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ABSTRACTS

ORGANISED CRIME PORTFOLIO: ILLICIT REVENUES AND CRIMINAL INVESTMENTS IN EUROPE

Monica Angelini, Diana Camerini, Luca Giommoni, Cristina Soriani and Priscilla Standridge

This article presents the main findings of the Project OCP — Organised Crime Portfolio. It focuses on the economics of organised crime in Europe by estimating the criminal revenues of illicit markets and by analysing organised crime involvement in the legitimate economy. Furthermore, a qualitative analysis addresses organised crime involvement in different illicit markets and investments in the legal economy. Results show the magnitude and characteristics of the criminal portfolio of both illegal and legal businesses and provide an important contribution to help EU Law Enforcement Agencies (LEAs), Financial Intelligence Units (FIUs) and Asset Recovery Offices (AROs) to reduce the opportunities for criminal infiltration in the legitimate economy. Results also constitute a starting point to develop risk assessment models of crime prevention.

LEADING POLICING IN EUROPE: AN EMPIRICAL STUDY OF POLICE LEADERSHIP

Bryn Caless and Steve Tong

This article summarises empirical research data obtained by the authors from interviewing more than a hundred strategic police leaders in forces across 22 countries in Europe. The authors have categorised the leaders' confidential comments into a series of insightful analyses of police recruitment, selection, promotion and posting, diversity, attitudes to multilateral cooperation and joint operations, views on contemporary

policing problems, including threats from terrorism and transnational organised crime, and incorporate their visions of a future, perhaps dystopian, Europe dominated by cybercrime and public disorder.

INVESTIGATIVE INTERVIEWS WITH CHILDREN

Renata Odeljan, Ksenija Butorac and Andrew Bailey

The aim of this article is to discuss different protocols and good police practices in some Member States by conducting investigative interviews with children. Issues that are enabling police to achieve higher evidential standards in child-abuse investigation/protection, both for victims and witnesses to perceived difficulties in securing witness/victim accounts are also discussed.

THE 'COLLATERAL DAMAGE' OF IRREGULAR MIGRATION IN THE EUROPEAN UNION

Dimitrios Aspasiou

Modern migration has become a timeless and volatile global phenomenon. Migration in Europe, and more specifically the irregular movement of immigrants, is high on the common European agenda, highlighting the importance of the phenomenon for the Member States of the European Union. Individual migration aspects such as the recent migration flows to Europe, national security and the efforts to protect the external borders of the European Union comprise the harsh picture of irregular migration that results in the loss of thousands of lives annually.





THE HUNGARIAN CIVIL SELF-DEFENCE ORGANISATION

Sándor Madai

Creating and maintaining public security and public order is the exclusive right and duty of the central government and in some cases of the local government in EU Member States. In Hungary, the Civil Self-Defence Organisation (*Polgárőrség*) participates in this activity in an organised manner. This study presents the legal standing and special features of this organisation that has some unique features in Europe.

DETECTION AND IDENTIFICATION OF CONTAMINANTS IN FINGERPRINTS USING INFRARED CHEMICAL IMAGING

Ana Rita Ferreira Matos, Carlos Farinha and Tereza Lima

Infrared chemical imaging has been a powerful tool in the study of digital trace evidence, especially in the detection and identification of contaminants present in those traces. After obtaining optimal conditions for collecting images and spectra, in transmission mode and in a barium fluoride window, four known substances – phenobarbital, mirtazepine, caffeine and benzoic acid – were tested and detected as contaminants of fingerprints. The results were satisfactory in all cases. Mirtazepine and phenobarbital, which have a potential forensic interest, were used in a study of fingerprint blind samples in 27 volunteers. No false positives were found. The results confirm that infrared chemical imaging is an efficient technique in the detection and identification of contaminants in digital trace evidence.

EUROPEAN COOPERATION — A COMPARATIVE STUDY OF PORTUGUESE AND FRENCH SCIENTIFIC POLICE LABORATORIES

Marta Beja, Duarte Nuno Vieira, Carlos Farinha and Gisela Rosa

This study was aimed at relating the work done by scientific police (forensic) laboratories with implications on criminal investigation through international cooperation and collaboration in the forensic field. In order to do so, a qualitative

research methodology was adopted, with data obtained from the Scientific Police Laboratory of Lisbon and the National Institute of Scientific Police of Lyon. The results obtained reveal that, although both laboratories use the same techniques and the same instruments for the different forensic assessments, differences found in procedures have a direct impact on criminal investigation.

COLLECTIVE INTELLIGENCE AS AN EFFICIENT TOOL FOR LEARNING

Jean-François Gadeceau

Professional instructors intuitively promote the principle of interaction as one of the keys to effective training for adults. Recent findings in neuroscience are generating new knowledge that can reinforce or adjust educational policy and practice. One key area of neuroscience research shows that some types of adult learning benefit from and require the interaction of others. Recent findings on brain function and collective intelligence are a rational factor to add to the list of reasons why adults learn best through collective and interactive activities. Networking needs to be promoted as it stimulates our individual brains and collective intelligence. Group interaction is important in the learning curve. This article focuses on learning with others and is split into two sections: Why should we care about collective intelligence? And how can we incorporate collective-intelligence learning into training programmes?

E-LEARNING IN POLICE TRAINING — THE CASE OF THE SLOVENIAN POLICE

Borut Rozman

During the reorganisation of the Slovenian Police in 2013, the Police Academy established a new department, the Social Skills and Research Centre. One of its first tasks was to analyse and assess e-learning in the Slovenian Police. This article is a résumé of the analysis and assessment report.





ORGANISED CRIME PORTFOLIO: ILLICIT REVENUES AND CRIMINAL INVESTMENTS IN EUROPE



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Keywords: organised crime; criminal investments; criminal revenues; money laundering; crime prevention; Europe.

Abstract: This article presents the main findings of the Project OCP — Organised Crime Portfolio ⁽¹⁾. It focuses on the economics of organised crime in Europe by estimating the criminal revenues of illicit markets and by analysing organised crime involvement in the legitimate economy. Furthermore, a qualitative analysis addresses organised crime involvement in different illicit markets and investments in the legal economy. Results show the magnitude and characteristics of the criminal portfolio of both illegal and legal businesses and provide an important contribution to help EU Law Enforcement Agencies (LEAs), Financial Intelligence Units (FIUs) and Asset Recovery Offices (AROs) to reduce the opportunities for criminal infiltration in the legitimate economy. The results also constitute a starting point for development of risk assessment models for crime prevention.

INTRODUCTION

Project OCP — Organised Crime Portfolio, was co-funded by the European Commission, DG Home Affairs, and carried out by an international consortium coordinated by the Università Cattolica del Sacro Cuore — Transcrime ⁽²⁾.

The aim of the project was to study the economics of organised crime groups (OCGs) in Europe, focusing on 7 countries (Ireland, Spain, France, Italy, Netherlands, Finland, and the United Kingdom). In particular, Project OCP carried out

a study of: where organised crime proceeds are generated, from which illicit markets (Part 1); where these proceeds are then invested in the legitimate economy, in which regions, assets and business sectors (Part 2); the extent to which these proceeds are confiscated by European authorities (Part 3).

This paper discusses some of the key results of the final report of Project OCP (Savona & Riccardi, 2015), focusing in particular on: 1) estimates of the revenues of the main illicit markets in the European Union; 2) analysis of investments

⁽¹⁾ More information can be obtained at <http://www.ocportfolio.eu/>

⁽²⁾ The eight partners of the project are: Università Cattolica del Sacro Cuore — Transcrime (UCSC — Italy), Universiteit Utrecht (UU — The Netherlands), Universidad Rey Juan Carlos (URJC — Spain), Durham University (UDUR — United Kingdom), Guardia di Finanza (GDF — Italy), Police University College (PCF — Finland), Agence de Gestion et de Recouvrement des Avoirs Saisis et Confisqués (AGRASC — France) and An Garda Síochána — Criminal Assets Bureau (CAB — Ireland). We would like to acknowledge the other authors of the final report of Project OCP (of which this paper constitutes a brief summary): Sarianna Petrell and Jarmo Houtsonen (Police University College, Finland), David Wall and Yulia Chistyakova (Durham University, UK), Jesús Palomo, Jerónimo Márquez, Nuria Ruiz, Pilar Laguna and Marta Chinnici (Universidad Rey Juan Carlos, Spain), Joras Ferwerda and Brigitte Unger (Utrecht University, Netherlands), John Walker (John Walker Crime Trends Analysis), Jeltsje Cusveller, Francesco Calderoni, Marco Dugato, Marina Mancuso, Michele Riccardi, Alexandre Salha and Ernesto U. Savona (Università Cattolica del Sacro Cuore — Transcrime, Italy).



by criminal groups in the legitimate European economy; 3) review of the main criminal actors active in illicit and legal markets in Europe.

AN ESTIMATE OF THE REVENUES OF ILLICIT MARKETS IN EUROPE

Project OCP provides country-level estimates of the annual revenues generated by illicit markets in

Europe. The estimated revenues include (1) new estimates for six selected markets, namely heroin, cocaine, illicit trafficking in firearms (ITF), illicit trade in tobacco products (ITTP), counterfeiting and Missing Trader Intra Community (MTIC) fraud, and (2) a collection of existing estimates on cannabis, amphetamine-type drugs and cargo theft. The estimates of the monetary scale of illicit markets presented in Table 1 refer to the value of the illicit goods and/or services sold at retail level. These revenues are attributable to all the actors involved in these illicit activities, not only to OCGs.

Table 1 — Estimates of the annual revenues of six illicit markets in the EU (million EUR)

EU Member State	Illicit drugs ^a	ITTP	Counterfeiting	MTIC frauds	Cargo theft	ITF	TOTAL ^b
Austria	686	133	1 899	527	1.9		3 246
Belgium	300	130	1 320	755	11.5		2 517
Bulgaria	34	195	244	92	0.03		564
Croatia	111	23					134
Cyprus	20	9	296		0		325
Czech Republic	630	42		645	1.1		1 318
Denmark	192	40	931	390	2.7		1,554
Estonia	52	33	49	46	0.01		180
Finland	227	146	280	430	0.3		1 084
France	3 234	2 083	5 746	4 899	47.7		16 010
Germany	3 520	1 805	8 198	4 090	32.3		17 645
Greece	142	455	1 501	1 484	1.6		3 584
Hungary	211	73	254	562	1.7		1 102
Ireland	806	277	456	168	0.8		1 709
Italy	4 866	546	4 596	5 492	11.4		15 511
Latvia	253	61	53	145	0.5		513
Lithuania	69	80	100	206	0.2		455
Luxembourg	9	3	63	84	1.9		161
Malta	19	9	61	3	0.004		92
Netherlands	535	249	1 986	610	46.8		3 427
Poland	484	601	676	822	1.2		2 583
Portugal	116	25	512	420	0.2		1 073
Romania	47	251	436	1 573	0.3		2 307
Slovakia	191	12	257	421	0.5		882
Slovenia	123	24	183	50	0		379
Spain	3 941	635	3 928	2 310	21.2		10 836
Sweden	148	132	1 706	142	5.8		2 134
United Kingdom	6 072	1 304	4 569	2 962	232.8		15 140
OCP countries	20 163	5 240	21 562	16 872	361.0		64 199
Total EU	27 685	9 373	42 711^c	29 329	424.4	370	109 891

^a This category includes heroin, cocaine, cannabis and amphetamine type drugs.

^b The totals may not sum up due to rounding.

^c This estimate is based on EU 27 aggregated data. Thus, it may include also Czech Republic data, missing at country level.

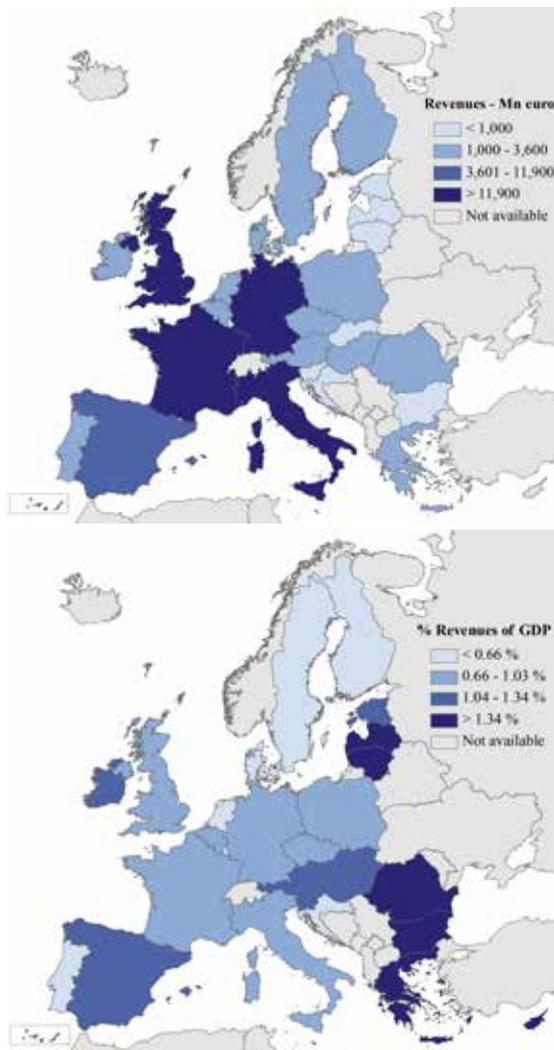
Source: OCP report (Savona & Riccardi, 2015).





At EU level, the magnitude of criminal revenues from illicit markets amounts to approximately EUR 110 billion per year, equivalent to 0.9 % of the GDP of EU-28 MS in 2010 ⁽³⁾. Germany, France, Italy, and the United Kingdom alone account for 58 % of criminal revenues, since they are among the richest and most populated countries in the EU. However, based on the rate of criminal revenues on the GDP, illicit markets appear to be more relevant for the economies of south-eastern Europe and the Baltic countries (Figure 1).

Figure 1 — Estimated annual revenues of illicit markets in European countries. Absolute values (top) and % of GDP (bottom).



Source: OCP report (Savona & Riccardi, 2015).

Illicit drug trafficking is still one of the main sources of income for organised crime groups, despite the emergence of new illegal markets. The trafficking in heroin, cocaine, cannabis, and amphetamine-type drugs alone produces annual revenues amounting to nearly EUR 28 billion in Europe as a whole. In absolute terms, the United Kingdom is by far the biggest market in Europe, followed by Italy, Germany and France. In addition, illicit drugs are the main source of revenue for criminals in Spain, Croatia, Latvia, Ireland, the United Kingdom and Estonia. Heroin, with revenues amounting to EUR 8 billion, is the biggest drug market, followed by cocaine (EUR 6.8 billion) and cannabis (EUR 6.7 billion) (Caulkins, Kilmer, & Graf, 2013). Amphetamine-type drugs have lower values, EUR 2.8 billion for amphetamines and EUR 3.5 billion for ecstasy (Kilmer & Pacula, 2009).

Counterfeiting attracts the interest of OCGs because of the combination of high profits and low risks. The EU is one of the main destinations for counterfeit products. As reported by EU TAXUD (2014), most of the products suspected of infringing intellectual property rights come from China, but many also arrive from Hong Kong, India, the UAE, and North Africa.

Using data from a survey of EU MS citizens on willingness to accept counterfeit products (EUROBAROMETER, 2011) and data on the turnover of licit production, it emerged that the potential demand for counterfeit goods exceeds EUR 42 billion. The biggest markets for counterfeiting in Europe are Germany, Italy, France and the United Kingdom. However, considering criminal proceeds as a percentage of GDP, Austria, Slovenia, Bulgaria, Greece and Sweden also emerge, due to a higher propensity to accept counterfeit products.

The ITTP is a multifaceted phenomenon comprising a vast array of activities, from small-scale to large-scale cigarette smuggling and illicit tobacco manufacturing. This activity offers a very attractive combination of opportunities for criminal groups in terms of high profits and low risks. According to Project OCP estimates, European ITTP revenues amounted to EUR 9.3 billion in 2013, and they accounted for 9 % of all criminal revenues in the EU. In absolute terms, more than 50 % of ITTP proceeds are

⁽³⁾ Reference year of GDP is 2010 because it is the median year of the estimates considered.



concentrated in only 7 countries (Ireland, Spain, France, Italy, Netherlands Finland, and the United Kingdom), amounting to EUR 5.2 billion. However, in eastern European countries, ITTP generates the highest revenues compared to other illicit activities. Indeed, in Bulgaria, Estonia, Croatia, Lithuania and Poland, ITTP revenues range between 17 % and 34 % of national criminal revenues.

MTIC fraud is a common type of VAT fraud carried out within the EU. This fraud concerns cross-border transactions of movable assets imported from one country to another, free of VAT. Then, in the destination country they are sold including VAT, failing to remit it to the Government. MTIC frauds yield around EUR 29 billion per year. Due to the complex nature of this crime, it is likely that it is mainly organised criminals who collect these proceeds. Italy, France and Germany have the highest revenues from MTIC fraud in absolute terms (EUR 14.5 billion). However, according to estimates, MTIC fraud is the most important source of revenue for OCGs in Greece, Lithuania, Hungary, and Slovakia. These are also the countries where MTIC fraud has the highest impact on the GDP.

Firearms trafficking in Europe appears more limited in size, especially if compared to the dimension and the demand for illicit firearms in politically unstable regions of the world. However, Europe is a strategic region for firearms traffickers. Indeed, it is an important hub and source of firearms, firearm parts and ammunition destined for countries outside Europe. Different studies suggest that firearms trafficking may range between 10 % and 20 % of legal firearms production (e.g. UNODC, 2010). According to this calculation, the estimated revenue of ITF in the EU amounts to EUR 370 million.

OCGs also generate revenues from organised property crimes, such as burglaries and thefts of cargo, medicine, vehicles, fuel, metals, art and antiquities. Europol (2009) estimated the revenue of cargo theft in the EU to be EUR 424 million. Unfortunately, no other comprehensive estimates are available for other property crimes at EU level.

THE ANALYSIS OF ORGANISED CRIME INVESTMENTS IN EUROPE

A significant amount of revenue from illicit markets may end up invested in the legitimate European economy. However, it is still unclear what portion of illicit OCG proceeds is available for laundering after covering expenses related to illegal activities (e.g. transportation and storage), purchase of new stock (e.g. drugs and raw materials), salaries and personal living expenses.

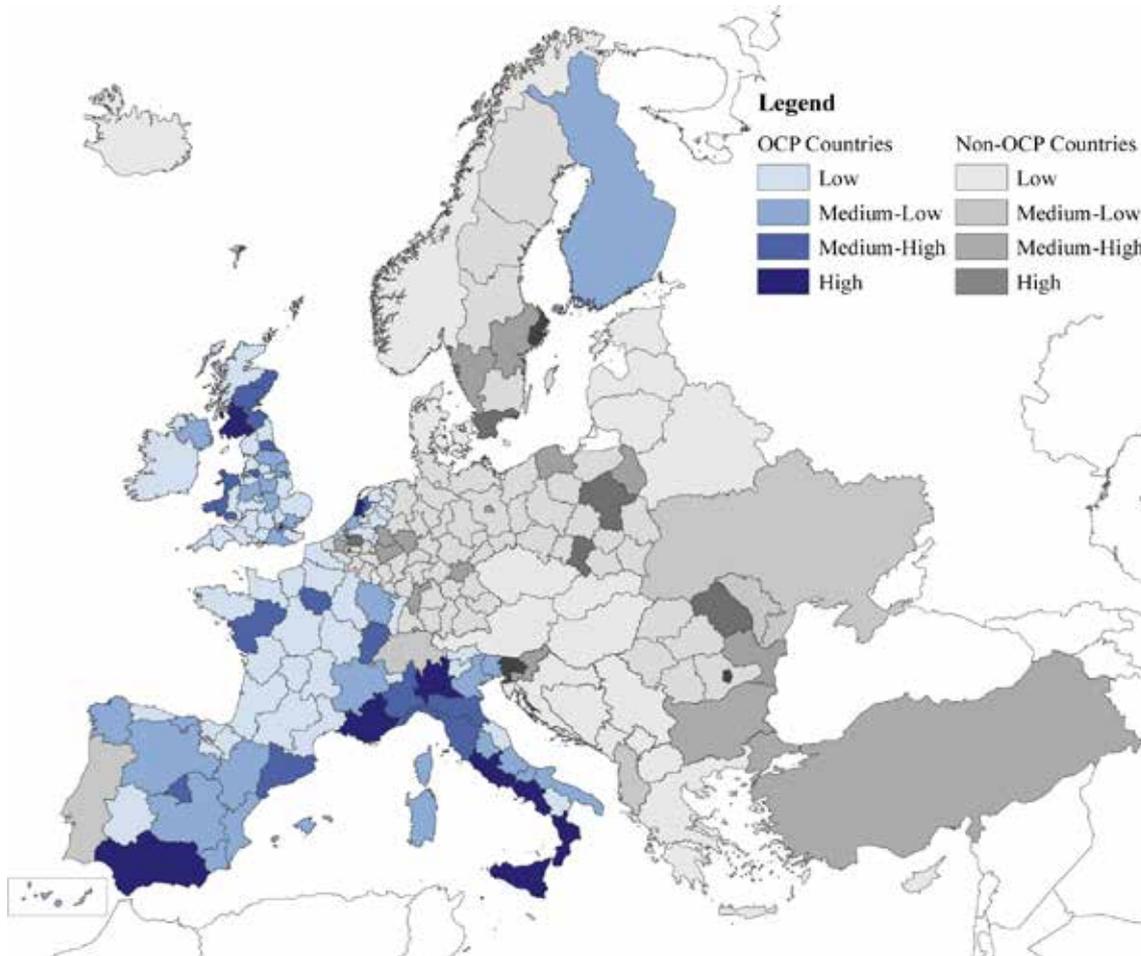
The definition of organised crime investments in Project OCP is any possession and/or acquisition of any type of asset in the legal economy by individuals belonging to a criminal group, acting on its behalf and/or involved in one of the criminal activities previously identified by the project. This definition includes assets targeted to various degrees by freezing and confiscation measures. Data on confiscated assets can provide a basis for the analysis of organised crime investments (Transcrime, 2013). However, due to the lack of available and comparable data on confiscated assets across European countries, the project also collected evidence of organised crime investments in the legal economy from a wide range of other sources (e.g. government and police reports, academic and research institutes studies, and media coverage).

Figure 2 presents a picture of where criminal groups invest in Europe. Criminal investments concentrate mainly in large urban areas (e.g. Madrid, London, Paris and Rome), in tourist or coastal areas (e.g. southern Italy, Côte d'Azur, Murcia and Malaga) and in border regions (e.g. Andalusia, Lombardy and Franche-Comté). The geographical characteristics of the territory facilitate both illegal markets (e.g. fraud or illicit trafficking) as well as money-laundering activities. Thus, it seems that the concentration of criminal investments in these areas could be related to the presence of vulnerabilities that create opportunities for criminal groups to conduct illicit activities (e.g. drug trafficking and money laundering), and then reinvest the illicit proceeds in the legal economy. In addition, infiltration in the legal economy is greater in those areas where criminal groups, to a different extent, exert some influence and power at the local level (e.g. southern Italy, Provence-Alps-Côte d'Azur and Andalusia).





Figure 2 — European regions with evidence of organised crime investments (NUTS 2, percentages of the country total) ⁽⁴⁾.



Source: OCP report (Savona & Riccardi, 2015).

Therefore, the geographical pattern of criminal investments differs according to both the illicit activities and the criminal groups operating in the area. Some criminal groups tend to invest in the territory where they generate illicit funds. Other criminal groups may conduct illegal activities in a certain country, but then invest the illicit proceeds in another, such as their country of origin (e.g. there is evidence that north African groups who are active in the illicit drug trade in troubled areas in France may launder their proceeds in the real-estate sector in north Africa). Furthermore, some European countries attract investments from non-local criminal groups who are not active in illicit activities in that territory (e.g. France has witnessed, among others, investments by Italian Camorra groups and Chinese criminals).

Regarding the drivers of organised crime investments, there are four broad and sometimes overlapping reasons for criminal groups to invest in the legal economy: to facilitate illegal activity, to launder money, to make a profit and to gain prestige and influence.

First of all, investments in the legal economy can be an extension of the illegal activities in which organised crime is already involved. For example, warehouses, vehicles and boats can be used to store and traffic illicit goods. Furthermore, companies involved in transportation, wholesale and retailing of consumer goods and manufacturing can be a cover for illegal operations while conducting some legal business activities as well (e.g. drug operations off the coast of Spain misusing logistics and import-export companies). Bars, restaurants,

⁽⁴⁾ The classes of evidence are identified using Jenks natural breaks optimisation.



clubs and small stores can serve as meeting places and headquarters for illegal operations. Other types of real estate, such as hotels, apartments and private houses, can also facilitate illegal activities (e.g. cases in the United Kingdom of real-estate properties used as brothels or as accommodation for victims of sexual exploitation and human trafficking). These forms of investment seem to be well known to law enforcement agencies targeting organised crime. In fact according to the available data in Ireland, Spain, France, Italy and Finland, consistent portions of confiscated assets are real estate and registered assets, 14.5 % and 23.9 % respectively ⁽⁵⁾.

Money laundering is another important driver of organised crime investments. Large amounts of cash are often a by-product of illegal markets. This is confirmed by the significant weight of cash seizures in most European countries. Certain kinds of investment can facilitate the laundering of large amounts of money. Some sectors, such as real estate, gambling and cash-intensive businesses, can serve as a cover for movements of money. In recent years, there has also been a rise in the use of money service businesses to transfer funds across borders, for example by Chinese criminal groups from Italy to China. Businesses can also be shell companies, which merely 'produce paper' and legitimise financial flows. In this case, transactions between multiple companies registered in multiple countries make the origin of the funds difficult to trace.

Organised crime groups or individuals involved in illicit activities can also make investments in a strictly economic sense (i.e. for profit). The real-estate boom in Spain attracted 'clean' investors as well as criminals, as evidenced by the confiscation of real estate belonging to outlaw motorcycle gangs and British, Chinese, Irish, Italian and Russian OCGs in the popular coastal areas of Andalusia.

Often criminal methods increase the profitability of certain investments. Certain profitable sectors characterised by weak or developing regulation show evidence of crimes such as VAT fraud, fuel laundering and infiltration of public procurement, as seen in the previous part. Examples include oil and gas energy sectors in the United

Kingdom and Ireland, wind farms in southern Italy, types of construction and waste disposal with involvement of public administration and subsidies in France and Italy and the various facets of sport and gambling.

Other cases of investment have a more intangible advantage, in the sense that they are a visible sign of the power of a certain criminal group or individual in a specific area. Houses, cars and other valuable personal items can give prestige to the members of a criminal organisation and therefore the reputation of the group as a whole. These include the villas and luxury cars of Italian *mafiosi* in southern regions of Italy as well as the motorcycles of motorcycle gangs (such as Hell's Angels) in Germany, Finland and other northern European countries. Companies can also allow criminals to turn 'dirty money' into prestige and gain a greater social and political influence. This is highlighted by the case of a Chinese businessman and art collector in Spain accused of being a 'kingpin' of the Chinese mafia and charged with money laundering, tax evasion and forgery.

Despite growing evidence of organised crime investments in businesses, the confiscation of companies is still very rare in the European Union. While Italy alone has confiscated nearly 2 000 companies from mafia groups since 1983, this is still quite exceptional in the rest of Europe. This indicates a clear discrepancy between the known portfolios of organised crime and what is recovered in EU MS through confiscation.

CRIMINAL ACTORS

Both illicit and legitimate markets in Europe include a plurality of criminal actors. The analysis carried out for Project OCP, through a large-scale review of LEA reports, judicial evidence and academic papers, shows that criminal groups in Europe have different structures and internal organisations, ranging from large and well-structured criminal organisations such as Italian mafias and outlaw motorcycle gangs, to loose and flexible criminal groups, such as criminal gangs involved in drug-trafficking or fraud activities in

⁽⁵⁾ The data analysed here refer to statistics of Police Information System — Patja (Finland), Agence de Gestion et de Recouvrement des Avoirs Saisis et Confisqués — AGRASC (France), Criminal Assets Bureau (Ireland), Agenzia Nazionale per l'amministrazione e la destinazione dei beni sequestrati e confiscati alla criminalità organizzata — ANBSC (Italy), Plan Nacional sobre Drogas — PNSD (Spain). For further details see OCP final report (Savona & Riccardi, 2015, p. 249).



the United Kingdom or the Netherlands. It also emerged that some criminal groups are involved in specific illicit activities while others are also active in infiltrating the legal economy.

Criminal actors may be involved in different stages of illicit markets because of certain factors (e.g. territory, structure of the group). Various motives and opportunities to exploit different vulnerabilities influence the infiltration of the legal economy. Thus, the role of OCGs in both illicit and legal activities can take many forms.

Some criminal groups show high evidence of involvement in multiple illicit activities as well as infiltration of the legal economy in a large number of European countries. For example, Chinese OCGs have an important role in drug trafficking, trafficking of human beings, counterfeiting, illegal gambling and extortion racketeering targeting their co-nationals. Indeed, their involvement in the illicit trade of herbal cannabis and amphetamine-type drugs emerged in the Ireland, Italy, Netherlands and the United Kingdom. For smuggling purposes, they misuse transportation and logistics companies to traffic drugs or other illicit goods. There is also evidence that Chinese criminals exploit their co-nationals in the wholesale of clothes or force women into prostitution using massage parlours, bars and restaurants as fronts. They are also important actors in the counterfeiting of goods and digital piracy, where they cooperate with other local criminal groups (e.g. collaboration with Camorra in the counterfeiting industry in Italy). Beside frequent investments in specific legal sectors in Europe, Chinese criminal groups also invest criminal revenues in money transfer businesses, which are also used to send illicit funds to China (as evidenced by some police investigations in Italy).

Much evidence of the involvement of Russian (and Georgian) organised crime groups has been found both in illicit markets and investments in the legal economy, especially for the purpose of money laundering. Although they do not have a key role in illicit drug trafficking, according to the collected cases they play an important part in trafficking of human beings, illicit trade in tobacco products, fraud, firearms trafficking, organised property crime and extortion racketeering. In Spain, there is evidence that the proceeds of Russian criminal groups, for example from extortion, may be laundered through legal companies operating in several sectors including

construction, real estate, restaurants, retail and petrol stations. In Finland, cases of logistics companies and forwarding agencies related to Russian criminals have been connected to fraud and financial crime. Finally, import-export, wholesale trade and transport companies may prove useful for receiving or dispatching illicit or stolen goods from and to eastern Europe. There is also evidence of money laundering by Russian OCGs in the real-estate and hotel sectors.

Other criminal groups have a prominent role in several illicit markets, but there is little evidence of investment in the legal European economy. According to the reviewed literature, there are Turkish, Albanian and African criminal groups in several European countries (including Denmark, Germany, France, Netherlands and the United Kingdom). There are several reasons for this strong presence, including their low social standing in host countries, the immigrant diaspora, strong family ties in these communities and geographical proximity to trafficking routes. They are crucial actors in the supply of heroin in Europe, both as retailers and wholesalers. Albanian and Moroccan criminal groups play an important role as traffickers of cannabis resin in areas bordering their home countries (e.g. Albanian groups in Greece and Italy) and in areas considered entry points to Europe (e.g. Spain, France, Italy and Portugal). Cases of infiltration in the legitimate United Kingdom economy reveal that the investment of proceeds of drug trafficking in hotels and transport (e.g. taxi services) are both functional to as well as fronts for illicit activity. Turkish and Albanian criminals are also engaged in firearms trafficking as suppliers of weapons from the Middle East and the western Balkans. According to the evidence, these groups seem to operate mainly in France, Netherlands, and the United Kingdom, where they may also profit from extortion activities against co-national businesses and individuals. Legal businesses may be instrumental in the smuggling of illicit goods, including weapons and firearm components, or in maintaining territorial control and a cover for other illegal activities such as labour and sexual exploitation. In this regard, there is evidence of several investments in real-estate companies, bars and restaurants (e.g. kebab shops) and immovable assets. However, several sources stress that they may tend to send the illicit proceeds generated in Europe to their countries of origin.





Finally, some criminals have a more limited role in European illicit markets, but show a great propensity to invest in legal companies in specific territories and sectors. Among the Italian mafias, the Cosa Nostra and Camorra are involved in the distribution of heroin at various levels of the supply chain in Italy and France and the 'Ndrangheta seems to maintain a central role in cocaine trafficking in some European countries (e.g. Germany and Spain). Investments by Italian mafias in both Italy and foreign countries serve to facilitate illicit activities such as drug trafficking (e.g. wholesale trade, transportation and import-export companies), and fraud (e.g. petrol stations and renewable energy companies). Moreover, cases of investment in the construction industry and real estate in many European countries highlight the collaboration of Italian mafias with local criminals as well as their capacity to infiltrate the political and administrative sphere. Extortion racketeering and usury, mainly against conationals, provide additional proceeds to launder in the legal economy, both in Italy and abroad. For example in Spain cases of investment can be found in coastal areas (e.g. Andalusia and Galicia) in the real-estate sector but also in the wholesale trade of seafood products and the olive oil sector. In France and the United Kingdom, cases of money laundering by Italian mafias have been found in casinos, hotels and the sports-club sector. There is much evidence that Camorra, 'Ndrangheta and Cosa Nostra OCGs supply and manage VLT gaming machines, also directly infiltrating these businesses. In Italy, Italian mafias cooperate with other criminal groups in the illicit trafficking of firearms, the illicit tobacco trade and counterfeiting. The Camorra is historically involved in counterfeiting, often involving labour exploitation and investments in real-estate and wholesale businesses, especially in Campania, where they produce counterfeit products to export to other European countries. In this sense, wholesale and retail shops may be used both to launder illicit money and to sell fakes along with original goods.

Similarly, there is high evidence of the presence and activity of outlaw motorcycle gangs in the illicit and legitimate economy of Scandinavian countries (e.g. Finland), and less frequently in other European countries (e.g. Germany, Spain and Netherlands), with minor roles in drug trafficking, fraud, financial crimes, illicit firearms trafficking and extortion racketeering. Besides their investments in motorbikes and real estate, there are reports of financial involvement in tattoo

shops and the repair and retail sale of vehicles, supporting their biker criminal subculture. There are also cases of investments in hotels, bars and restaurants, construction companies and private security companies in several European countries (e.g. in Netherlands, Finland, and Sweden).

CONCLUSIONS

This paper provides a brief overview of the main results of Project OCP. It gives a first exploratory analysis of the organised crime portfolio in Europe using innovative methodologies and sources. The use of a transparent and replicable methodology for the estimate of how much criminals earn from illicit activities in European countries, and an analysis of criminal actors involved in various countries, may help practitioners to better understand the dynamics and economics of organised crime. Furthermore, the findings on OCG investments in the legitimate economy may strengthen the knowledge of law-enforcement agencies and enable them to target legal assets belonging to criminal groups.

This paper also highlights the different levels of vulnerability of territories, assets and business sectors across Europe and can be a starting point for future risk-assessment tools to reduce opportunities for criminal infiltration of the legitimate economy and to prevent organised business crime. Follow-ups to this project may help law-enforcement agencies to better identify changes in the behaviour of criminal actors (e.g. investments and concealment strategies), improving the tracing and confiscation of criminal assets.

From a policy perspective, Project OCP shows that data in this field are often scarce, of poor quality and difficult to compare across Europe. An improvement in the collection of statistics on confiscated assets, suspicious transaction reports, financial investigations and financial crimes can help researchers and practitioners to identify priorities and emerging phenomena. In particular, the results highlight the discrepancy between criminal investments and what European authorities confiscate. There is a need to increase the confiscation of companies by improving the tools to identify infiltrated companies (e.g. access to registries and effective IT tools), legal instruments (e.g. use of extended confiscation and third-party confiscation), and





management of assets (e.g. developing policies to preserve companies and jobs).

European institutions and national governments should address these challenges in cooperation

with LEAs, FIUs and AROs. Adopting an opportunity-reduction approach and focusing on high-risk situations may help accomplish these goals using fewer resources and with lower costs for European citizens.

REFERENCES

Caulkins, J. P., Kilmer, B., & Graf, M. (2013). Estimating the size of the EU cannabis market. In: F. Trautmann, B. Kilmer, & P. Turnbull (Eds.), *Further insights into aspects of the illicit EU drugs market*. Retrieved 14/10/2015 from http://ec.europa.eu/justice/anti-drugs/files/eu_market_full.pdf

Eurobarometer. (2011). Internal Market: Awareness, Perceptions and Impacts (Special Eurobarometer No 363). Retrieved 14/10/2015 from http://ec.europa.eu/public_opinion/archives/ebs/ebs_363_en.pdf

Europol. (2009). Cargo theft report: applying the brakes to road cargo crime in Europe. The Hague, Netherlands: European Police Office. Retrieved 14/10/2014 from [https://reportingproject.net/new/REPORTS/Cargo %20Theft %20Report.pdf](https://reportingproject.net/new/REPORTS/Cargo%20Theft%20Report.pdf) also: http://www.esmc.eu/pdf/Cargo_Theft_Report.pdf

EU TAXUD. (2014). Report on EU customs enforcement of intellectual property rights. Results at the EU border 2013. Retrieved 10/02/2015 from http://ec.europa.eu/taxation_customs/resources/documents/customs/customs_controls/counterfeit_piracy/statistics/2014_ipr_statistics_en.pdf

Kilmer, B., & Pacula, R. L. (2009). Estimating the size of the global drug market: A demand-size approach. RAND Europe. Retrieved 14/10/2014 from http://www.rand.org/content/dam/rand/pubs/technical_reports/2009/RAND_TR711.pdf

Savona, E. U., & Riccardi, M. (Eds.). (2015). From illegal markets to legitimate businesses: the portfolio of organised crime in Europe. Final Report of Project OCP — Organised Crime Portfolio.

Transcrime. (2013). Progetto PON Sicurezza 2007-2013. Gli investimenti delle mafie. (Rapporto Linea 1, Deliverable D1.3). Retrieved 14/10/2014 from http://www.investmentioc.it/files/PON-Gli_investimenti_delle_mafie.pdf

UNODC. (2010). The Globalization of Crime. A Transnational Organized Crime Threat Assessment. Retrieved 14/10/2014 from http://www.unodc.org/documents/data-and-analysis/tocta/TOCTA_Report_2010_low_res.pdf





LEADING POLICING IN EUROPE: AN EMPIRICAL STUDY OF POLICE LEADERSHIP (1)



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Keywords: : strategic police leader; selection; promotion; pan-European; accountability; policing.

Abstract: This article summarises the empirical research data obtained by the authors from interviewing more than a hundred strategic police leaders in forces across 22 countries in Europe. The authors have categorised the leaders' confidential comments into a series of insightful analyses of police recruitment, selection, promotion and posting, diversity, attitudes to multilateral cooperation and joint operations, views on contemporary policing problems, including threats from terrorism and transnational organised crime, and incorporates their visions of a future, perhaps dystopian, Europe dominated by cybercrime and public disorder.

EUROPEAN STRATEGIC LEADER RESEARCH

Conducting research across different policing systems inevitably leads to substantial differences and challenges. It is important to acknowledge from the outset that rank equivalence does not properly exist across all police systems in Europe. Rather than specify the rank of those we have interviewed (and the multiple meanings attached to terms like 'Superintendent' or 'Commissioner', which are good examples where the designations can range from describing local, low-level operational control to the highest strategic command), we define a strategic police leader as 'someone having responsibility for the delivery of strategic policing' regardless of nominal or apparently equivalent rank.

In the event, of course, those who deliver strategic policing are at or near the top of their particular policing tree, and they constitute a de facto elite. While we seriously considered using the term 'executive' police officer to describe

the people who deliver strategic policing across Europe, this seemed to us to smack too much of management-speak and, more damagingly, equated policing (a largely public service) too closely with commercial or private industry structures. There are too many loadings and shades of meaning around the generalised word 'chief', especially when used in policing. 'Strategic police leader' is an altogether preferable term for the people we interviewed and, what is more, the phrase has resonance across Europe, whereas 'executive' does not.

This study examines differences in policing structures, given point and context by the selection and appointment of strategic police leaders across Europe, the different ways in which such leaders are developed and promoted, to whom and in what ways they are accountable and their views on that accountability; the different ways in which political and judicial governance of the police are obtained, relationships within policing, within the wider criminal justice systems and within the larger political structure in Europe. Strategic leaders'

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views are elicited on contemporary threats posed by organised crime and terrorism and how they prefer the pragmatism of bilateral cooperation (Guille, 2010b) to the ‘supranational’ multilateral approach favoured by the European Council (Guille, 2010a; Smith 2013) and embodied in organisations like Europol and Eurojust. The leaders’ views on the future of policing, as well as its contemporary challenges, are captured.

European strategic police leaders have hardly been studied at all (Loader, 2002) and there is very little in the way of contemporary ‘pan-European’ empirical data analysis, such as we offer. The data we have gathered enabled us to search for common factors as well as to highlight important differences; one example is a reluctance on the part of strategic police leaders to countenance joint investigative operations with more than three or four other countries — there is certainly nothing in their comments that embraces the strategic political ideal of ‘pan-European’ concerted action (Lorincz, 2013). This in turn suggests a gap between the kind of supra-national policing vision promulgated by EU politicians and the pragmatic determination to get the job done at the operational policing level.

METHODOLOGY

Confidential interviews and questionnaires were conducted with 108 strategic leaders, ranging from the very experienced and long in post, to those recently appointed who will influence European policing for the next 10-15 years. The interviewees came from more than 22 European countries spread across seven specific regions ⁽²⁾.

Participants were accessed through ‘snowball sampling’ techniques, taking advantage of an evolving network of contacts and supporting police organisations. The data were processed by

cross-referencing, and categorised by thematic analysis ⁽³⁾.

The sample size alone does not necessarily reflect the ‘quality’ of those interviewed: many interviewees are at, or close to, the very top of policing in their respective countries and their views represent an insight into how policing is conducted across Europe and what constraints operate on the autonomy of the strategic leaders. By contrast, some of the strategic police leaders are young in both service and age, especially in the emergent post-Soviet countries, where ‘clean skins’ are being preferred to the previous apparatchiks who ran the repressive police states. Democratisation of these forces has entailed a necessary sacrifice of ‘tainted’ experience and length of service to embrace western European policing practices (Pagon, 1996; Marenin & Caparini, 2005; Meško & Dobovšek, 2007).

Numbers of interviewees by region:

Alpine (A)	18
Baltic (Ba)	5
Benelux (B)	11
British Isles (BI)	10
Central Europe (C)	22
Mediterranean (M)	22
Nordic (N)	20
Total	108

RESEARCH FINDINGS

There are a number of observations we can make as a result of the interviews and questionnaires conducted and our analysis of the replies. We emphasise that these are not definitive conclusions but rather indicative findings. Nonetheless, we summarise them here to show that the research has produced ‘rich detail’ of interest.

⁽²⁾ We guaranteed our interviewees complete anonymity and so we do not identify them either by name or by country, lest they are recognised. Instead, we designate them as coming from one of the following regions of Europe: Baltic covering Estonia, Latvia, and Lithuania, Benelux: Belgium, the Netherlands, and Luxembourg, British Isles: England, Wales, Scotland, Northern Ireland, the Isle of Man and the Republic of Ireland, Nordic: Sweden, Norway, Finland, Denmark, Iceland, Alpine: Austria, Switzerland, Liechtenstein, Slovenia, Germany, Central Europe: Poland, Czech Republic, Romania, Slovakia, Hungary, and the Mediterranean covering Portugal, Spain, France, Monaco, Italy, Croatia, Bosnia and Herzegovina, Montenegro, Albania, Greece, Turkey, Cyprus, Malta and the British territory of Gibraltar.

⁽³⁾ A qualitative methodology has been used in this study, dealing with often unsystematic ‘rich detail’ and so standard sampling techniques familiar in quantitative processing were neither applicable nor effective.





SELECTION FOR HIGH OFFICE

Many strategic police leaders are critical of their selection processes, believing them to be opaque and unstructured, whilst others deplore the lack of development in post and beyond. By contrast, some believe that the selection process has become too managerial and that there are too many 'chiefs' for the task. There are a range of experiences drawn on here and the views of some strategic police leaders are expressed in detail. The role of CEPOL (the European Police College) is of importance here, especially the impact of the 'TOPSPOC' training course for strategic police leaders, while the virtues and drawbacks of a standardised chief police officer curriculum for development and learning were considered, as well as national autonomous or bespoke programmes for advancement of potential leaders.

It seems that patronage still plays a prominent part in strategic police leader selection, and there is strong emerging evidence from the testimony from interviewees that the selection system across Europe continues to rely on potential leaders being spotted early and nurtured by existing strategic police leaders. This raises in turn questions about potential for 'cloning' and whether movement between different national systems will ever be practicable, given the persistence of patronage.

The profile of a 'typical' European strategic police leader is of a conservative, fairly well-educated (often to degree level), middle-aged 'pale male' who has risen through the police ranks. He has both uniformed and detective experience and has been tested in a variety of operational postings. The implications of this profile for diversity within policing, for the representation of women and members of ethnic minority communities in the top strategic posts, and for the message that this sends to society as a whole, is analysed in the context of the considerable body of literature on the subject (Punch et al., 2013).

ACCOUNTABILITY

The empirical data gathered suggest that strategic police leaders are wary of anything on a 'pan-European' scale, and many are sceptical of the operational value of 'supra-state' organisations like Europol or EUROJUST. The different jurisdictions and legal structures

suggest that reconciling differences would be a huge task for not much reward, while 'oversight' appears to have variable meanings in the policing context.

Evidence suggests that there is a distinction between old-established political oversight of the police in western Europe, and the more uneasy relationship between police and politicians in emerging states in the Baltic and central European regions (Marenin & Caparini, 2005). In the former, there is a fairly comfortable equation between policing and policy, whilst in the former Soviet countries there is some continuing mistrust and suspicion of political interference. We note evidence from our interviewees that in some instances this has led strategic police leaders into closer relationships with lawyers and judges at the expense of politicians, with implications for criminal justice and the open oversight of the law.

Some strategic police leaders are highly critical of what they see as politicians' expedient interference with policing to score political points, while others are head-shakingly rueful about the influence of politics on the police — especially at the strategic level and through appointed mayors. This extends to pan-European considerations and the reluctance of police across Europe to embrace both political change in policing strategies and concomitant structural change in how that policing is delivered. A 'defensive default' position is widespread.

GENDER AND REPRESENTATION OF MINORITY GROUPS IN POLICING

The data strongly suggest that women and ethnic minorities are under-represented at strategic levels in policing across Europe, but the picture is slowly changing, particularly in north-western European states. Relationships with peers tend to be less fraught and competitive in the rest of Europe than in the United Kingdom, and key relationships tend to be more between strategic police leaders and public prosecutors than between police peer groups. There is evidence to suggest that leaders prefer to develop less-competitive relationships within the criminal justice system and away from their own peer group, which in turn leads us to ask what influences impact most on their formulation of policing strategies.





CHALLENGES TO POLICING

Strategic police leaders are more or less agreed on the three major challenges facing them: terrorism, organised crime and cybercrime, but differ in the methodologies they should use, as well as differing in the second rank of priorities.

There is considerable unanimity about the threats facing Europe in the future; but there are wide variations in the means that strategic police leaders believe that they need to counter those threats. The internationalism of modern policing, and the impossibility that a European police force can exist in isolation from others, has implications both for British police forces — which may be forced by current political initiatives progressively to disengage from European policing mechanisms — and for the newly-joined states in terms of capability, preparedness and cooperation. That said, there is widespread scepticism about the notion of *corpus juris criminalis*, or a pan-European agreed 'top ten' crimes that all states will prosecute with equal vigour. This clearly remains a chimera.

FURTHER RESEARCH AND RECOMMENDATIONS

It is important to note that this research was conceived as the preliminary stage of a proposed larger, deeper, longitudinal study under the auspices of CEPOL, which will extend the empirical study in more detail, covering more topics in greater depth, gathering more comprehensive data through collaborative work by academics and police forces in a number of countries. At present, the way in which this can be done and how it may be funded is still being debated.

We recommend that this is both valuable and necessary research: as police budgets tighten across Europe, as threat assessments change, as policing importance in cyberspace is debated and as the threat from transnational organised crime grows (Mallory, 2014), we need to know what our strategic police leaders are thinking and we need to influence their planning. These are matters far too important to leave to politicians alone. We recommend too that greater collaboration should exist between police forces and university research departments across Europe: we have scratched the surface and hope now that future researchers will go deeper and wider. Above all, the aim is to help our police colleagues, not to threaten them.

REFERENCES

- Guille, L. (2010a). 'The proliferation of parallel tracks in police and judicial cooperation in Europe: the current "chaos"', *Cahiers Politiestudies*, Jaargang 2010-3, nr.16, p.57-74..
- Guille, L., (2010b). 'Police and judicial cooperation in Europe: bilateral versus multilateral cooperation', in Frederic Lemieux, (ed.), (2010), op. cit.
- Lemieux, F., (ed.), (2010). *International Police Cooperation; Emerging issues, theory and practice*, Devon: Willan Publishing.
- Loader, I., (2002). 'Governing European policing: some problems and prospects,' *Policing & Society*, Vol. 12, No 4, pp. 291-305.
- Lorincz, A-L., (2013). 'The European Arrest Warrant as a form of international judicial cooperation in criminal matters in terms of amendments to the Romanian legislation', *European Police Science and Research Bulletin*, Issue 8 — Summer, pp. 33-36; available at <https://www.cepola.europa.eu/index.php?id=893>; accessed 10 October 2013. Now: https://www.cepola.europa.eu/sites/default/files/website/Research_Science/Bulletin/08_EPSR_BULLETIN.pdf
- Mallory, S., (2012). *Understanding Organized Crime*, 2nd edtn., Sudbury, ME: Jones & Bartlett Learning
- Marenin, O., & Caparini, M., (2005). 'Reforming the police in Central and Eastern European states,' In: Fields, Ch.B. & Moore, Jr., R. H.: *Comparative and International Criminal Justice: Traditional and Non-traditional Systems of Law and Control*, Long Grove, Illinois: Waveland Press, pp 216-242.
- Meško, G and Dobovšek, B., (eds.), (2007). *Policing in Emerging Democracies — Critical Reflections*, Ljubljana, Slovenia: University of Maribor.



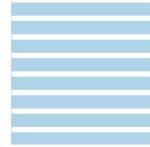


Pagon, M., (ed.), (1996). Policing in Central and Eastern Europe. *Comparing First-hand Knowledge with Experience from the West*. Ljubljana, Slovenia: University of Maribor Press.

Punch, M., van Dijk, A. and Hoogewoning, F., (2013). 'Reflections on Policing and Leadership Development', paper delivered to *The Fourth Annual Conference of the Higher Education Forum for Learning and Development in Policing*, Canterbury Christ Church University, September.

Smith, K. E. (2013). *European Union foreign policy in a changing world*. New York: John Wiley & Sons





INVESTIGATIVE INTERVIEWS WITH CHILDREN



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Keywords: investigative interview; children; ABE model; good practices; victimisation; Croatia; Northern Ireland; European Union.

Abstract: The aim of this article is to discuss different protocols and good police practices in some Member States in conducting investigative interviews with children. Issues that are enabling police to achieve higher evidential standards in child-abuse investigation/protection, both for victims and witnesses to perceived difficulties in securing witness/victim accounts are also discussed.

INTRODUCTION

From a police perspective, all forms of abuse and neglect (physical, emotional, sexual, educational and medical) committed against children are some of the most difficult, traumatic and most complex criminal offences to investigate to perceived difficulties in securing witness/victim accounts. Finkelhor and Omrod (2001) have affirmed that 90 % of child victims of abuse who are under 12 years of age know their abusers. In the US, the Department of Health & Services (2010) found that in 80 % of cases the abuser is a parent; in 38 % of cases the abuser is the mother; in 19 % the father and in 18 % both of them. In the remaining 25 % of cases the abusers were mothers acting in concert with another abuser (an abuser unknown to the victim, a male relative, or the stepfather).

These criminal offences require special investigative strategies and the achievement of justice for the child, through the criminal justice system, relying on data gathered from the child in ways that do not re-victimise the child. A multidisciplinary approach needs to

be applied accordingly. Besides knowledge of developmental psychology and child psychology, and making the child's interests paramount, when conducting investigative interviews with child abuse victims, investigators need to be familiar with the modus operandi of child abusers, the impact of family dynamics and gain insight into factors that will influence the victim's willingness to disclose the crime (Zorić, 2008).

Empirical work and clinical experience in the area of child protection indicate that, to secure the best evidence in a child-friendly way that keeps the child's interests paramount, investigative interviews for criminal (and perhaps civil) hearings should be governed by detailed guidelines or best-practice guides. One of the key considerations is to prevent additional victimisation of children. Multiple interviews and interviews in different institutions by different professionals, perhaps with limited training, are some of the factors that can amount to re-victimisation.

Even though there is a great deal of consensus among experts on the basic principles of an





investigative interview (e.g. the importance of adjusting the interview to the child's cognitive level, highlighting free narrative and use of open questions), it is important to highlight that there is no single best practical technique for conducting investigative interviews in cases of child abuse. There are, however, many techniques and protocols for investigative interviews (Poole and Lamb, 1999; Milne and Bull, 1998; Faller, 1998; Home Office, 1992). Some of these techniques and protocols are multi-disciplinary and allow the best evidence to be captured on video, which is later used as the child's examination-in-chief.

According to the guidance issued by Department of Justice of the Criminal Justice System in Northern Ireland (CJSNI, 2012) entitled 'Achieving Best Evidence in Criminal Proceedings, Guidance on interviewing victims and witnesses, the use of special measure, and the provision of pre-trial therapy', there are three categories of children for which video recording an interview is proposed: children giving evidence in sexual offence cases; children giving evidence in cases involving an offence of violence, abduction or neglect and children giving evidence in all other cases. It is proposed that video-recorded interviews should take place in all categories unless the child objects, and/or there are insurmountable difficulties which prevent the recording taking place (including, for example, that the child has been involved in abuse involving video recording or photography).

In England and Wales, the Memorandum of Good Practice (MOGP) interviewing protocol was introduced in 1992 for use with children under the age of 14 for violent offences and under the age of 17 for sexual offences. This protocol was revised in 2001 and replaced by Achieving Best Evidence (ABE) for use in interviewing children under the age of 17, regardless of the offence involved, and also for interviews with vulnerable or intimidated adults (Home Office, 1992, 2002, 2007).

ACHIEVING BEST EVIDENCE — THE ABE MODEL

Many government services, law enforcement bodies and NGOs have started to provide recommended guidelines. One of the leading organisations in this area is the British Home

Office. Guidance was first issued in 1992 and then revised in 2002 and 2007. The redrafted Memorandum Of Good Practice (MOGP) re-titled and revised, 'Achieving Best Evidence, N.I.{2011}' (ABE), provides specific guidelines for a video recording of investigative interviews by police and social workers that can be used in criminal and civil proceedings in the United Kingdom.

The ABE Model is a four stage, step-wise, cognitive interview model designed to be child friendly, evidentially sound and is designed to replace the child's examination-in-chief (the witness's account for the prosecution).

The elements of the model include:

- Interviews should be conducted as soon as possible, if possible straight after receiving the accusations of abuse.
- Interviews should be done in an informal environment with an interviewer who is trained for conducting investigative interviews with children.
- Children should be able to tell everything that has happened before the questioning phase starts.
- Interviews should be conducted in phases, starting with open questions. Specific questions should be used at the end of the interview.
- The duration of the interview shouldn't be longer than one hour.

The interview has four phases:

- establishing rapport;
- asking for free narrative recall;
- asking questions; and
- closure.

The Department of Justice of the Criminal Justice System in Northern Ireland (CJSNI, 2012) has supported and accepted the suggestions of the Memorandum of Good Practice and, in May 2011, created the guidance entitled 'Achieving Best Evidence in Criminal Proceedings, Guidance on interviewing victims and witnesses, the use



of special measures, and the provision of pre-trial therapy'. The guidance was based on the equivalent guidance in England and Wales, with some slight amendments in the underpinning legislation to reflect the legal system in Northern Ireland.

The four phases are compatible with and underpin the PEACE (or ethical interview) model (Planning and Preparation; Engage and Explain; Account, Clarification and Challenge; Closure; Evaluation) interview framework advocated by the Association of Chief Police Officers (ACPO). In fact, the ABE model is also known as the modified PEACE Model. While PEACE is designed for use with suspect and witness interviews, the ABE model specifically takes account of the needs of a child or vulnerable witness, including child abuse victims.

The phased approach acknowledges that all interviews contain a social as well as a cognitive element. As regards the social element, witnesses, especially the young and the vulnerable, will only divulge information to people with whom they feel at ease and whom they trust. Therefore, the first phase of any interview involves establishing rapport with the witness, and the final or closure phase requires the interviewer to try to ensure that the witness leaves the interview feeling that they have been given the fullest opportunity to be heard.

As regards the cognitive element, the phased interview attempts to elicit evidence from the witness in a manner that is compatible with what is known about the way human memory operates and the way it develops through childhood. A variety of interviewing techniques are deployed, proceeding from free narrative to open and then specific-closed questions, from which a hierarchy of reliability of the information is obtained. The technique is designed to ensure that, as far as possible, witnesses of all ages provide their own account, rather than the interviewer putting suggestions to them with which they are invited to agree. The techniques of the phased interview are not those of casual conversation: they must be learned and then practiced to ensure that they are applied consistently and correctly (Achieving Best Evidence in Criminal Proceedings, 2012). Typically, police officers and social workers, who have knowledge or experience of child protection laws, child development, inter-agency working and previous PEACE model training, can be sufficiently up-skilled in a seven-day training course.

EVIDENCE-BASED PRACTICE IN OTHER EU COUNTRIES

In most Member States, the police have the power to interview a child as a witness. In the Federal Republic of Germany and in some police services of federal states there are specialised units that are specially trained and which conduct video-recorded investigative interviews of children (which can be used, if needed, in court proceedings later on). Interviews in the above-mentioned federal states are conducted by staff from centralised units (first as short screening interview in conjunction with other first actions, while proper investigative interviews are conducted by a specially trained team, video recorded if needed). These specialised teams for investigative interviews with children started working in the federal state of Schleswig-Holstein and have achieved a high level of quality based on the Dutch police model of experience, which also achieved very good results (Odeljan, 2012).

EFFECTIVENESS OF ABE INTERVIEWS IN NORTHERN IRELAND

The Royal Ulster Constabulary G. C. and the new police service, established after the peace agreement and terrorist ceasefires, the Police Service of Northern Ireland, were quick to take up the new models promulgated by the MOG and ABE. Child abuse detectives and social workers investigate child abuse cases as a joint team and generally conduct joint interviews with each other under the ABE Model.

The idea that only a video interview with the child, recorded by specially trained staff, could subsequently replace the child's oral testimony in court was at the heart of both practice and policy development. Training was rolled out across the districts to over 60 detectives, senior detectives and prosecutors who were generally pleased with the resulting interviews and the evidence.

The use of ABE interviews is only one element of a raft of special measures for vulnerable victims (The Criminal Evidence (NI) Order 1999). These measures include screening of participants in the trial, removal of wigs and gowns and giving evidence via an intermediary. There were,





however, some challenges facing the police and Health and Social Service Trusts when it came to ABE interviewing and these fall into at least three categories.

First, it became obvious that some detectives were not ideally suited or indeed competent to undertake some of the very difficult cases that arose. Those officers selected for deployment in this area of work are made aware of the necessity to meet national police occupational standards in this area, and indeed that their work will be closely monitored and quality assured by trained supervisory detectives. Only a very small number of investigators will struggle with this type of interview, but the implications for the police service and prosecuting authorities include the need for proper human resources department policies to manage any staffing and/or developmental implications. For the state prosecution service, they needed to think through the implications for pre-trial disclosure of any ABE interviews deemed to be or open to challenge on the basis of breaches of the model or perhaps questions that might be claimed to be leading.

Second, as confirmed by the National Society for the Prevention of Cruelty to Children (NSPCC, 2009), there have always been question marks over the audio-visual quality of reproduction. In particular, the sound on the recording has sometimes been below standard and this ultimately allows the defence to argue that the child should make a live appearance at court to give evidence-in-chief rather than relying upon the video (although the child can still use the live court video link). With the replacement of analogue equipment with DVD and other digital equipment and investment, these issues should be a thing of the past.

Third, the NSPCC points to problems indicated by some of the figures connected with the use of special measures and the outcomes in court, including how often the video interview is successfully used as the child's examination in chief. In a four-year period up to 2009, there were 281 cases in Northern Ireland where the prosecution service applied for video interview evidence to be admitted and 11 were refused. Out of the remainder, 106 videos were actually used as the child's evidence (NSPCC 2009). The figure of only 106 being actually used is not surprising as some of the cases will turn out to be a guilty plea and, in some other cases, the child witness

may express a wish to make a live appearance in court to participate and see justice done. In fact, out of the 446 cases examined in this period by the NSPCC, only 33 were not-guilty findings (39 were withdrawn and 52 were ongoing). From a prosecution point of view, senior officers from the police and indeed the Public Prosecution Service appear to take the view that a good ABE interview, even with a younger child, can be very powerful evidence that may in fact persuade some defendants to proffer guilty pleas.

Turning away from the hard facts and figures, one of the main advantages of the ABE model, if administered as per the UK system, is that generally the child will only be interviewed once and this reduces the trauma (and other problems such as memory retrieval errors) of repeated interviews. In addition, the interviews can be conducted jointly by a police officer and a social worker who have trained together and work in joint investigative teams. This means that the interview can be used to address both criminal and civil issues, as evidence can be used for both criminal justice and family/domestic proceedings. Both the police and health/social welfare departments accept the golden rules in this area of work, namely the child's welfare is paramount, participating in a contested trial may not be in the child's best interests and that child protection is much wider than mere criminal prosecution.

Obtaining a fresh or early video account by trained and experienced police or social-work interviewers working jointly on child protection, and this subsequently being used as the child's evidence-in-chief after one rather than repeated interviews, is a very good way of helping those child-abuse victims who want to get access to justice to do so.

INVESTIGATIVE INTERVIEWS WITH CHILDREN IN CROATIA

Being aware that the position of a child witness in a police station in Croatia can be improved, the Ministry of Interior (Department of Juvenile Delinquency and Criminal Offences Committed against Youth and Family) applied for pre-accession help from the European Commission IPA 2009.





A twinning project entitled 'Capacity Building in the Field of Fight against Sexual Exploitation and Sexual Abuse of Children and on Police Assistance to Vulnerable Crime Victims' started in September 2011 and went on for 21 months, conducted by Northern Ireland Co-operation Overseas — NICO (United Kingdom of Great Britain and Northern Ireland), with the help of the Police Service of Northern Ireland (PSNI). During the project, a special emphasis was placed on training for investigative interviews of child victims of the most serious criminal offences by implementing the ABE (Achieving Best Evidence) methodology.

70 police officers and a smaller number of social workers were trained. Four police officers gained a certificate for delivering ABE training. The content of the training was based on ABE guidance and the UK model for interviewing victims and witnesses, the use of special measures, and the provision of pre-trial therapy (Achieving Best Evidence in Criminal Proceedings, 2012). The level of skills and knowledge achieved by the Croatian police officers was highly praised by the EU Resident Twinning Adviser and by experts from the UK.

The education of specialised police officers and the provision of appropriate technical equipment and child-abuse interview rooms at police stations were all aimed at ensuring timely and high-quality gathering of evidence by police officers. This should enable police who interview children as witnesses to reduce secondary victimisation and to implement the EU directive (2011/92/EU) on combating sexual abuse and sexual exploitation of children and child pornography. Article 20 (3) (c) states: 'interviews with the child victim are carried out by or through professionals trained for this purpose', and implements the Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse (2007), Article 35 (a-f).

Now there is a plan to implement research on the effectiveness of the aforementioned training in order to be able to create a tool to assess interview practice under the model concerned. In addition to evaluation of interview practice, the research will be used to assess the quality of evidence obtained and the out-workings of the interview model in criminal and other proceedings. The sample of police officers trained in ABE in 2012 will be used to evaluate practice and qualitative analysis, including cases conducted by police officers previously trained in ABE interviewing.

PROBLEMS IN IMPLEMENTING THE ABE METHODOLOGY IN OTHER EUROPEAN COUNTRIES

As Themeli and Panagiotaki (2013) pointed out, although there is plenty of research in the area of child abuse in Europe, there is little evidence concerning secondary victimisation surrounding preliminary stages of any investigation such as investigative police interviewing.

Unfortunately even today — despite the scientific community — children are frequently considered to be 'second-class' witnesses (Davies and Noon, 1991), as their credibility and their mnemonic ability are rigorously questioned. These are obviously out-dated views that worsen the condition of children and obstruct the detection of the truth or securing the best evidence.

It is clear that the main problems associated with the initial stages of the police or state prosecutor's investigations are connected with staff that have prejudicial or stereotypical views of the capacity and truthfulness of the child witness. Turning to the interview model, Davies, Wilson, Mitchell and Milsom (1995), point out that in their research in the UK only 30 % of the interviews followed the model generally and 28 % had no free narrative phase.

Similarly, Westcott and Kynan (2006) found that 88 % of the cases commenced with utility questions rather than rapport and 30 % of the interviewers jumped too quickly to specific questions rather than allowing or facilitating free-narrative accounts. This nervousness about the free-narrative phase by the interviewers is indicative of a lack of experience from staff in the early stages of their investigative interviewing career. Certainly, these problems with rapport and the free-narrative stage were seen in Northern Ireland when the model was first introduced and it places responsibility on senior staff to assure quality practice and training/selection.

PROBLEMS IN IMPLEMENTING THE ABE METHODOLOGY IN CROATIA

While police have been building up capacities in the fight against sexual abuse of children, the





Ministry of Justice in Croatia has been working on a new Juvenile Courts Act ⁽¹⁾. Police and EU experts were convinced that legislators will accept the EU best practice and the appropriate skill levels achieved by specialist police officers from the Criminal Police Directorate in the area of legislation on children and juveniles protection by criminal law. There was a hope that the Government would allow police officers to interview children or juveniles as witnesses, but instead, new provisions allowed state attorneys to conduct the interview within three days after a report of child abuse and to submit the case to an investigative judge giving suggestions for an evidential hearing of the child as a witness.

This legal solution, especially in situations where time is precious, presents an insurmountable problem (interviewing children and juveniles of foreign citizens, interviewing children or juveniles that have to give information to the police of a personal description or revealing the identity of participants of criminal offences urgently). A video interview with a child is first conducted according to the Police Duties and Powers Act ⁽²⁾, and then the child or juvenile gives one more account in an evidential hearing to an investigative judge. That procedure implies that at least two accounts are to be given by the child. If police were empowered to conduct investigative interviews of children, then a child or a juvenile would be interviewed only once as a witness and the results of interviews would be used accordingly as evidence in criminal proceedings in the form of an official record/video.

Hence, in order to gain information and evidence of criminal offences committed against children, the police is supposed to carry out an informal and inadmissible interview with the child. Information gained is then used to perform formal actions such as crime scene investigation, searches etc. In stark contrast, if the victim is an adult, all actions, including the police interview, are evidential. Regulations from the Juvenile Courts Act (2011) partially allow police to investigate when a report of a criminal offence is made, but there is a danger that the law is being misinterpreted. It remains unclear if the police must, after receiving a report of a criminal offence, stop the inquiry and wait for the state

attorney or judge to conduct an evidential interview with the witness/victim, and then proceed under directions of the state attorney or lawyer; or if the police can proceed with what they would naturally aim to do, to get a detailed account from the victim by interview. Likewise, if the offender is known, it is not clear if the police should arrest the offender immediately or defer the procedure to the state attorney. There are obvious public protection and safety implications for leaving a dangerous sex offender in circulation for any longer than necessary.

At the moment specialised police officers (when getting a report of a criminal offence) conduct an informational interview with the child abuse victim by using the ABE method in order to determine which criminal offence has been committed, where, by whom, and where they might locate forensic evidence and other evidence. Without these crucial fast-track actions and the information needed to formulate an investigative strategy, it is impossible to conduct a proper, timely and human-rights compliant criminal investigation. Furthermore, the situation is also vague for parents and children who come to report child abuse, and in particular they often struggle to accept why the account given to a police officer is not used as evidence. It is well known among professionals that interviews with the victim should be kept to a minimum because repeated interviews can cause multiple traumatic events. Ultimately, trauma can impact upon a person's ability to give coherent oral evidence.

CONCLUSION

It can be concluded that some European Member States, particularly the United Kingdom, achieved high standards in the interviewing of child victims and witnesses of crime, but with certain problems that can be successfully eliminated through ongoing training and evaluation. On the other hand, Croatia, with its legislative provisions, requires additional efforts in inter-agency training and a change of consciousness of experts, in order to give more protection to the rights and interests of children, whose rights must take precedence over all other rights.

⁽¹⁾ Juvenile Courts Act, Croatian Official Gazette, No 84/11.

⁽²⁾ Police Duties and Powers Act, Croatian Official Gazette, No 76/09.





REFERENCES

- Bilić, V., Buljan Flande, G., Hrpka, H. (2012). Violence against and among children. Jastrebarsko: Publisher Slap.
- Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse, Council of Europe, CETS No: 201, retrieved from http://www.coe.int/t/dghl/standardsetting/children/default_en.asp
- Criminal Code, Croatian Official Gazette No 152/08, 76/09, 80/11.
- Davies, G. M., Noon, E. (1991). An evaluation of the live link for child witnesses. London, England: Home Office.
- Davies, G., Wilson, C., Mitchell, R., Milsom, J. (1995). Videotaping Children's Evidence: An Evaluation, Home Office London.
- Department of Justice (2011). Achieving Best Evidence in Criminal Proceedings. Guidance on interviewing victims and witnesses, the use of special measure, and the provision of pre-trial therapy. Northern Ireland: Criminal Justice System Northern Ireland (CJSNI).
- EU directive on combating sexual abuse and sexual exploitation of children and child pornography. EU directive (2011/92).
- Faller, K.C. (1998). Interviewing for child sexual abuse: A forensic guide, New York, The Guilford Press.
- Finkelhor, D., Ormrod, D. (2001). Offenders Incarcerated for Crimes Against Juveniles. Juvenile Justice Bulletin, 191028, 1-12.
- Home Office. (1992). Memorandum of Good Practice. London: HMSO.
- Home Office. (2002). Achieving best evidence in criminal proceedings: Guidance on interviewing victims and witnesses and using special measures. London: HMSO.
- Home Office. (2007). Achieving best evidence in criminal proceedings: Guidance on interviewing victims and witnesses and using special measures. London: HMSO.
- Juvenile Courts Act, Croatian Official Gazette No 84/11.
- Milne, R., Bull, R. (1999). Investigative Interviewing, Psychology and Practice. England: John Wiley & Sons, Ltd.
- National Society for the Prevention of Cruelty to Children (2009). 'Special Measures: Pre-Policy Consultation NSPCC response', retrieved from <https://www.nspcc.org.uk/Inform/policyandpublicaffairs/northernireland/consultations/SpecialMeasureswdf65613.pdf>
- Odeljan, R. (2012). Access to children — police perspective. Zagreb, Croatia. In: Proceeding of the symposium of the Ombudsman for Children, 33-43. Police Officers Code of Conduct, Croatian Official Gazette No 89/10.
- Police Duties and Powers Act, Croatian Official Gazette No 76/09.
- Poole, D.A., Lamb, M.E. (1998). Investigative Interviews of Children. Washington: American Psychological Association.
- The Criminal Evidence, Northern Ireland Order. No 2879 (N.I.8), 1999.
- Themeli, O., Panagiotaki, M. (2013). Forensic Interviews With Children Victims of Sexual Abuse: The Role of the Counselling Psychologist, retrieved from <http://ejcop.psychopen.eu/article/download/17/pdf>
- USDHHS (U.S. Department of Health & Services) (2010). Child Abuse and Neglect Fatalities, retrieved from <https://www.childwelfare.gov/pubs/factsheets/fatality.pdf>
- Westcott, H.L., Kynan, S. (2006). Interviewer practice in investigative interviews for suspected child sexual abuse. Psychology, Crime and Law 12 (4) at p367-382.
- Zorić, J. (2008). Forensic Interview with the child. Zagreb: Croatian Psychological Society, Section of Forensic Psychology.



THE 'COLLATERAL DAMAGE' OF IRREGULAR MIGRATION IN THE EUROPEAN UNION



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Keywords: irregular migration; security; external borders; European Union.

Abstract: Modern migration has become a timeless and volatile global phenomenon. Migration in Europe and more specifically the irregular movement of immigrants is high on the common European agenda, highlighting the importance of the phenomenon for the Member States of the European Union. Individual migration aspects such as the recent migration flows to Europe, national security and the efforts to protect the external borders of the European Union comprise the harsh picture of irregular migration that results in the loss of thousands of lives annually.

INTRODUCTION

Modern immigration has become a dominant topic of interest in the scientific community because it constantly acquires new features, which require timely and thorough scientific study. One very important but poorly studied aspect of the migration phenomenon deals with the human casualties caused during the migration process. Death of immigrants as a result of their efforts to reach the 'promised land' is one aspect of the phenomenon that shows how the general framework within modern movement of populations evolves and highlights the risks posed by irregular border crossing.

Behind every immigrant that manages to enter a new country of destination, there are hundreds of others that were not able to see their dream become reality due to apprehension by law authorities or even the loss of their lives during their effort to enter the destination country and avoid police arrest. The importance of involvement with this admittedly ghoulish issue of human losses, as a result of irregular migration, mainly arises within the overall dipole, which on the one hand requires the adoption and implementation of strict rules on the movement of people by modern states and on the other hand the need to efficiently manage the migration flows triggered by political, economic, cultural or geopolitical reasons.

MODERN MIGRATION FLOWS

Europe is one of the main geographic areas significantly affected by changes brought about by the evolution of migratory flows in the last decade. Member states of the European Union became basic migration destinations for underdeveloped Balkan, African and Asian countries, giving rise to serious problems, due to the regular but mainly irregular migration flows that they were forced to manage.

This new migration environment accelerated the process for the adoption and implementation of common rules for the management of the situation, while upgrading the degree of cooperation between all Member States. Management problems that modern migration flows continue to cause since then are high on the political agenda of the Member States of the European Union, in order to deal with the impacts of massive population movement. One of the most important aspects of the migration process and its consequences, for both the migrants and the internal security of the European countries, is irregular migration. The imperative need to address irregular migration is due to the size of recent migration flows and the individual characteristics of those that may variously affect host and residence states.





The acknowledgement that immigration and especially irregular movements cannot be solved unilaterally, but require solutions at a supra-national level, soon became accepted by all Member States of the European Union and all efforts took serious notice of this fact, challenging their coherent cooperation (Bauer, Lofstrom, & Zimmermann, 2000; Geddes, 2003).

IMMIGRATION AND SECURITY IN THE EUROPEAN UNION

Until recently, migration was mainly studied in the social and economic sciences, because the effects at the socio-economic level were particularly pronounced for the majority of European citizens. The fatal terrorist attacks of 9/11 radically changed the existing environment of freedom and security, bringing forth a different dimension to the migration phenomenon that was not widely known until recently. Changes caused by the above-mentioned terrorist attack across the world led to the study of migration flows in a completely different light, that of national security and sovereignty.

Changes in the 20th century and especially wars and radical ideological orientations considerably transformed the image of the known world and as a result many groups of people were forced to abandon their homeland and seek refuge in another country. Some of the foreign immigrants, due to their particular political, religious or cultural beliefs, could become a threat to national security and these threats should be addressed at all costs (Koser, 2005).

It was widely understood that among people who migrate seeking asylum, and use the legally protected characterisation of refugee, there may be individuals who act fraudulently by effectively hiding their real identity and act under a regime of complete secrecy, repeatedly performing unlawful actions. For these reasons, the modus operandi of the competent authorities for the protection of national sovereignty and security had to be adapted to the new asymmetric threats imposed by globalisation (Moses & Letnes, 2004).

IRREGULAR MIGRATION TRENDS IN EUROPE

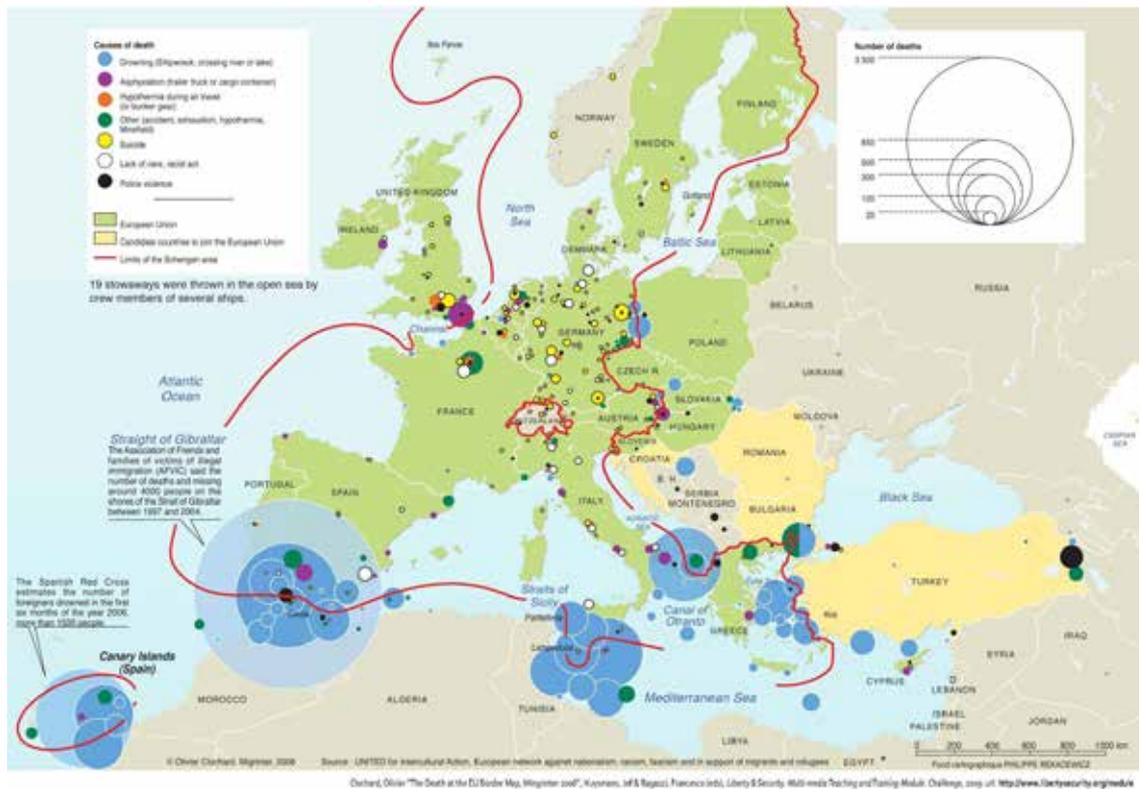
The main objective of the European Union, and more specifically the Schengen Agreement, was the creation of an area, geographically defined by the individual Member State's territory, which would be characterised by the absence of internal border controls (Kunz & Leinonen, 2007). The abolition of internal border controls and the strengthening of external border controls led to harsh consequences for both the States, which were forced to spend very large amounts of money and human resources, and for migrants themselves, because a large number of them died when trying to enter a country irregularly and avoid detection by the law enforcement authorities. An example of the numbers of lives lost during the migration process is the fact that every day an immigrant dies at the borders of the United States of America and Mexico because of hypothermia, physical exhaustion or drowning (Pecoud & De Guchteneire, 2007).

Evaluating the data collected by the organisation UNITED for Intercultural Action, which is a European network of non-governmental organisations and other actors with the main object of combatting the phenomena of nationalism, racism, fascism against migrants and refugees, it is understood that thousands of immigrants fail to arrive safely in Europe (UNITED for Interculture Action). Based upon an investigation that resulted in gathering data from 1993 until the end of 2012, there were 17 306 deaths of migrants recorded in Europe alone. The majority of these fatal incidents (11 000 deaths) were caused by the immigrant's efforts to enter European territory. More specifically nearly 10 000 migrants were drowned, as a result of weather conditions or through the inefficient means of transport used for crossing the European border (UNITED for Intercultural Action, 2012).

The majority of migrant deaths were observed in the southern part of Europe, proving that this specific geographical area is the main gateway for immigrants. Greece, Italy, Spain and Portugal are the countries with the highest number of fatal incidents (Figure 1) but it is worth mentioning that despite the fact that most deaths were recorded in southern Europe, fatal incidents occurred in almost all European countries.



Figure 1 — Map Representing Immigrant Deaths per Thousand at European Borders.



Source: Chochard, 2009.

The life-threatening efforts of immigrants to bypass border controls drives many of them to find particularly dangerous ways to cross the external European borders, in many cases resulting in their death (Manach, 2011).

CONCLUSION

It is commonly accepted that the number of irregular immigrants tends to increase rather

than decrease over time. This trend should be seriously taken into account by all European Member States and for that reason specific policies should be promoted targeting reduction in the number of irregular immigrants. The liberal principles and human rights that characterise modern European states should be guaranteed and protected at any cost and any measures for tightening controls at external border crossing points should not impose serious consequences to the lives of individual immigrants.

REFERENCES

Bauer, T., Lofstrom, M., & Zimmermann, K. F. (2000). *Immigration Policy, Assimilation of Immigrants, and Natives' Sentiments Towards Immigrants: Evidence from 12 OECD Countries*. Mobility and Flexibility of Labor Markets. Institute for the Study of Labor (IZA).

Chochard, O. (2009). *The Death at the EU Border Map, Mingrinter 2006*. (J. Huysmans, & F. Ragazzi, Eds.) Retrieved 10 February 2014, from Liberty & Security. Multi-media Teaching and Training Module: <http://www.libertysecurity.org/module>

Geddes, A. (2003). *The Politics of Migration and Immigration in Europe*. London: Sage Publications.



Koser, K. (2005). *Irregular Migration, State Security and Human Security*. Global Commission on International Migration (GCIM).

Kunz, J., & Leinonen, M. (2007). Europe Without Borders: Rhetoric, Reality or Utopia? In A. Pecoud, & P. De Guchteneire (Eds.), *Migration Without Borders. Essays on the Free Movement of People* (pp. 137-160). New York: Unesco Publishing/Berghahn Books.

Manach, J. M. (2011, March 4). *Fortress Europe: A Deadly Exodus*. Retrieved 10 February 2014, from OWNI.eu (Object Web non Identifié): <http://ownieu.6x9.fr/2011/03/04/app-fortress-europe-a-deadly-exodus/index.html>

Moses, J. W., & Letnes, B. (2004). The Economic Costs to International Labor Restrictions: Revisiting the Empirical Discussion. *World Development*, 32 (10).

Pecoud, A., & De Guchteneire, P. (2007). Introduction: The Migration Without Borders Scenario. In A. Pecoud, & P. De Guchteneire (Eds.), *Migration Without Borders. Essays on the Free Movement of People* (pp. 1-30). New York: Unesco Publishing/Berghahn Books.

UNITED for Intercultural Action. (2012, November 01). *The Fatal Realities of Fortress Europe*. Retrived 15 February 2014, from UNITED for Intercultural Action. *European Network Against Nationalism, Racism, Fasism and in Support of Migrants and Refugees*: <http://www.unitedagainstracism.org/campaigns/the-fatal-realities-of-fortress-europe/>.



THE HUNGARIAN CIVIL SELF-DEFENCE ORGANISATION (1)



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Keywords: civil self-defence; public security; crime prevention; Hungary.

Abstract: Creating and maintaining public security and public order is the exclusive right and duty of central government and in some cases of local government in European Member States. In Hungary, the Civil Self-Defence Organisation (*Polgárőrség*) participates in this activity in an organised manner. This study presents the legal standing and special features of this organisation that has some unique features in Europe.

INTRODUCTION

Creating and maintaining public security and public order is the exclusive right and duty of central government and in some cases of local government in every European state. The voluntary participation and cooperation of citizens in this task is a goal that is acknowledged and supported by central government, but the Hungarian central government is also entitled to determine the conditions and limits of this participation (2).

It can be stated without any doubt that within the framework of civilian security activities, the Civil Self-Defence Organisation has a special significance in Hungary. However, it has to be borne in mind that the Civil Self-Defence Organisation is unique in Europe, a truly unique Hungarian institution (a so-called *Hungaricum*), as there is no other country in Europe where similar organisations operate.

The Civil Self-Defence Organisation started its operations in Hungary in 1990. The first associations came into existence as a movement supported by the government. The local units had formed county-wide associations by 1992 and then set up a nationwide association. The national governing body strived to keep the local Civil Self-Defence associations separate from the police, operating as an independent, civilian initiative.

Taking into consideration the support for the organisation, the Home Office and the police accepted the changes to the organisation. This process was accepted and supported by the local population. The social recognition of these activities is also indicated by the fact that a law was enacted in relation to the Civil Self-Defence Organisation that is unique among European countries.

(1) This paper was prepared in the framework of the project 'Területi közszolgáltatások szabályozásai' [Regulatory Tools for Local Public Services] implemented by the 'MTA- DE Public Service Research Group' of the Hungarian Academy of Sciences and the Faculty of Law at the University of Debrecen.

(2) Of course this is not a new idea. See e.g. Greenberg, Martin Alan: *Auxiliary police: the citizen's approach to public safety*, Greenwood Press, 1984.



REGULATIONS IN FORCE

The existing regulations include not only the rules for the activities of the volunteers of the Civil Self-Defence Organisation but also the rules for their organisation and operation. The primary aim of the regulation of the legal standing, organisation and activities of the Civil Self-Defence Organisation is to motivate in a more efficient way the operation of this voluntary civilian organisation, that plays a significant role in the fields of crime prevention, personal safety and property protection and to facilitate the cooperation of these organisations with the police, local government, security forces and the general population. Furthermore, it aims to ensure that the organisation receives adequate central government support ⁽³⁾.

First of all it is important to emphasise that the volunteers participate in the maintenance of local public order and security — but this is also true for other self-defence groups operating in other European countries — this being an exclusive central or local government task, the latter being the case in countries with local government police ⁽⁴⁾.

A volunteer must be a person above 18 with legal capacity and with a clean criminal record who voluntarily undertakes service for the Civil Self-Defence Organisation in writing and acknowledges that the service and ethical regulation issued by the National Civil Self-Defence Organisation is binding upon him or her. Volunteers do not have any public authority when performing their Civil Self-Defence Organisation duties and are not entitled to use coercive measures defined in the Act on Police except for the ones explicitly stated in the Act on the Civil Self-Defence Organisation. Furthermore they are obliged to respect the fundamental rights and human dignity of those subjected to their actions.

The Civil Self-Defence Organisation carries out patrolling activities in public premises, watch activities, signalling activities at traffic accidents and in the area of day nurseries, kindergartens, elementary and secondary schools in order to participate in the safeguarding of public order and security, as well as crime prevention. It

should also be emphasised that citizens willing to participate in the maintenance of local public order and security decide with their free will that they want to act for the good of their township, and thus by voluntarily joining (or founding) the Civil Self-Defence Association they acknowledge that it is also necessary to join the National Civil Self-Defence Organisation as this organisation takes care of those central government tasks — and in some cases authoritative, professional supervision tasks — that are essential for those who carry out security activities. Volunteers perform their duties free of charge.

In general it can be stated that the most important goal of the civilian security groups throughout the whole of Europe is active participation in activities concerning the security of local communities. This includes crime prevention but goes further than this, as several factors influence the security and sense of security of communities. Such factors include the state of the environment, free and unrestricted transport and last but not least the possibility of becoming a victim of crime.

It is true that there are similar organisations in some European countries (e.g. Stadswacht — City Guard — in Netherlands or the Neighbourhood Watch Scheme in England). However, the Hungarian Civil Self-Defence Organisation is a fundamentally different organisation. It is not an authority and therefore it does not dispose of independent powers to effect official measures, but rather facilitates the measures of other authorities (typically the measures of the police). Consequently, the Civil Self-Defence Organisation may not use coercive measures.

The organisation operates in the legal form of an association and is independent from central and local government. Volunteers do not receive any remuneration for their work and are not employed by central or local government. The structure of the Civil Self-Defence Organisation has three levels: local, county and national. The Civil Self-Defence Organisation is basically the ‘eyes and ears’ of the police, as besides their mutual work it also provides the police with information and often the police act based on the activities of the Civil Self-Defence Organisation.

⁽³⁾ Act n° CLXV of 2011 on the rules on Civil Self-Defence Organisation and its activities.

⁽⁴⁾ Géza, Finszter: Police law, Budapest, National Police Headquarters, 2012, pp. 267-275.





CONCLUSION

Civil associations have a special role in averting and decreasing risks just by being close to the population that trusts them. Of course these kinds of organisations do not have public authority — in contrast to the police — and so coercive measures are not available for them during their operations. And this is exactly why the trust of the population is a basic condition for their activities. While the authorities serving the interests of the population (such as the police) are functional — due to the authority of the central government and the available coercive measures — even when lacking the trust of the society in the justness of the law enforcement carried out by them, the Civil Self-Defence Organisation accomplishes law enforcement through trust and not through enforceability, so the lack of trust within a society is not directly relevant to it.

Crime prevention is a special field in the exercise of public security: on the one hand this task cannot be performed successfully only by central or local government tools, and on the other hand civil organisations of society alone are too weak,

only being capable of slow development and lacking in professional knowledge. This is why cooperation of central government and society as a whole is essential, without which there can be no efficient public security system.

The composition of the civil organisations mirrors the social stratification and age groups of the population of the area and thus an organisation like this is able to build connections with the population, act as an autonomous partner of the local government and provide useful assistance to the local police ⁽⁵⁾.

We suppose that such social organisations will appear more and more frequently in connection with the security operations that are already clearly indicated in Europe. This is no different in Hungary either: as an example we refer to the Civil Self-Defence Organisation whose national alliance (National Civil Self-Defence Organisation) received a central government subsidy of HUF 1.05 billion (EUR 3.4 million) in 2014 pursuant to Act no. CCXXX of 2013 on the central government budget (this is 0.006 % of the total Hungarian central government budget).

REFERENCES

- Act no. CLXV of 2011 on the rules on Civil Self-Defence Organisation and its activities.
- Act XXXIV of 1994 on police.
- Géza, F. (2012). Police law, Budapest: National Police Headquarters.
- Greenberg, M.A. (1984). Auxiliary police: the citizen's approach to public safety, Greenwood Press.
- United Nations Office on Drugs and Crime (UNODC) (2011). Handbook on police accountability, oversight and integrity, New York: United Nations Publications.

⁽⁵⁾ Only as a reference we must note that point c) of Section 2 (2) of Act no. XXXIV of 1994 on police sets down a cooperation obligation for the local governments and the police with the voluntarily organised communities of society and social self-protective organisations established for ensuring the security of lives and assets of the population.



DETECTION AND IDENTIFICATION OF CONTAMINANTS IN FINGERPRINTS USING INFRARED CHEMICAL IMAGING



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Keywords: infrared chemical imaging; digital trace evidence; fingerprints; barium fluoride window; phenobarbital; mirtazepine.

Abstract: Infrared chemical imaging has been a powerful tool in the study of digital trace evidence, especially in the detection and identification of contaminants present in those traces. After obtaining optimal conditions for collecting images and spectra, in transmission mode and in a barium fluoride window four known substances — phenobarbital, mirtazepine, caffeine and benzoic acid — were tested and detected as contaminants of fingerprints. The results were satisfactory in all cases. Mirtazepine and phenobarbital, which have a potential forensic interest, were used in a study of fingerprint blind samples in 27 volunteers. No false positives were found. The results confirm that infrared chemical imaging is an efficient technique in the detection and identification of contaminants in digital trace evidence.

INTRODUCTION

Criminal and forensic sciences have increasingly played an essential role in the justice system by providing scientific information for criminal investigation. The use of vibration spectroscopy techniques, namely the development of infrared chemical imaging, has provided a more detailed study of fingerprints. Infrared chemical imaging aims to create a greater contrast between ridges and grooves which make up the digital fingerprint and the matrix where it is located (Tahtouh et al. 2005).

The formation of digital traces results from the interaction between two surfaces. Therefore, the composition of digital trace evidence on surfaces results from a complex mixture of secretions from secretor glands and environmental contaminants (Ramotowski 2001; Walker et al. 2009).

AIM OF THE STUDY

This study aims to assess the potential of infrared chemical imaging in the detection and identification of contaminants manipulated by individuals and contaminants present in their fingers, allowing us to obtain more information from a fingerprint.

INSTRUMENTATION

The emergence of infrared chemical imaging has widely increased the applications of infrared spectroscopy, extending them to many areas such as forensic science (Williams et al. 204). It allows us to obtain spectral and space information of complex and heterogeneous samples, making it a powerful tool for the study of forensic samples which are limited, and for the study of which





non-destructive techniques are always preferred (Koening et al. 2001).

Infrared chemical imaging involves spectra collection of a high number of sampling points that are usually collected in individual or group pixels of a multi-channel detector. The obtained data can be seen as a data cube and are able to allow the formation of three-dimensional pictures if the radiation used enters the sample sufficiently. For mapping of the surface, the data cube includes a three-dimensional data block with two dimensions and a third one that corresponds to the wavelength (Cullen et al. 2012). Each wavelength produces a picture and a spectrum can be obtained from each pixel that makes up the picture. A Nicolet IN MX spectrometer was used in the digital trace evidence analysis carried out in this study. The integrated architecture of this system eliminates the need for an external spectrometer and provides an exceptional experience of optical microscopy, allowing for fast results and a high space resolution (Nicolet).

METHODOLOGY AND RESULTS

OPTIMISATION OF PARAMETERS

During the initial development of a study by infrared chemical imaging it is necessary to optimise several image collection parameters to minimise the collection time and to ensure the necessary quality (Tahtouh et al. 2007).

In order to optimise the spectral resolution, the number of scans, the step size, the image size and the image formation parameters, we used the following methodology: digital traces were deposited after hands had been washed and dried; the right index finger was passed on the forehead and put in contact with a barium fluoride window; infrared chemical images were processed using a Nicolet IN10 MX spectrometer and a multi-channel detector. All images and spectra were collected and processed using OMNIC Picta software (version 9.1). With a size of 3mm x 3mm, all images were obtained

using the transmission mode. The parameters mentioned above were changed and optimised. Table 1 summarises the optimised values of the parameters for the collection of images.

Table 1 — Summary of the optimised parameters for the collection of images

Parameter	Optimised settings
Spectral Resolution	32 cm ⁻¹
Number of scans	4
Step size	25 μm
Image size	3 mm x 3 mm
Image formation parameters	Frequency slice within the range 2850 — 2980 cm ⁻¹ from the second derivative data

PRELIMINARY STUDY OF DETECTION AND IDENTIFICATION OF CONTAMINANTS IN DIGITAL TRACE EVIDENCE

Compounds with different proprieties and different functional groups, such as phenobarbital, caffeine, benzoic acid and mirtazapine, were chosen with the objective of being familiar with detection and identification of contaminants in digital trace evidence. The experimental spectra were compared with existing ones in the libraries made available by the equipment supplier or created by the operator. The correspondence percentage indicated by the software (> 80 % Excellent; 70-79 % Good; 65-69 % Satisfactory) was taken into account, and was determinant for additional recognition (Mou & Rabalais 2009).

All pictures were obtained using the transmission mode, at 32 cm⁻¹ resolution and four scans. The spectra of the compounds were collected at 4 cm⁻¹ resolution and 256 scans. Figure 1 shows an infrared chemical image from a section of a contaminated digital fingerprint with phenobarbital particles and Figure 2 the respective infrared spectrum.





Figure 1 — Infrared chemical images from a section of contaminated fingerprint with phenobarbital, on the left an image formed at 2800 cm⁻¹, on the right an image formed at 1700 cm⁻¹, second derivative, barium fluoride window, transmission.

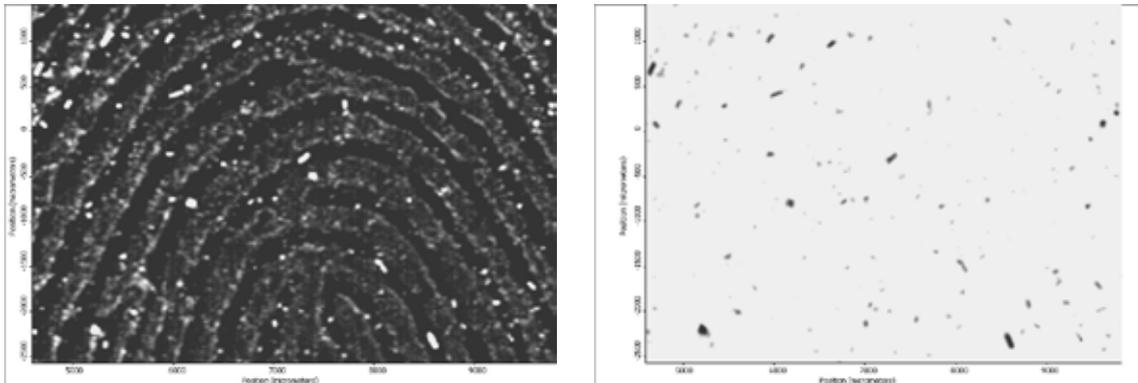
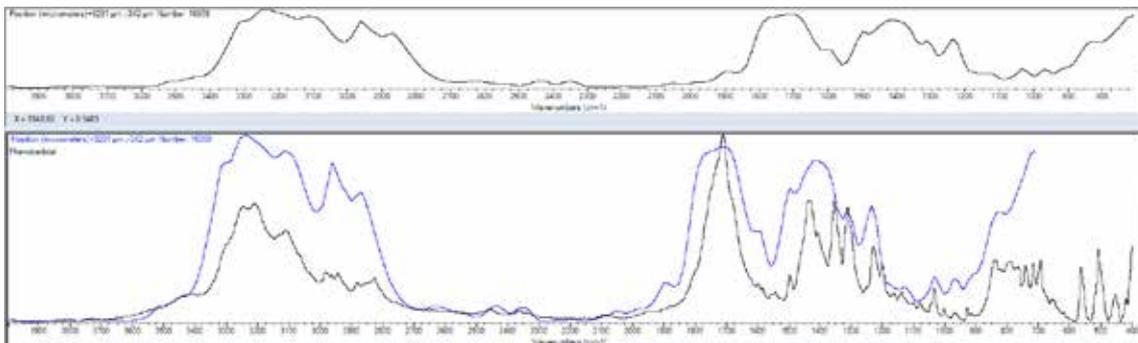


Figure 2 — Infrared spectrum of phenobarbital in the digital trace evidence from Figure 1 (above) and infrared spectrum reference (below, in black), comparability 67 %.



IDENTIFICATION TESTS OF CONTAMINANT SUBSTANCES ON DIGITAL TRACE EVIDENCE

Subsequently, we carried out the identification of contaminant compounds in digital traces, resulting from the previous manipulation of substances by the provider. We aimed, in this way, to detect and correctly identify the compounds without knowing if the volunteer had manipulated them. The two contaminant substances used were phenobarbital and mirtazapine. 27 different trials were used. 27 volunteers were requested to choose one of the following options: not to manipulate any of the compounds, manipulate mirtazapine, manipulate phenobarbital or manipulate both compounds. Thereafter, each volunteer put the right index finger in a barium fluoride window, resulting in infrared chemical images of digital trace evidence.

All the chemical images were processed using OMNIC Picta software (version 9.1). The identification of the spectra of the compounds was performed using OMNIC Spectra software through comparison with the spectra of the following spectral libraries: HR Georgia State Forensic Drugs (for phenobarbital identification) and Project (library created for the mirtazapine study). Figure 3 shows the infrared chemical image of a digital fingerprint section of a volunteer who didn't manipulate any of the compounds, with no contaminant particles visible.

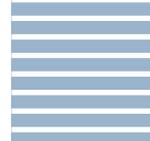
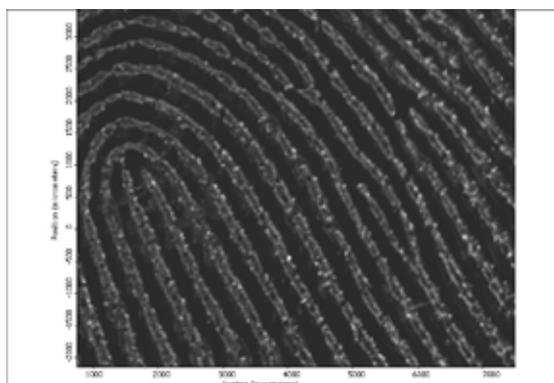


Figure 3 — Infrared chemical image of a digital fingerprint section, without manipulation of compounds, $\nu=2930\text{ cm}^{-1}$.



Notable in this figure is the contrast obtained between ridges and grooves as well as the same typical characteristics of a digital fingerprint. Figure 4 shows the infrared chemical image of a digital fingerprint section of a volunteer that chose only to manipulate the phenobarbital.

Figure 4 — Infrared chemical image of a digital fingerprint section of a volunteer that chose only to manipulate the phenobarbital; above an image formed at 2928 cm^{-1} , below an image formed at 1700 cm^{-1} .

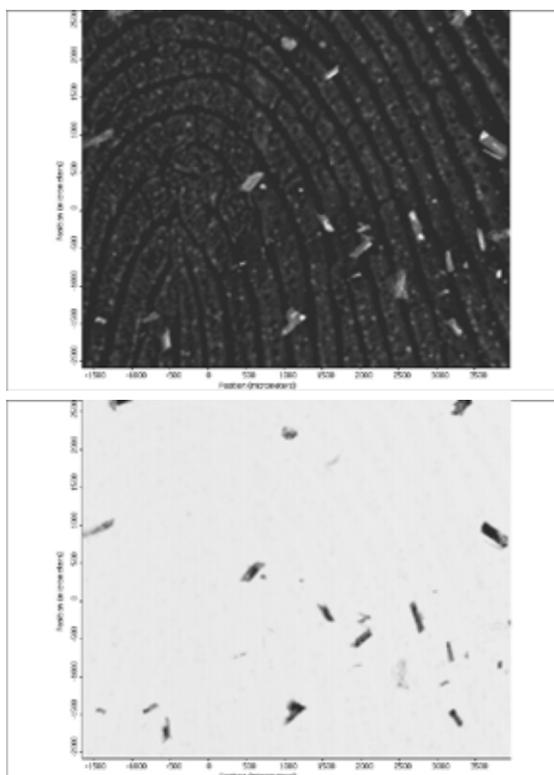


Figure 5 shows the respective infrared spectrum and, Figure 6, the reference spectrum of phenobarbital. In the chemical image of Figure 4 the contrast between ridges and grooves of the digital fingerprint is visible, allowing us to observe the contaminant particles in the sample. The chemical image on the right shows the space distribution of the particles.

Figure 5 — Infrared spectrum obtained from the phenobarbital particle.

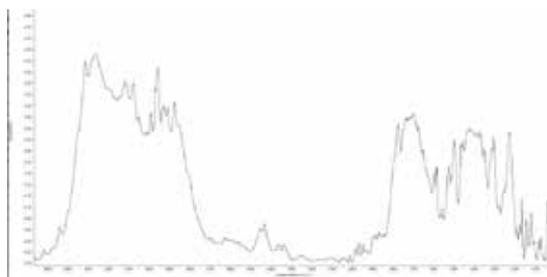
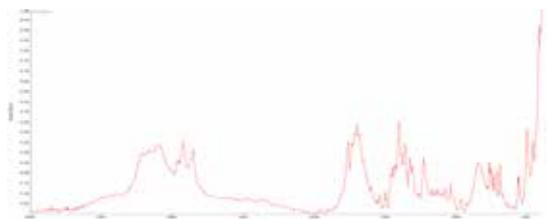


Figure 6 — Reference infrared spectrum of phenobarbital.



The infrared chemical image of a digital fingerprint section of a volunteer that only manipulated mirtazepine is displayed in Figure 7. Figure 8 shows, as an example, the infrared spectrum of contaminant particles. The reference infrared spectrum of mirtazepine is shown in Figure 9. It is possible to observe, in the chemical image in Figure 7, the ridges and grooves of the digital fingerprint and also the presence of some contaminant particles in which the space distribution is clearly visible on the right figure.



Figure 7 — Infrared chemical image of a digital fingerprint section of a volunteer that chose only to manipulate mirtazepine; above an image formed at 2919 cm^{-1} , below an image formed at 1400 cm^{-1} .

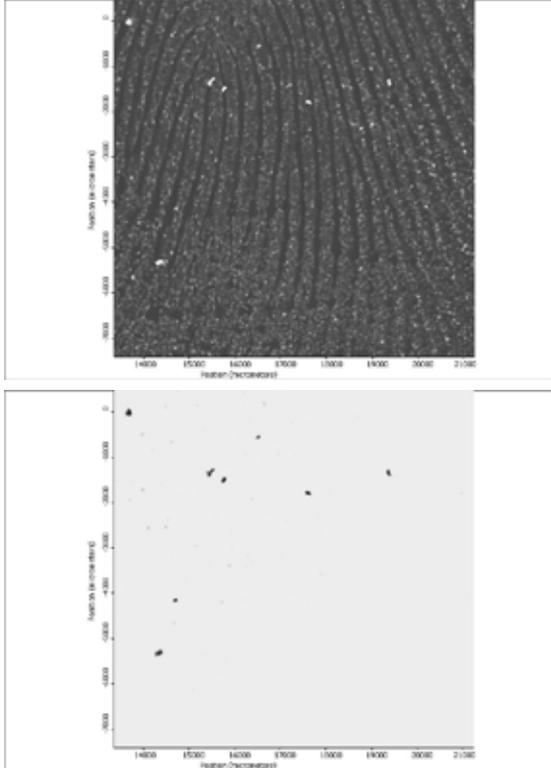


Figure 8 — Infrared spectrum obtained from the mirtazepine particle.

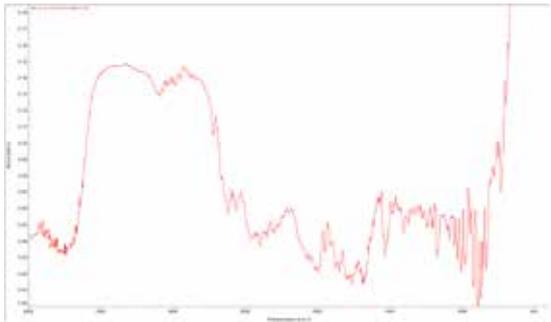


Figure 9 — Reference infrared spectrum of mirtazepine.



The results obtained from the digital trace evidence from the volunteer who decided to manipulate both compounds are displayed in Figures 10 and 11. The identification of the two contaminants was obtained as a first comparability in comparison with the spectral database used.

Figure 10 — Infrared chemical image of a digital fingerprint section of a volunteer who manipulated both compounds; above an image formed at 2915 cm^{-1} , below an image formed at 1400 cm^{-1} .

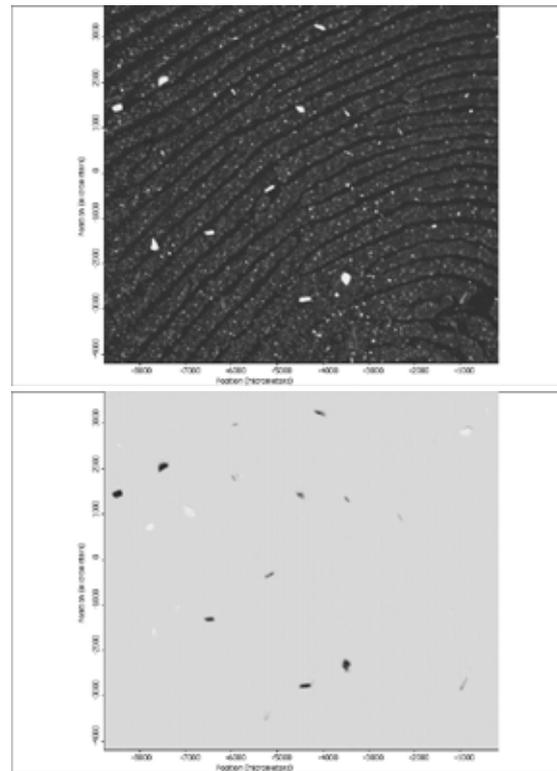
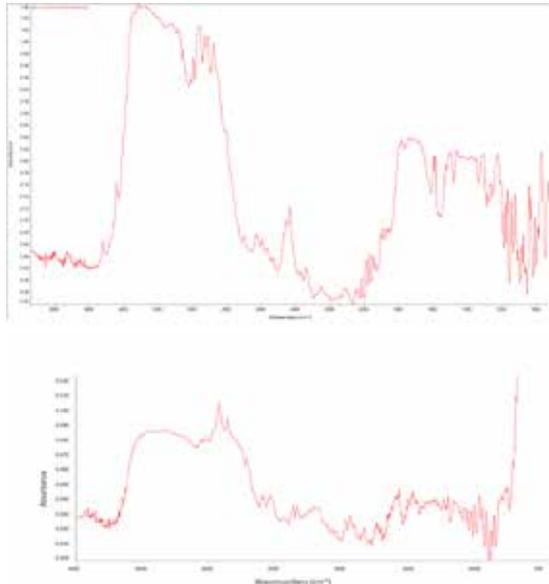




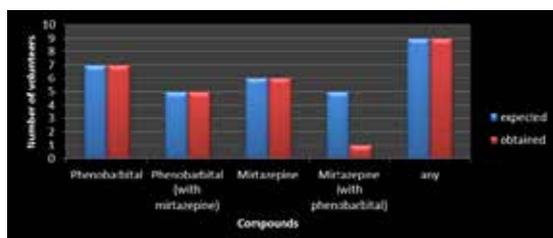
Figure 11 — Infrared spectra recorded for the contaminants of the digital traces of the volunteer who manipulated both compounds, comparability of 45 % for mirtazepine and 74 % for phenobarbital.



GLOBAL ANALYSIS OF THE RESULTS

A general perspective of the results obtained is summarised in Figure 12.

Figure 12 — Global perspective of the results obtained from the sample study of digital fingerprint with phenobarbital and / or mirtazepine by infrared chemical imaging.



From the 27 volunteers that participated in this study, 7 manipulated phenobarbital only, 6 manipulated mirtazepine only, 9 didn't have any contact with any of the compounds and 5 manipulated both of them. There was no evidence of false positives and in all the trials the compound identification fits the first choice in the research in spectral libraries. The mirtazepine detection when manipulated with phenobarbital

appeared to be more problematic, with the 4 false negatives recorded. The mirtazepine adherence seems to be more difficult due to the presence of another compound, since no false negative was recorded as a unique contaminant. It will require a higher number of samples to confirm this conclusion.

CONCLUSION

During the study of the contaminant substances, infrared chemical imaging shows that it is a potential technique. In a preliminary study, using a barium fluoride window, as a matrix, in transmission mode, four substances were collected with different chemical functions, two of them with potential forensic interest. The identification of these compounds was successfully performed. In order that the contaminant substances may be correctly identified it is obviously necessary that the infrared spectrum is included in the existing database. The highest percentage values of correspondence obtained in the mirtazepine identification (in which the spectrum inserted in the database was obtained in this study) suggests that the creation of a database with the compounds spectra collected in the same conditions as the contaminant under research will be an advantage for the investigation of interesting compounds.

This database should be used with others that already exist. From the blind study of digital fingerprints of the 27 volunteers, who were requested to manipulate (or not) two known substances, mirtazepine and phenobarbital, the absence of any false positive is highlighted. Phenobarbital was identified in all the samples where it was present, separately or together with mirtazepine. This last compound was identified when it was manipulated separately. False negatives were obtained for mirtazepine as a result of the manipulation, by volunteers, of the two substances. It will be desirable, in a future study, to increase the number of samples assessed to develop the statistical consistency of the results. The infrared chemical imaging showed, undoubtedly, a technique with great potential in the investigation of fingerprints in the forensic area.



REFERENCES

- Cullen, P., Edelman, G., Leeuwen, T., Aalders, M. & Gaston, E. (2012). Hyperspectral imaging for non-contact analysis of forensic traces. *Forensic Science International*, 223, pp. 28-39.
- Koenig, J., Wang, S. & Bhargava, R. (2001). FTIR Images. *Analytical Chemistry*, 73, pp. 360A-369A.
- Mou, Y. & Rabalais, J. (2009). Detection and identification of explosive particles in fingerprints using attenuated total reflection — Fourier transform infrared spectromicroscopy. *Journal of Forensic Sciences*, 54, pp. 846-850.
- Nicolet iN10 MX Scanning FTIR Microscope. (Retrieved at (http://www.analyzeinc.com/pdfs/Nicolet_iN10_MX_FTIR.pdf)).
- Ramotowski, R., (2001). Composition of latent print residue. In: *Advances in fingerprint technology*, 2nd edition, Lee, H. C. & Gaensslen, R. E., Eds., CRC Press: Boca Raton, 2001, pp. 63-104.
- Ronnie, P., Walker, S., Tahtouh, M & Reedy, B. (2009). Detection of illicit substances in fingerprints by infrared spectral imaging. *Analytical and Bioanalytical Chemistry*, 394, pp. 2039-2048.
- Tahtouh, M., Kalman, J., Roux, C., Leenard, C. & Reedy B. (2005). The detection and enhancement of latent fingermarks using infrared chemical imaging. *Journal of Forensic Sciences*, 50, pp. 1-9.
- Tahtouh, M., Despland, P., Shimmon, R., Kalman, J.R. & Reedy, B.J. (2007). The application of infrared chemical imaging to the detection and enhancement of latent fingerprints: Method optimization and further findings. *Journal of Forensic Sciences*, 52, pp. 1089-1096.
- Williams, D.K., Schwartz, R.L. & Bartick, E.G. (2004). Analysis of latent fingerprint deposits by infrared microspectroscopy. *Applied Spectroscopy*, 58, pp. 313-316.



EUROPEAN COOPERATION — A COMPARATIVE STUDY OF PORTUGUESE AND FRENCH SCIENTIFIC POLICE LABORATORIES



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Keywords: international cooperation; scientific police laboratories; Portugal; France.

Abstract: This study was aimed at relating the work done by scientific police (forensic) laboratories with implications on criminal investigation through international cooperation and collaboration in the forensic field. In order to do so, a qualitative research methodology was adopted, with data obtained from the Scientific Police Laboratory of Lisbon and the National Institute of Scientific Police of Lyon. The results obtained reveal that, although both laboratories use the same techniques and the same instruments for the different forensic assessments, differences found in the procedures have a direct impact on criminal investigation.

INTRODUCTION

This paper is part of a final dissertation to obtain the Masters degree in Legal Medicine and Forensic Sciences. It is a comparative study between two scientific police laboratories, the INPS — Institut National de Police Scientifique — in Lyon, France and the LPC — Laboratório de Polícia Científica — in Lisbon, Portugal.

Criminal investigation is, like crime, a dynamic phenomenon under constant development. Authorities rely on the fundamental support of forensic laboratories to achieve, through expert evidence, a link between a crime suspect and a victim. In a global world, international cooperation in crime investigation becomes

essential, particularly in the European Union, where Member States unite to avail themselves of their power and strength in different fields.

AIMS

The main aims of this study were to analyse and compare the operational mode of two forensic laboratories in two different countries, France and Portugal; and to demonstrate that, although the countries have different legal systems, institutions and operational means, there can be international cooperation between police authorities and it is possible to improve this if resources are available to do so.





METHODOLOGY

A qualitative research methodology was adopted, with data obtained from the INPS in Lyon, and the LPC in Lisbon. This study used a descriptive method based on internships in the two forensic laboratories, and also a comparative one, from data collection through document analysis and information given by the experts of each specialty in the respective laboratory.

EUROPEAN COOPERATION

The free circulation of people, goods and services in the EU brings many advantages in terms of business, market, culture or tourism, among other important factors, but it also brings the risk of transnational criminality. International cooperation between countries, particularly between EU Member States, is crucial to maintaining both internal and external security, as well as the fight against transnational criminality.

Police cooperation refers generally to the interaction between two or more police forces in order to exchange criminal data, support investigations or detain suspects, beyond national and geopolitical borders. When, in a criminal investigation, information is collected and shared with foreign police forces, it is possible that these police forces can identify certain criminal activities or suspects of criminal activity (whether one individual suspect or a group of suspects) and develop a database with all the information about this activity that occurs outside their jurisdiction. It also allows the development of specific strategies on fighting crime because it provides a bigger perspective on what is being investigated (Lemieux, 2013).

In the EU, each Member State has national police and judicial bodies to coordinate the fight against crime and to promote international cooperation (Davin, 2007). Furthermore, Member States can rely on Interpol and Europol, the two international organisations which represent the highest level of institutional cooperational police efforts, and to which has been assigned the mission of facilitating the exchange of inside information, functioning as a channel through which the information flows: this information is collected, analysed and then disseminated back to the Member States as intelligence. Therefore,

the efficacy of police cooperation depends on structural factors which the EU Member States should develop through the idea and commitment of the internationalisation of the police (Lemieux, 2013).

SCIENTIFIC POLICE LABORATORIES

Scientific police laboratories, commonly known as 'crime labs', sustain their activity on the foundations of the scientific truth, which means that they rely on different fields of scientific knowledge to determine what is and isn't relevant in a crime. It is precisely through scientific knowledge that, over time, the construction of the method of judicial proof has been developed, based on scientific evidence of a criminal act rather than subjective assessments, inquiries and deductions.

The concern about the search for evidence to present in Court has always been present, ever since the beginnings of criminal investigation until the present day, but already Voltaire in the 18th century, raised the issue of the fragility of evidence and the possibility of convicting innocent people, taking on the defence of several convicted on charges based on dubious reasoning (Flores, 1994).

It is on expert evidence that all forensic sciences auxiliary to criminal investigation depend, resulting in multidisciplinary work with the same purpose and a common goal: to achieve the truth of the facts. These forensic sciences, auxiliary to criminal investigation, are all the sciences that may contribute to answering one or more questions in a particular investigation. They can be the so-called natural sciences but, if there is the need of a response from the field of engineering to a given investigation that also would not be unusual.

Forensic genetics, forensic dentistry and lofoscopy (the branch within criminalistics, dealing with analysis and processing of all papillary evidence, derived from a criminal offence), are considered the three pillars of human identification, although unscientific techniques are also important to complement this information to reach a positive identification.





Regarding biological evidence, the more supportive forensic sciences for criminal investigation are criminalistics — forensic biology and genetics, forensic pathology, forensic toxicology and chemistry, but also forensic entomology and forensic anthropology, among others. Biological residues can be body fluids such as blood, semen, hair, tears, sweat, saliva, milk, urine, or bone, teeth, epithelial cells, amniotic fluid, bile, gastric contents, excreta, skeletal remains, foetal material, and other organic tissues or unknown traces that may arise from biological material.

In addition to biological evidence, there are other important forensic specialties in criminal investigation, such as forensic psychiatry and psychology, document analysis, forensic ballistics, the department of fire and explosives, forensic drawing, photo fit, forensic photography, analysis of counterfeit currency and handwriting.

At the end of an assessment, forensic experts prepare a technical and expert report, which should contain answers and substantiated conclusions, bearing in mind that, if required, they may be requested to provide clarification of the judicial authority by the defendant, the assistant, the civil parties and by technical consultants.

RESULTS

Regarding the differences between both countries, the first main difference is that France has one official forensic science laboratory, the INPS, and Portugal has two, INMLCF — Instituto Nacional de Medicina Legal e Ciências Forenses — and LPC — Laboratório de Polícia Científica. INPS brings together all specialties in one single building and, in Portugal, the Laboratory divides its specialties between two institutions, INMLCF and LPC, sharing competence in some specialties.

The second distinction is that the INPS, in France, belongs to the Ministry of the Interior, and the INMLCF and LPC, in Portugal, to the Ministry of Justice. However in Portugal criminal investigations are directed by the Public Ministry which means that they rely in administrative, financial and organisational terms on the Ministry of Justice, but all the operational activity is

performed under the direction and coordination of the Public Ministry.

The French judicial police — *Police Judiciaire* — is different from the Portuguese police. In France, the PJ belongs to the National Police, although Gendarmerie also performs PJ functions with a geographical difference; one is within cities and the other within areas. There are other professionals such as customs guards, marine police, airport security guards, rangers, mayors and others who may act as PJ at certain times, if a prosecutor or judge has given them these powers during a criminal investigation. This doesn't happen in Portugal.

In Portugal, the judicial police — *Polícia Judiciária* — is the upper body of criminal police, devoted to combating forms of the most serious, complex and harmful crime. The investigation of petty crimes and other offences is the responsibility, in its various areas of operation, of other police or judicial organisations such as PSP (*Polícia de Segurança Pública*), GNR (*Guarda Nacional Republicana*), SEF (*Serviço de Estrangeiros e Fronteiras*) among others. The Portuguese PJ is a central service under direct administration of the State, with administrative autonomy and unyielding powers to any other judicial or police authority, as in France. LPC is a support unit in the criminal investigations of the PJ.

Regarding the two scientific police laboratories, it was found that, although the functional organisation, designation and division of sectors and areas of expertise are different, the techniques and the technology used in each speciality are the same. The instruments and the methodology adopted are also similar, making the two laboratories equal and at the same level. However, while the INPS has a departmental responsible for numerical skills, in Portugal this speciality is given over to another department of the PJ, which is not in the LPC, called the Unit of Telecommunications and Informatics.

In this study, seven different situations of international cooperation between the Portuguese and the French authorities, particularly the forensic laboratories, were analysed, and it was found that there is cooperation in criminal investigations between them, either informally or formally, although informal cooperation is more common. In the existing bilateral cooperation, four situations illustrated examples of informal cooperation





and three situations reflected examples of formal cooperation (in one situation a letter of request was issued, in other an international arrest warrant was applied; and in the other situation cooperation took place through the Embassy and INTERPOL).

CONCLUSIONS

This paper provides a brief overview of some results from the dissertation to obtain a Masters degree, as mentioned before. From what it was intended to investigate, in terms of international cooperation, it was found that there is a great effort by the EU to achieve international justice cooperation, promoting working groups among the Member States in order to keep up to date and in accordance with the evolution of technology, but also ensuring the protection of personal data of its citizens, particularly regarding DNA

and fingerprints databases and criminal insider information-intelligence.

Comparing the aims that guided this work with the results of the investigation, it was noted that international cooperation exists but it is often performed outside the EU legal and institutional framework, which can eventually make it less effective than expected. Maybe if there were a unified approach from all Member States in implementing the law and the exchange of criminal intelligence, areas in which cooperation requires harmony of procedures, cooperation would probably turn out more effective. It is also important to mention that, although informal means of cooperation are the easiest and more frequently used forms of cooperation, it is mandatory to complete specific forms or documents if the investigation goes to court, and formal requirements are necessary for the collection of international evidence.

REFERENCES

- Davin, J. (2007). 'A Criminalidade Organizada Transnacional — A Cooperação Judiciária e Policial na UE'. Coimbra. Edições Almedina SA.
- Flores, F. M. (1994). 'A Morte Violenta e os Primórdios da Investigação Criminal'. Lisboa. Centro Português de Estudos Sobre a Morte.
- Lemieux, F. (2013). 'International Police Cooperation — Emerging Issues, theory and practice'. New York. Routledge.





COLLECTIVE INTELLIGENCE AS AN EFFICIENT TOOL FOR LEARNING

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Keywords: educational neuroscience; collective intelligence; brain; capacity building; knowledge; interaction; police training; INTERPOL.

Abstract: Professional instructors intuitively promote the principle of interaction as one of the keys to effective training for adults. Recent findings in neuroscience are generating new knowledge that can reinforce or adjust educational policy and practice. One key area of neuroscience research shows some types of adult learning benefit from and requires the interactions of others. Recent findings on brain function and collective intelligence are a rational factor to add to the list of why adults learn best through collective and interactive activities. Networking needs to be promoted as it stimulates our individual brains and collective intelligence. Group interaction is important in the learning curve. This article focuses on learning with others and is split into two parts: Why should we care about collective intelligence? And, how can we incorporate collective-intelligence learning into training programmes?

INTRODUCTION

Educational neuroscience (the study of the anatomy and physiology of the brain) is generating valuable new knowledge that can inform educational policy and practice. Far from the focus on the brain reinforcing an exclusively cognitive performance, new fields of educational neuroscience enquiries have emerged suggesting holistic approaches which recognise the close interdependence of physical and intellectual well-being, and the close interplay of the emotional and cognitive, the analytical and the creative arts. One key area for further neuroscience research (OECD, 2008) is 'the types of learning requiring the interactions of others'.

Some of the more forward-thinking companies are becoming interested by the findings on collective intelligence and how to capitalise on their collective intelligence potential. In these companies, teams are engaged to play a pivotal role in improving their operational processes. A specialised consultancy company has formed a network of the most advanced companies interested in the latest developments

in the study of collective intelligence and how its principles apply to their management. So how can collective intelligence be used in the field of training? Research findings gathered by this company indicate that there are types of learning that require interaction with others.

Professional trainers know how efficient the learner-centred approach is. The latest research findings invite those involved in learning and development to consider also the collective dynamics of a 'group-centred approach'. Psychologically proven reasons justify why group interaction is so important in the learning curve.

WHY SHOULD WE VALUE THE FINDINGS ON COLLECTIVE INTELLIGENCE?

What is known of the sophisticated architecture of the brain can be a good source of inspiration for designing new powerful forms of collective intelligence. There are links between how neurons and crowds function: it can be seen





as a continuum. Williams-Woolley et al. (2010) showed that small groups of people possess a collective intelligence that is a tangible construct only weakly correlated with the average or maximum individual IQ of group members. How does this process work?

BRIEF DESCRIPTION OF THE FUNCTIONING AND AGGREGATION PROCESS

It wasn't until empirical split-brain research, initiated by Roger Sperry, Nobel Laureate in Physiology and Medicine in 1981 and expanded by Michael Gazzaniga, his graduate student, proved conclusively how the human brain is organised. Each of the brain's 100-billion-plus neurons receives input from an average thousand other neurons. So the main idea from this simple illustration is that intelligence is about connections. It is not a single, holistic, unitary system at all.

The human brain is highly plastic. Neural connections can be reformed and new behaviours can be learned. The brain is not unlimited; old neurons must disappear to allow for new neurons and connections. Brains learn by repeatedly strengthening the neuronal connections that lead to the desired behaviour. 'Knowledge is in the connections' rather than in the different sections of the neural network (Rumelhart et al., 1986, p. 132).

Brains are modular at all levels and work according to 'wise crowd' principles. The findings of James Surowiecki (2005), are the reference point about the wisdom of crowds and collective intelligence. It argues that any information processing system is made up of simple devices that collaborate with one another.

Regardless of context, groups work in the same way: effective groups are separated from ineffective groups by these four principles:

1. Members of the (smart) group have a variety of opinions (diversity);
2. They draw on specialised or localised knowledge (decentralisation);
3. They are able to express themselves without being influenced by others (independence);
4. An independent mechanism put it all together and determines the group's behaviour (information aggregation).

Regular intelligence is a form of collective intelligence or, to put it simply, intelligence is collective. The brain is a wise crowd.

CONNECTIONS WITHIN THE BRAIN, CONNECTIONS WITH EACH OTHER

To a mammal, being socially connected to caregivers is necessary for survival. The human brain is a social organ. Its physiological and neurological reactions are directly and profoundly shaped by social interaction. Most processes, operating in the mind's background when it is at rest, are involved in thinking about other people and oneself. As David Rock (2009) puts it: 'The ability to intentionally address the social brain in the service of optimal performance will be important in distinguishing leadership capabilities'.

The brain is a pattern-making organ with an innate desire to create new connections. 'When people solve a problem themselves, the brain releases a rush of neurotransmitters like adrenaline. The phenomenon provides a scientific basis for some of the practices of leadership coaching. Rather than lecturing and providing solutions, effective coaches ask pertinent questions and support clients in working out solutions of their own' (Rock & Schwartz, 2006:9). Insights need to be generated from the participants rather than given to them as conclusions. They will experience the adrenaline rush of insight if they go through the process of making the connections themselves.

Cognitive neuroscience and artificial intelligence suggests that intelligence in its highest form is organised according to the collective intelligence principles identified by Surowiecki (2005).

HOW CAN WE INCORPORATE COLLECTIVE INTELLIGENCE INTO CAPACITY BUILDING PROGRAMMES?

Our challenge is seeing how we can convert the concept of 'group thinking' (collective intelligence) into a strong nexus for in-person and possibly online training activities. We understand the specificities of adult learning (the andragogy model): adults need to find something useful for them in the learning process and they need to be an actor in their acquisition of new skills. In turn,





this process contributes to involve adults in the improvement of the organisation (Jacobs, 1990).

With regards to our own organisation, three training features can be directly derived from the collective intelligence concept.

DIVERSITY AND DECENTRALISATION OF INPUTS

With 190 member countries and each with its own National Central Bureau, INTERPOL programmes, participants and instructors are inherently international. This diversity of thought and input is a valuable asset for the organisation.

INDEPENDENCE OF THOUGHT

INTERPOL programme participants are usually experienced police officers and their opinions are valued in the programmes. As human beings, they are afflicted by the 'confirmation bias' which is the natural tendency to interpret evidence in ways that are partial to expectations, existing beliefs, emotions and assumptions. An efficient way to deal with this major drawback in the individual decision-making process is to seek the equally biased opinions of others as suggested by Surowiecki (2005). In this way, a certain balance of judgement/opinion/bias can be found.

AGGREGATION OF INPUTS

All inputs should be aggregated under the guidance of course managers, instructional designers and instructors/facilitators to decide in which direction the thinking flows next.

A study on attorneys trying to predict a civil jury verdict found that one estimate could be improved by 25 % if averaged with a single other attorney's estimate and improved by almost 50 % if averaged with the estimates of three other attorneys (Jackobson 2011). The accuracy of estimates substantially increased as group size increased.

What experts think individually matters far less than how they think collectively.

IMPACT ON TRAINING PROGRAMME MANAGEMENT

The course manager and instructors should act as a catalyst by:

1. Assembling smart training teams and matching participants and instructors able to communicate, listen and collaborate. Remember: The collective intelligence quotient is driven by the ability of team members to listen earnestly to one another. Knowledge is in the connections.
2. Selecting participants for a diversity of opinion to avoid 'confirmation bias'. For instance, selecting from various agencies and cultures allows individuals an opportunity to gain a better understanding of the material through discussion and sharing of prior experience with one another.
3. Assigning seats at the outset of the training enhances inter-unit/country discussion. In training sessions, it is observed that officers tend to sit near their colleagues from the same department. Pre-assigning seats (according to a diversity pattern) stimulates discussion and the sharing of experience.
4. By experience, instructors know that participants express a preference for interactive training modules and case studies rather than lectures and discussions.

Individuals in teams can monitor the learning process collectively and make decisions as a team. People rarely support initiatives they had no part in designing. Adopting an inclusive programme planning process can just make the participants involved in a process of change that affects them from the outset:

1. The programme agenda should be sent in advance to the participants so that they start a reflection process and get engaged well in advance of the session. Experienced participants can contribute to the syllabus, including the adjustment of the learning objectives, content and structure of the agenda.
2. Instructors should be reminded that the moment of insight is a positive and energising experience. This rush in energy is essential in facilitating change. As in the field of team





management, the participants can be invited to talk one after another about the means for making things better, training their brains to make new connections.

3. Involving the participants in the programme development when it is rolled out over a period of time in a series of sessions is highly recommended. This is what is done for counter-terrorism programs recently managed by INTERPOL for a group of selected officers. This is the also the way for the 2-year programme for converting training into joint operations.
4. A small group of experienced people who come together to learn and take action can be invited to provide subject matter input. This is 'team learning' and the facilitator may be present or not.

Organise large spaces in the agenda for the sharing of participant experiences and their contributions (inputs). Carol Glasgow and Cheryl Lepatski report that in the Investigative Skill Education Program run by the Edmonton (Canada) Police Service: 'Each day of the classroom session was comprised of half day or less presentation from experts and the remainder of the day students worked within their major case management teams of five to seven...' (Glasgow & Lepatski 2012:108). Participants reported they were fully engaged in the learning process. This is what the session coordinators aim to effect in the INTERPOL capacity building programmes.

AN INSTANCE WHEN COLLECTIVE INTELLIGENCE IS APPROPRIATE

Collective intelligence is especially relevant to leadership training when it gathers experienced people who are faced with leadership decisions from day to day. Since 2012, INTERPOL has organised a leadership and management skills workshop for Directors and Assistant Directors. The process followed the model and demonstrated how collective intelligence can be of use to senior executives:

- The participants are involved before the workshop through individual assessments.
- All are engaged in the workshop on a need/voluntary basis only.

- Participants are called on to search for and provide the newly formed group with excellent articles which challenge the ways leadership is usually approached. Large portions in the agenda are set aside for contribution by the participants and most of the questions raised are answered by the participants.
- The instructor facilitates the contributions and introduces a number of assessment tools and patterns adapted to the flow of the contributions.
- Contradictory inputs expressed by the participants demonstrate that the participants are confident.
- Views from external leaders (on leader roles and traits) are shared and very much appreciated by the groups.

IMPACT ON PROGRAMME DESIGN & DELIVERY

Multi-agency approach: Connecting the dots

Law enforcement may work in silos when the officer's horizon needs to be expanded. This is why INTERPOL systematically promotes and delivers programmes which combine facilitators and participants from different entities and different countries in a region. In all the INTERPOL capacity building programmes (e.g. Counter-terrorism and Maritime security in Africa and Asia, Organised crimes in the Americas, ...), regional officers from the Customs, the Gendarmerie, prosecutors, police officers, officials from IOM, WCO, UNODC and others work together.

The strategy for accomplishing the sharing of tactical information among partner countries takes several forms:

- A focus on collaborative classroom activities, such as table-top activities and group work;
- Site visits to different LEAs (Law enforcement agencies);
- Social programmes and team-building exercises outside of course hours;
- Preference for 'U-shaped' room arrangements to promote visual contact and interactivity;
- Icebreaker activities;





- Seating plans which encourage interactivity to promote interaction between individuals of different backgrounds and nationalities;
- Distribution of contact information (including personal and professional emails/telephone numbers) at the conclusion of each course

Beyond connecting together during the class, many case studies allowed the participants to exchange information through social media or phones after the programme for liaising on cases in the field with a much broader and efficient perspective:

'I once had to proceed to the southern part of Nepal to investigate a case involving Bhutanese citizen. Since there were lots of formalities to enter and investigate in Nepal, I contacted my INTERPOL friend in Kathmandu...who graciously assisted with my investigation and meeting the right people there' (Participant from Bhutan).

'There are a large number of example[s] of successful cooperation between the participants and facilitators however I would like to mentioned about a notorious Indian criminal who submitted a fraudulent document to acquire Nepalese citizenship in the name of (X), convicted and serving a sentence in the jail of Nepal. (...) Regarding his actual verification, close formal/informal cooperation and coordination was done with the colleagues of INTERPOL-Dhaka and INTERPOL-New Delhi' (Participant from Nepal).

'Samoa operation was a success in the fact that a multiagency and a whole of Government approach was taken...' (Participant from Samoa).

'... I believe that our correspondences will continue to foster sound networking and confronting terrorist activities all over the globe...networking is vitally important...remember: focus locally, work regionally & think globally!' (Participant from Fiji).

'I have very good contact with the officers working at INTERPOL Dhaka. I know how to use INTERPOL links... So it is easier for me to use cross-border & intelligence connectivity with a view to developing opportunities for joint operations' (Participant from Bangladesh).

The Kirkpatrick Level Three assessments reveal evidence of a strong desire to consolidate these networks and to provide channels for their continuation.

Lesson plans

The components (lesson plans) of the curriculum shall be interrelated by a 'meta' curriculum advisor (the whole is greater than the sum of its parts). INTERPOL training strategy is based upon clearly defined and regularly updated lesson plans. Lesson plans are designed for addressing precise learning objectives. They are prescriptive but instructors are required to engage participants as much as possible and at appropriate points in the course. Facilitating cross learning between participants is both a key method and an objective. INTERPOL strives to create a continuum of courses which have clearly defined lesson plans instead of creating patchwork courses based on independent lectures and disconnected lessons.

Competence

In terms of categories of competence (KSA: Knowledge, Skills and Attitudes/behaviour), knowledge can be learned through individual methods (e.g. Memorise rules). Skills can be developed individually (e.g. Shooting exercises) and/or collectively (e.g. Negotiation with kidnapper/terrorists through scenarios or debriefed case studies). Fostering change in attitudes/behaviour may be supported through peer group activities, group discussions, and role plays.

Performance

We usually refer to Bloom's taxonomy revised by Lorin Anderson & Davis Krathwool (2001) for structuring the expected performance level with training methods. As performance verbs for the highest levels (Creating, Evaluating), Bloom recommends Assemble, Invent, Debate, Predict, ... which are supported by methods such as Project, Plan, Debate, Panel ... and these are collective activities. The highest the performance against the taxonomy ladder, the most appropriate are collective intelligence methods. Remembering and understanding (the lowest levels) can usually get acquired through individual work although interaction is recommended at all levels.

Instructional methods

Activities should reduce the participant threat to engage. Because human brains evolved in response to stressors over thousands of years they are attuned (at an unconscious level) to





how social encounters threaten or support them. The human threat response is aroused when the participants feel cut off from social interaction. This is why it cannot be assumed that groups of diverse persons will trust each other. Trust must be earned. Empathy or goodwill will develop when the participant brain will recognise strangers as friends. This requires repeated social interaction. When people make strong social connections, oxytocin is released in the brain in order to disarm instinctive threat response. It further activates the neural networks. Discussions, role plays, cases, scenario and team-building exercises are among the activities that develop interaction and collective intelligence.

The knowledge that participants shared through discussions is at least temporarily uncertain and incomplete. 'For this reason, we desire their discussions to be deliberations rather than debates or negotiations wherein the participants enter with their positions fully formed and aim to achieve a balance of competing preferences. Deliberations are instead characterised by an attitude of social cooperation, a willingness to share information, openness to persuasion by reason (...) and decisions made by a pooling of judgments' (from Linton et al. 2003).

The facilitator ensures an environment in which all questions and objections are reasonably voiced and addressed, and that decisions are made by deliberation free from domination. Experienced officers are used in the class as experts to guide their colleagues and allow for the increasing collective knowledge base of other learners. One example of this is the sharing of experience between countries having suffered from terrorist attacks and having a sound experience in counter terrorism and countries which have not yet been struck by terrorism attacks but know it will happen in the future.

Training aids

Collective intelligence is also activated while using social media such as online forums, twitter, net discussions and wiki. INTERPOL has developed the INTERPOL Global Learning Centre which performs the role of an e-platform for connecting resources and people. In the field of collaborative distance learning, progress had been made into research on dialogue modelling and intelligent tutoring systems (i.e. replacing the facilitator by a machine). A web-based, collaborative distance-learning system would allow students

to interact with each other remotely and with an electronic agent that would play the role of facilitator (student modelling for an intelligent agent in a collaborative environment). However, such projects have demonstrated that online coached instruction coupled with peer activities in a classroom environment led by a human being remains the best option when moving to distance learning.

Feedback

The evaluations received from the participants indicate that they wish to be personally engaged in exercises focusing on their areas of expertise (e.g. the participants are all requested to make presentations on people smuggling, counter terrorism, etc.). Organising feedback by instructors is highly recommended all the way through the learning process. This is why collective formative feedback is encouraged although performance assessments or reviews often provoke a threat response. It may put people on the defensive because they perceive the person assessing as claiming superiority. Peer assessment can be a powerful tool for gleaning feedback from participants if a respectful and trusting environment has been established and if the peers have observation skills.

Another option is to create opportunities for participants to do the hard work of self-assessment. Asking learners, 'How do you think you did? What do you think went well? Is there anything you would do differently if you could?' can produce quite a revelation for the learners. We all tend to be our own greatest critics, and framing the self-assessment in a positive way makes it non-threatening and creates a greater receptivity to learning on the part of the participants. 'Encouraging students dialogue to identify possible corrective actions facilitated a learning environment and enabled information sharing which further documented their comprehension, application and analysis of their competencies' — extract from the document 'Stress and decision-making', p. 66, from FLETC (Federal Law Enforcement Training Centre).

Is collective summative feedback possible? Does it add value to the evaluation procedure? Final performance assessments can be made and debriefed collectively: this is very powerful to check and reinforce the assimilation of new competence. Individual formal assessments results should however remain between the





participant and the instructor and managed tactfully.

CONCLUSION

INTERPOL has a set of recommended training standards set out in the INTERPOL Guide to Effective Training (updated every year). The IDC (Instructor Development Course) is a seven full-day intensive course aiming at implementing the training standards in the INTERPOL Guide to Effective Training. To date, 120 instructors (15 % of the total staff of INTERPOL) have been certified by INTERPOL after successfully meeting the requirements of IDC. Many more non-INTERPOL instructors throughout the world have benefited from the programme.

These two achievements (the Guide and the training) have significantly aided in the development and dissemination of a consistent training culture throughout the Organisation and beyond. INTERPOL receives requests from member countries to share this competence. IDC has changed the way INTERPOL instructors design and deliver training sessions. The focus is on

measured competence and interactive methods and it is challenging to convert course organisers and instructors from a lecture approach to a seminar approach whereby they play the role of facilitator as well as instructor. As the INTERPOL Guide to Effective Training states, 'Interaction is one of the keys for an effective training'.

The interactive and collective approach is an effective manner in which to maintain high levels of participant motivation in that it puts the onus on the participant to contribute to their own development and that of other people. The most effective way to increase the learning motivation for trainees is to involve them collectively in the learning process.

As professional instructors, we intuitively promote the principle of interaction as one of the keys to effective training for adults. Recent findings on brain function and collective intelligence are another rational factor to add to the list of why adults learn best through collective and interactive activities. Networking needs to be promoted as it stimulates our individual brains and collective intelligence. Connections are made within and between trained groups through the world. Is this not INTERPOL's mandate?

REFERENCES

Anderson, J.R., Bothell, D., Byrne, M.D., Douglass, S., Lebiere, C., Qin, Y. (2004). An integrated theory of the mind, *Psychological review*, 111 (4), pp.1036-60

Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of educational objectives: Complete edition, New York : Longman.

FLETC (Federal Law Enforcement Training Centre), Stress and decision-making, July 2011

Glasgow, C. & Lepatski, C. (2012). The Evolution of Police Training: The Investigative Skill Education Program, in: Haberfeld, M.R., Clarke, C.A., Sheehan, D.L. (eds.): Police Organization and Training, Innovations in research and practice, Springer, pp.95-111.

INTERPOL General Secretariat (2013). INTERPOL Guide to Effective Training.

Jacobson, J. (2011). Predicting Civil Jury Verdicts: How Attorneys Use (and Misuse) a Second Opinion, *Journal of Empirical Legal Studies*, Vol.8, p.99-119

Linton, F., Goodman, B., Gaimari, R., Zarrella, J. & Ross, H. (2003). Student modeling for an intelligent agent in a collaborative learning environment, In: Brusilovsky, P. et al. (eds), Proceedings of the 9th international conference on User modelling, Springer, pp. 342-351.

OECD, Centre for Educational Research and Innovation (2008). Understanding the brain: the birth of a learning science.





- Rigby, R. (2012). We learn the most from people who upset us the most, *Financial Times*, 8 July 2012.
- Rock, D. (2009). Managing with the Brain in Mind, *Strategy & Business*, issue 56, Autumn.
- Rock, D. & Schwartz, J. (2006). The neuroscience of leadership, *Strategy & Business*, issue 43, Summer.
- Rumelhart, D., McClelland, J.L. & Corporate PDP Research Group (eds.), (1986). *Parallel Distributed Processing: explorations in the microstructure of cognition*, vol 1: foundations, MIT Press, Cambridge.
- Servan-Schreiber, E. (2012). Intelligence is collective, retrieved at http://www.lumenogic.com/www/static/pdf/Intelligence_Is_Collective.pdf
- Surowiecki, J. (2005). The wisdom of crowds, *Anchor*.
- Williams Woolley, A., Chabris, C.F., Pentland, A., Hashmi, N. & Malone, T.W. (2010). Evidence for a Collective Intelligence Factor in the Performance of Human Groups, *Science* 29 October 2010, Vol. 330 no. 6004 pp. 686-688.



E-LEARNING IN POLICE TRAINING — THE CASE OF THE SLOVENIAN POLICE



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Keywords: e-learning; blended learning; e-classroom; police training; CEPOL; FRONTEX; EIDA; EIDAZ; Slovenia.

Abstract: During the reorganisation process of the Slovenian Police in 2013, the Police Academy established a new department, the Social Skills and Research Centre. One of its first tasks was to analyse and assess e-learning in the Slovenian Police. This article is a résumé of the analysis and assessment report.

INTRODUCTION

The Slovenian Police implemented e-learning in 2010. In 2013 alone, 38 092 participants finished courses in an e-learning environment. The Slovenian Police is committed to e-learning in part because of its online availability 24 hours a day, 7 days a week, 365 days a year. The implementation of e-learning was made in the police 'ITK environment'. The Slovenian Police e-learning environment is also used by other public services. After four full years of implementation, it can be said that e-learning introduced new possibilities into police training. The evaluation of several courses shows, however, that e-learning has to be developed in combination with classic training and also with the use of different approaches. One of them is blended learning, where an e-learning platform is used to support classic training.

E-LEARNING IMPLEMENTATION

Plans for the implementation of e-learning in Slovenian police training began in 2008. Neighbour countries were approached but it was found that there were no e-learning solutions present at that time. An e-learning method had to be built and a team of experts was nominated to create an e-learning solution.

It took two years to develop a project suitable for police training. Nominated experts have been involved in several working groups in CEPOL and FRONTEX, building expert modules for their LMS solutions. One Slovenian expert is a member of the FRONTEX project 'European Joint Master's in Strategic Border Management', particularly developing a Leadership and Organisational Development Module, including an e-learning component. Following this cooperation, there are pre-deployment modules for Slovenian police officers leaving the country for UN peacekeeping missions. These courses are certified and constantly reviewed by UN professionals.

The Slovenian Police uses two separate e-learning environments: EIDA — an internal environment, accessible only from workstations connected to the Intranet of the Slovenian Police; and EIDAZ, which is accessible from any computer connected to the Internet. As might be expected, the separation is due to data sensitivity. EIDA is only used for the training of the Slovenian Police force. The other platform (EIDAZ) is used for the classic education of police officers, for external parties such as the Ministry of the Interior, for municipal security etc. Both platforms are built on the LCMS platform Moodle, currently running version 2.6.3.

Following the implementation of e-learning, the decline of traditional forms of training was expected but thorough analysis reveals quite



opposite results. Since the cost ratio drops significantly, traditional forms of training also rise. The usage of e-learning was also analysed. With analysis we wanted to find out if we transformed proper classic training into proper e-learning classrooms. We also wanted to find out if users had a lot of problems during the courses. At first we tried with two MOOC (Massive Open Online Course) type courses which every Slovenian police officer has to attend. We found out that this kind of online course is satisfactory and results were great.

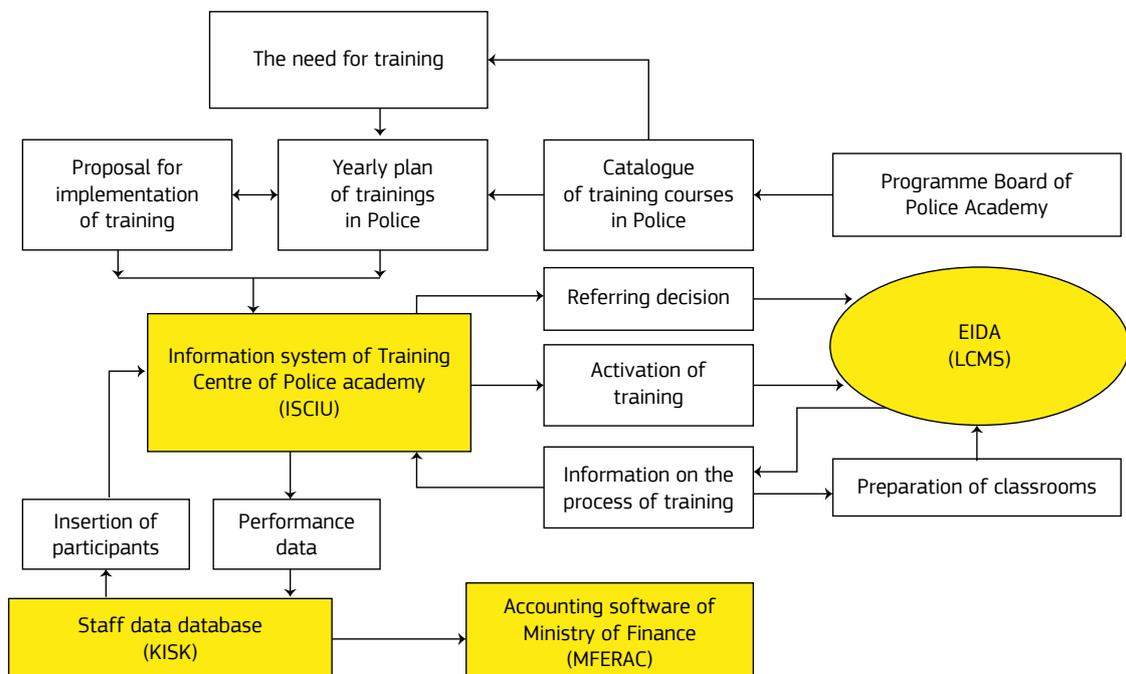
We also tried to implement some Traffic Police courses, but during the period of training we discovered that physical presence in the classroom is essential for the course to succeed, so we now are using a blended learning approach. Course participants at first get access to the e-classroom to prepare for a classic in-classroom lecture. Later on they discuss material with a lecturer in the classroom. After the classroom lecture, the lecturer gives them assignments in the e-classroom. After that, an evaluation is made online.

We find this approach very useful since trainees come to the classroom prepared and the success of this kind of blended learning is much better than just e-learning or classic learning. It is also cost effective, since we can now shorten the time for physical presence of police officers in classrooms.

THE PROCESS OF E-LEARNING

Figure 1 shows how the process of e-learning begins in the programme planning stage, verified by the Programme Board, and is inserted in the Training Catalogue. Opening of a new classroom is only possible by issuing a preliminary award in training centre information system of (ISCIU) where data is used from the Training Catalogue of and attendees from the staff data database (KISK). After the course is completed, course data is exported from the e-learning environment and re-imported to the ISCU database, certificates are issued to participants and a report is created.

Figure 1 — E-learning process.





STATISTICAL ANALYSIS

We mentioned that the Slovenian Police conduct training and education through e-learning platforms. Below, we will discuss only training, since other types of education takes just 0.2 percentage points of the total group.

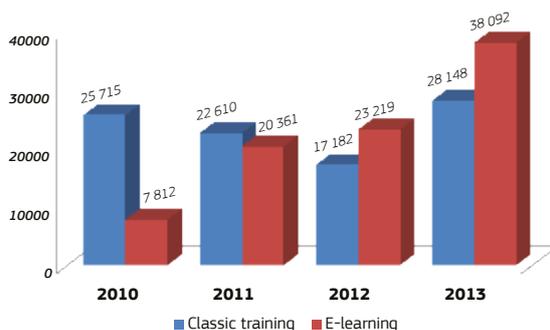
Table 1 and Figure 2 show the increase in the number of participants in the years from 2010 to 2013. The data show the opposite of what we had expected at first. We expected a significant drop of classic trainings to be present after the implementation of e-learning, but after an initial drop of 24 percentage points in year 2012 compared with year 2011, significant growth of 39 percentage points is recorded in year 2013 compared with year 2012. Graph 1 shows a significant growth of classical and e-learning training in 2013. In our analysis we have not determined the reasons but we must point out that in 2013 new Police legislation entered into force.

Table 1 — Overview of classic training and e-learning supported training in the Police from 2010 to 2013.

Type of training	2010	2011	2012	2013
Classic training	25 715	22 610	17 182	28 148
E-learning	7 812	20 361	23 219	38 092
Sum total	33 329	42 971	40 401	66 240

Sources: Report on Police work in year 2010, number 0101-6/2011/69 (2061-01), 28. 2. 2011; Report on Police work in year 2011: 0101-5/2012/113 (2061-01), 12. 3. 2012; Report on Police work in year 2012: 0101-15/2013/115 (2061-01), 18. 2. 2013; Report on Police work in year 2013-7/2014/384 (2061-01), 28. 3. 2014.

Figure 2 — Graphical overview of participants involved in classic training and e-learning in Police from 2010 to 2013.



If we look at the entire period from 2010 to 2013, data shows trends in growth of both e-learning and classic trainings for 50 percentage points. From another point of view we can say that participants number rise for 50 percentage points from year 2010 to 2013.

FUNDING OF TRAINING

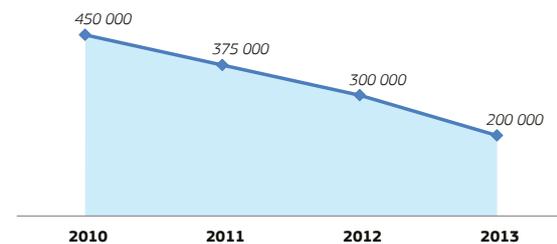
Since the collapse of world markets, the Slovenian Police has also been cutting costs at several levels including training. From Table 2 and Figure 3 we can see that from the year 2010 to 2013 there was a significant drop of 225 percentage points in funding of training.

Table 2 — Funding of training in Slovenian Police from 2010 to 2013.

	2010	2011	2012	2013
Funding of training	€450 000	€375 000	€300 000	€200 000

Sources: Catalogue of training courses in year 2010, number: 007-208/2012/12, 5.11.2009; Catalogue of training courses in year 2011, number: 603-150/2010/15, 10.12.2010; Catalogue of training courses in year 2012, number: 604-680/2011/27, 20 12 2011; Catalogue of training courses in year 2013, number: 604-1023/2012/18, 7.12. 2012.

Figure 3 — Funding of training in Slovenian Police from 2010 to 2013.



E-learning significantly lowered the costs of learning and we must not deny this. We lowered costs at the point of managing police time. Where previously we had to transport police officers to the location where the training was taking place, now they can learn at their workplace or even at home.





CONCLUSION

After four full years we can say that e-learning has introduced new possibilities into police training. The evaluation of several courses led us to the conclusion that we have to develop e-learning in combination with classic training and use different approaches; one of them is

blended learning, where we use the e-learning platform to support classic training. Even though funding was cut more than in half, we can say that e-learning is a successful way of training in the Slovenian Police. The Police Academy is a leading institution in e-learning in the Slovenian public sector.

REFERENCES

- Report on Police work in year 2010, number 0101-6/2011/69 (2061-01), 28. 2. 2011.
- Report on Police work in year 2011: 0101-5/2012/113 (2061-01), 12. 3. 2012.
- Report on Police work in year 2012: 0101-15/2013/115 (2061-01), 18. 2. 2013.
- Report on Police work in year 2013-7/2014/384 (2061-01), 28. 3. 2014.
- Catalogue of training courses in year 2010, number: 007-208/2012/12, 5.11.2009.
- Catalogue of training courses in year 2011, number: 603-150/2010/15, 10.12.2010.
- Catalogue of training courses in year 2012, number: 604-680/2011/27, 20 12 2011.
- Catalogue of training courses in year 2013, number: 604-1023/2012/18, 7.12. 2012.



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2-5 September 2015

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Info: <http://www.eurocrim2015.com/>

5TH INTERNATIONAL CONFERENCE ON TEACHING, EDUCATION AND LEARNING (ICTEL)

20-21 September 2015

London, UK

Info: <http://ictellondon.com/>

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