previous owners, their address, sales contract, mortgage contracts);
- copy of the map showing the interior, the periphery and the garden of the property.

In this registry one can search for data, address and land register reference number and it is possible to search nationwide or by cities. The properties are registered under various titles (house, flat, garage, holiday home, office, shop, lot, basement, repair shop and other) which may be considered when planning a search of the premises or in case of a search for tangible evidence.

In case of property alteration surveillance the user receives an email if the data of the properties he is observing has been changed. The changes could be the following: marginal note, change of address, note of easement, change of property rights, etc. If during the investigation an arrest warrant is issued and new information would arise that the suspect is hiding on the countryside (in Szabolcs-Szatmár-Bereg county) in the family holiday home, the Takarnet system may be used to check whether under the name of the suspect or their family members a holiday home is registered. Based on data retrieved from Takarnet it turns out that under the name of the offender a holiday home is registered. After this it is also possible to get the ground plan from the database, which may facilitate the preparation for the search of the premises and the arrest.

### 2.3. Registry of financial institutions

Authorities may request information from financial institutions about whether the person concerned has an account at a financial institution (e.g.

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<sup>11</sup> Most of the law enforcement authorities have the system but only have a partial data base.

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investment account, current account, foreign currency account, securities account, credit card, prize passbook, etc.) and if so, what address did the person concerned give when opening the account. (Address of a person under an arrest warrant is relevant for making the arrest.) Other information requests could be:

- Over which business organisation accounts does the person concerned have authorisation?
- Is the person concerned authorised to access a natural or legal person's account as a delegate?
- Has the person concerned a safe or is he/she authorised to access the safe of a third party?
- If the person concerned has a current account at the financial institution information may be requested on the location and time where non-cash means of payment has been used.
- Has the person concerned topped up a mobile account via bank card or has the person subscribed to text message services? If so, to what mobile number was the top up made and on what number is the service received?

The civil records discussed in this essay are rarely used by the investigating authorities. They mainly perform searching and filtering work in easily accessible law enforcement databases but in this case the member of the investigating authority may only partially get a response on the basic forensic questions. The basic questions help revealing the past events: what happened, where, when, how, who was involved, why and with what. One can also ask if the events are part of a serial pattern.

The records have a close connection to each other, because one database can be reached from another and they complement each other. One can observe in case of secret information gathering when only partial (fragment) information (e.g. the perpetrator's gender, age, the location of the health services used or the address of the property owned) is available to the authorities. Based on the data

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fragments the offender can be identified through the civil registry (e.g. OEP, Takarnet or telephone companies), and the resulting data will be uploaded to the law enforcement registry (e.g. Net-cop database) to be checked. As a result of the audit work the criminal offense and the circle of offenders could be revealed.

In my opinion, in certain cases when the culprit is identified using the civil registries, the Automatic Face Recognition and Identification System will have a paramount role but this system is still under development.

If we want to place civil registries among the type of data collection, it would fit among interviewing, environmental studies, surveillance, the involvement of the public in data collection and forensic trap. We are talking about a very narrow category because data collection wraps the investigation from ordering an inquiry to the disposal of documents.

## II. Presenting civil registries via practical examples

In case of crime against property (e.g. theft, robbery) in most cases the offenders flee the scene by car.

“Based on the available information on the night of 25 May 2014 in District 11 of Budapest two, 20-25-year-old male suspects fled the scene by car with the registration number AAA-123. A sketch was made of one of the offenders based on the description of a witness. The victim stated that in the last few days he received many late night phone calls on the landline from a private number. When he answered the phone, the caller did not say anything than cut off the call.”<sup>12</sup>

In favourable circumstances the witness can also recall the registration number (AAA-123) of the vehicle during data collection, and the description of the offenders (in this case we are dealing with two 20-25-year old male

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<sup>12</sup> This statement is not based on actual data. It only serves to introduce the necessity, role and justification of civil registries.

offenders). Based on the registration number of the car, the first step in this case is to use the vehicle registry to find out the name of the owner and keeper of the vehicle. This way the police can retrieve data from the vehicle registry to which I referred earlier as a law enforcement registry. The investigating officer can access this database with his own ID code directly from his desk.

However, even if we have the data of the owner of the vehicle (in this case: Magdolna Kiss, born 27/12/1923) often the inquiry cannot proceed because the relevant information is not in the hands of the authorities. Because we know from the vehicle database that Magdolna Kiss lives at 23 Tar utca, District 12, Budapest, we can request a query from the address registry to see if at the address in question lives another person other than Magdolna Kiss. However, based on the database, only Magdolna Kiss lives at this address.

During data collection it was established that in the aforementioned address Magdolna Kiss has not been in residence for several months because, based on the statements of the neighbours, she was taken into hospital but they could not add any further information to the story.

No relevant information arose which could have led to revealing the identity of the offender(s). In my opinion, in this case we should conduct cunning interviews with the neighbours without revealing our true intentions. The interviewees (neighbours) are uncertainty factors because we cannot know what kind of relationship they have with Magdolna Kiss and the other neighbours.

It is not advisable to collect data among relatives because if one of the offenders is a family member, he or she might get to know immediately that the authorities know about the registration number of the vehicle in question and the offender(s) may influence the success of the inquiry or mislead it later.

The acting authority should send a written request to the National Health Insurance Fund (OEP) to find out where Magdolna Kiss used National Health

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Insurance services. The request revealed that the person named was indeed under hospital care and the address of the hospital was stated in the written reply. Let us assume that in the hospital they would say that Magdolna Kiss is not in a state to answer questions, so the inquiry will not have any progress.

We have the second opportunity to use the civil registries by sending a request to the Personal Records and Administration Department of the Head Office of the Administrative and Electronic Public Services,<sup>13</sup> which may conduct genealogy concerning Magdolna Kiss. Let us assume that based on the request the Head Office finds out that Magdolna Kiss has a 20-year-old, two 23-year-old, and a 25-year-old male (József Kiss, born 21/12/1989) grandchild.

It is also clear from the available data that the victim received many late night phone calls on the landline but the caller did not say anything. (This information must be examined because the offenders often keep a property under surveillance and they enter it on the basis of whether the residents answer the phone or not.)

Based on the aforementioned information, police can turn to the third civil registry, the telephone company registry. In reply to the request of the investigative body the telephone company affirmed that the victim received the phone call from a phone number (hereafter 06-35-1234567) that has no subscription data available. In this case it is advisable to send a written request to find out into which IMEI numbered device was the 06-35-1234567 numbered SIM card inserted and which SIM card was inserted in the IMEI numbered device in question. The telephone company said the SIM card in question was inserted in two IMEI numbered device (hereafter 1234, 5678). The telephone company's answer also states that from the 06-35-1234567 numbered SIM card inserted in the 1234 IMEI numbered device four calls have been made, in all four cases the called number was the number of the victim. The SIM card was

<sup>13</sup> [http://www.nyilvantarto.hu/hu/adatszolgaltatas\\_kapcsolatfelvetel](http://www.nyilvantarto.hu/hu/adatszolgaltatas_kapcsolatfelvetel)

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inserted only once in the 5678 IMEI numbered device and no calls have been made or received. It has also been established that the 5678 IMEI numbered device is regularly used with the 06-43-1234567 telephone number. The subscriber of the number is Rebeka Tóth (born 01/01/1990, mother's maiden name: Róza Gipsz).

In the light of this new information, which still needs to be analysed, police may use the fourth civil registry, the social network websites. Based on these sites, Rebeka Tóth named József Kiss (born 21/12/1989) as his boyfriend (life partner). Furthermore, amongst the law enforcement registries the Net-cop database plays an important role because in this registry it is possible to filter and search in every ongoing investigation and document, hence between telephone numbers and vehicle registration numbers. In this case, in the search results the AAA-123 registration number came up in a police report. The report says "during increased checks on 28 May 2014 József Kiss (born 21/12/1989), the driver of the vehicle with the registration number AAA-123 and Gábor Tóth (born 12/01/1990) on the passenger seat were stopped for identity checks. The persons named are not wanted persons."

If we would analyse the available data we could deduce that the person driving the vehicle during the identity checks was József Kiss, the grandchild of the owner of the vehicle. The SIM card that was used to call the victim was inserted in the girlfriend's mobile device. Furthermore, the sketch made based on the description of a witness has been uploaded to the Automatic Face Recognition and Identification System (3AR) which revealed that the person on the sketch is identical with József Kiss (born 21/12/1989) who has criminal record.

Let us assume that an arrest warrant is issued against József Kiss, whose current location is unknown, but based on the information of the authorities he is

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hiding on the countryside (in Szabolcs-Szatmár-Bereg county) in a family holiday home.

Now we can use the fifth civil registry, Takarnet (Land Registry) which let us retrieve and check whether under the name of József Kiss or his family members a holiday home is registered. Based on the Takarnet query it is established that József Kiss has indeed a countryside holiday home and we can retrieve the ground plan from the database. This information may help in the preparation of the search of the premises and the arrest.

Through this example the importance of the registries has been explained. However, in order to successfully complete the investigation, in many cases, it is necessary to know what records exist and what data may be retrieved from them.

### **Conclusion**

Many registries exist that are created and continuously supplemented by natural or legal persons. The aim of the aforementioned registries is to present the information registered in the databases. This information helps in establishing and fulfilling inquiry tasks.

In this study the presentation of civil registries is only partial. I merely listed some of the law enforcement registries but the listing shows that many registries exist which cannot be accessed directly. Although, in most cases these are the databases that offer the most relevant data which may help the authorities obtaining evidence.

In the future establishing a common database will be necessary which would allow us to get all information at one go and it would also better the forensic thinking.

Raster investigation is the future of investigation because it would save time to reach all information easily via computers, accelerating the information flow and the retrieved data would help forensic thinking.

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Raster investigation is a method during which we search in databases and the electronically registered data may help the inquiry process. However, most of the data serve the clarification of a crime, not the verification.

Civil and law enforcement registries should be handled in one database which would make law enforcement more effective and would allow us to see a "detailed" study on the observed person's lifestyle, movements, daily activities, relationships, bank accounts, money movement, call log, received health services, utility services, etc.. A "central database" is necessary as during a primary investigation it could serve as an effective tool to fight crime (crime detection, determining the identity of the accused). However, using a single, comprehensive database would violate for example the right to privacy and family life, informational self-determination, free movement of information and personal data protection. The procedure allowing the usage of this database must provide adequate guarantees for the protection of individual rights.

The condition of using a central database could be:

- imprisonment up to 5 years or more for intentional crime;
- imprisonment up to 3 years for a crime committed in a criminal organisation or for financial gain;
- abuse of new psychoactive substances, violation of conscience and religious freedom, abuse of ozone-depleting substances, the offense of maladministration;
- imprisonment up to 3 years for counterfeiting medical products, human trafficking, pandering, promoting prostitution, child pornography, damaging the environment, violating the course of waste management, abatement, bribery, accepting bribery, official corruption, the adoption of official corruption and human trafficking;
- crimes against national classified data and data assets;

- attempt of the listed points, and - if the preparations of the offenses are punishable by law.

Furthermore, a query from the central database would be valid if one can assume on solid grounds that retrieving evidence in any other way is hopeless or it would be disproportionately hard to come by.

The request of the investigative body would be granted by the attorney. In an urgent case (if the delay in the particular case would obviously bias the interest of the success of crime fighting) the law enforcement authority could command the use of the database and at the same time a request for the permission would be submitted to the prosecution. If the prosecution would deny the permission the obtained data must be destroyed.

I think it is of utmost importance to develop the legal basis of raster investigation and to implement its technical background.

### ***Bibliography***

1. 18/2011. (IX. 23.) command by the National Police Department (ORFK) on the integrated and compulsory use, authorisation levels, data protection and system development of the Robocop integrated electronic data managing and processing system

2. 58/2010 (OT 33) command by the National Police Department (ORFK) on introducing the Automatic Face Recognition and Identification System

3. Act C of 2003 Electronic Communications

4. Act CXII of 2011 on Informational Self-determination and Freedom of Information

5. Act LXVI of 1992 on the registry of personal data and address of citizens

6. Act LXXXIV of 1999 on the registry of public road traffic

7. Act XLVII of 2009 on Criminal Records System, registry of the decisions made by the courts of European Union Member States against Hungarian citizens, as well as the registry of law enforcement and criminal biometric data

8. [http://www.nyilvantarto.hu/hu/adatszolgaltatas\\_kapcsolatfelvetel](http://www.nyilvantarto.hu/hu/adatszolgaltatas_kapcsolatfelvetel)

9. [http://www.oep.hu/portal/page?\\_pageid=34,12980076&\\_dad=portal&\\_schema=PORTAL](http://www.oep.hu/portal/page?_pageid=34,12980076&_dad=portal&_schema=PORTAL)

***Nyitrai Endre***

***Реєстр розслідування***

Робота слідчих органів та успішне розслідування (виконання слідчих завдань) дуже залежать від наявних даних.

Наше повсякденне життя не можна уявити без комп'ютера. Правоохоронні органи записують і реєструють дані, зібрані в процесі розслідування, наприклад, записи про особу у закладах охорони здоров'я або дані про рух коштів, зафіксованих банками.

У цьому дослідженні розглянуто цивільні та кримінальні реєстри розслідування, які допомагають визначити минулі події або осіб (винних), причетних до цього.

***Ключові слова:*** дослідження, дані, судимість, цивільні реєстри.

***Nyitrai Endre***

***Реєстр расследования***

Работа следственных органов и успешное расследование (выполнение следственных задач) очень зависят от имеющихся данных.

Нашу повседневную жизнь нельзя представить без компьютера. Правоохранительные органы записывают и регистрируют данные,

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собранные в ходе расследования, например, записи о личности в учреждениях здравоохранения или данные о движении средств, зафиксированных банками.

В этом исследовании рассмотрены гражданские и уголовные реестры расследования, которые помогают определить прошлые события или лиц (виновных), причастных к этому.

**Ключевые слова:** исследование, данные, судимость, гражданские реестры.

*Endre Nyitrai*

### ***Raster Investigation***

The work of the investigative bodies and the success of the investigation (the fulfilment of investigative tasks) are hugely influenced by the available data.

Our everyday life would be unimaginable without a computer. Law enforcement authorities record and register data collected during an investigation e.g. individual records of healthcare institutions or cash flow data recorded by account managing banks.

This study discusses the civil<sup>14</sup> and law enforcement registry<sup>15</sup> essential for an investigation, which helps to identify a past event or the persons (culprits) involved in this event.

**Key words:** investigation, data, criminal records, civil registries.

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<sup>14</sup> The civil registry is an archive which is not accessible by an investigative body (i.e. police). The recorded information can be accessed only by an external request.

<sup>15</sup> Law enforcement registry is an archive that is accessible by the members of an investigative body at any time without sending an external request to the creator of the registry.