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Executive Director's Prologue

Detlef Schröder

Executive Director



Dear Readers,



At the time of writing these lines here in our CEPOL headquarter in Budapest one could think that the COVID-19 pandemic is already just history in the capital city of Hungary. People enjoy to go out for lunch or dinner, having drinks and partying as before the pandemic. The airport in Budapest is packed with tourists, all looking forward to a care-free holiday. It is great to see all these people enjoying their freedom and having a good time, just as it should be 'normal'.

However, looking at the facts, the pandemic is all but over by now. Incidence rates are increasing across Europe. Some governmental institutions say that the 4th wave is already in progress. Despite all shared efforts like wearing masks, social distancing and especially vaccinations, the pandemic threat is not eliminated. This means that all law enforcement services across Europe are not relieved from the challenge to police the pandemic. Governments in Europe have begun to re-introduce police checks to travellers and re-enforce night curfews, while police forces are facing resistance from small but vocal groups of protesters, who refuse to accept public health measures like wearing protective masks or COVID-vaccinations. COVID-19 triggered problems have been already a massive challenge to all police services across Europe for almost 19 months and continue to absorb a relevant part of resources. Tribute goes to all colleagues who have worked so hard for the public good during the pandemic.

CEPOL is following this development very closely to best support our communities in Europe. Under the given pandemic circumstances we have constantly adjusted our offer for online based learning and qualification services in the first half of 2021. All these services are highly demanded by our colleagues across Europe. At the same time we are all looking

forward to re-start our on-site activities to enable the so important personal contacts across Europe. We are well aware how important face-to-face meetings are for building trust in cross-border cooperation of law enforcement communities.

During our first online Research and Science Conference held in May 2021, implemented in close cooperation with our excellent partner from the Mykolas Romeris University, Lithuania, we provided the platform for practitioners and academics to come together for a first stock taking exercise on lessons learned from the first year of policing this unprecedented pandemic. I am very grateful for all individuals for their high level contributions to the conference. The variety of contributions to this conference have evidenced that this unique challenge caused by the pandemic provided multifold relevant questions for the academic discourse around the future orientation of law enforcement services in our societies. It will be equally important to further analyse how this situation has changed the relations between the citizens and the law enforcement services.

While we consider this online conference in May a success in the interest of our target groups, we are already looking ahead and planning for December 2021 in Vilnius, again in close cooperation with the Mykolas Romeris University, a further edition of our Research and Science Conferences in a hybrid format. We do hope that as many as possible of you will find the opportunity to join us in this event in Lithuania. For those of you who can't attend we are aiming to provide an interactive live streaming solution that you can participate from your office somewhere on the globe.

For obvious reasons we have focused on the major issue of policing the pandemic in the last 18 months. However, we should not forget other very important areas of non-crime policing as future strategic challenges. While some may dispute this, majority of scientists confirm that the impact of the climate change has hit already Europe. Heat waves, flooding's caused by extreme weather phenomena and wildfires have been seen in many European countries this summer with devastating impacts.

As it is very likely that more severe weather phenomena will occur, it is worth to consider seriously the preparedness and resilience of law enforcement services for such conditions, e.g. about necessary training, equipment and communications infrastructures. Law enforcement services obviously need to analyse their models of cooperation with the civil protection services, medical and rescue services and the civil societies across Europe. I think this provides a broad field for research around the interoperability of the different services engaged and about the preparedness across Europe. In a European dimension, it seems to be reasonable to consider options for mutual support across borders of police organisations also in such scenarios.

The geopolitical neighbourhood of Europe requires equally our attention. Around the Mediterranean Sea we observe a growing risk of political instability. In Tunisia there is an on-

going dispute within the Government, where we cannot yet predict the potential outcome. Over the last years Tunisia was considered as the success model of democratic change in the aftermath of the Arab Spring.. Here we should not forget how close Tunisia is to Libya and how difficult the situation is in this country.

Lebanon looks like a country almost in a free fall, following an ongoing economic crisis, the blast in Beirut harbour, just one year ago, and in combination with the pandemic. This had led to a massive crisis situation in the country in a highly sensitive geopolitical location in the Middle East.

Lebanon and Tunisia are without a question very close to Europe. The potential risk-laden developments there can have a significant effect on internal security in Europe. Here it is worth to consider the role of the European Union and how we can contribute to a positive development for strengthening stability in those countries.

Further away from Europe there are even more areas that deserve our attention. Here just to name the development in Afghanistan and Iraq. The international coalition has decided to withdraw its troops from Afghanistan. Beside the military forces deployed there has been a massive investment into building up the civil infrastructure and services in this country. Police services across Europe have been committed to support the re-structuring and re-building of the Afghan police services over many years. It would be a big loss, if we would not take the opportunity to carefully analyse the lessons learned from this engagement in Afghanistan. So many police officers have taken part in this endeavour, we should at least capture as best as possible all experiences gathered and analyse, what worked and what did not work under those very challenging circumstances. Without a question, we shall monitor very carefully, what is going to happen within Afghanistan in the next months to come and how this may impact the international threat landscape. It seems that we will see soon a similar development also for Iraq in case the international troops will withdraw there as well.

In conclusion, beside the still ongoing pandemic situation there are many relevant aspects of concern that we do need to pay attention to. Let's bring our competences together from the side of law enforcement practitioners and academics to best forecast and analyse all these challenges in a comprehensive way. Equally, let's prepare a joint answer of law enforcement services in Europe together. To be successful in the service for our citizens the best answer on some of these challenges will be for certain joining efforts across borders!

Executive Director CEPOL

Dr. h.c. Detlef Schröder

Editorial

Since the publication of the previous issue of the Bulletin, the COVID-19 pandemic has continued to create severe difficulties for societies across the globe, not at least in various degrees in almost all of the European countries. [R.I. Mawby's article on the "Coronavirus, Crime and Policing"](#) has since been downloaded numerous times from the journal's archive, indicating the high actuality of the topic for the audience. Following a webinar delivered in January 2021, CEPOL organised its first online-only research and science conference about the *"Pandemic Effects on Law Enforcement Training & Education"* in cooperation with the Mykolas Romeris University of Lithuania in May. Presentations of the contributions of this event are already available on [the conference website](#).

The impact, the pandemic has had so far on law enforcement, and what had been done and could be done in tackling it, is also the subject of the two opening articles of this issue of the Bulletin.

Focusing attention to the individual level, **Frenkel, Giessing, Jaspaert & Staller** consider *"How to prepare police officers to cope with pandemic specific stressors"* in reference to survey data collected in several European countries. Their findings indicate that, apart from personal factors, the initial lack of personal protection equipment alongside information overload created by quickly changing governmental regulations in the beginning of the pandemic, had indeed increased the stress level of an anyway stressful police officer job. Better preparation by making use of virtual reality-scenario training programs for officers is the proposed solution. This article also exemplifies how cross-national comparative research on police matters can create meaningful and pragmatic results on a European level – something we would like to see more often.

Taking a particular organisational perspective, **Gergely Mogyoródi** describes the effect the pandemic has had on the daily work of the Hungarian SIRENE Bureau, as part of the Schengen-wide cross-border information exchange network. Touching upon the ramifica-

tions of the temporary closure of borders and the travel restrictions on the alerts in the system, the author highlights the unexpected positive impact the otherwise catastrophic pandemic situation had on the bureau's workload, allowing officers to tackle backlog cases and opening space for improving intra-organisational procedures. "Never let a good crisis go to waste"? – Certainly a noteworthy perspective in face of the well-known notorious shortage of resources in law enforcement.

The scientific description and in-depth analysis the pandemic had on law enforcement has just begun; as mentioned, the forthcoming Special Conference Edition of the Bulletin will provide further research on individual, organisational and societal level for all readers.

Support in tackling a crisis, helping to stabilise security and simply providing humanitarian help are the common objectives of International Police Peacekeeping Missions. By example of the German case, the article by **Albrecht, Hof, Stocker & Thielgen** denotes the shift from capacity building to specialist counselling as required focus for those submissions enter subsequent demand for a specialist, not a generalist competence profile, for delegated officers. As an adequate means to find the "competent, motivated specialist" for International Police Peacekeeping Missions, the authors provide a description of their development centre for selecting applicant officers from within their force, hoping to open an international discussion on this certainly less researched topic.

By contrast, predictive policing has certainly received a higher degree of attention by the international research community and the law enforcement community. Defining predictive policing basically as "the computer-assisted, spatially-based, probability calculations of crime", guided by careful methodological considerations about modelling and prediction, **Kai Seidensticker** introduces the reader to the SKALA project, implemented at the largest land of Germany, North Rhine-Westphalia. Unlike occasional promotional reports, the author describes the need to adjust the system's outputs to the needs of frontline staff officers and admits that it is too early to conclude that this predictive policing tool has actually reduced crime in the area of its application. Such deliberative and grounded empirical studies can be very worthwhile readings for decision-makers.

Leading us back to the long-standing, notorious problem of organised crime on the territory of the European Union, **Nelson Macedo da Cruz** informs the reader from the perspective of the recently established European Public Prosecutors' Office on how intensification and diversification has driven the growth of organised criminal business in recent years and how the successful confiscation of criminal proceeds and profits through asset recovery can be an effective countermeasure. With a view to the discrepancy between criminal earnings and legal confiscations by authorities, he suggests a few points of conservation for law- and policy-makers, in order to achieve a more dynamic and effective asset recovery in the EU. For sure, the role and initiatives of public prosecutors deserve higher attention in law enforcement research.

As modern societies constantly “go digital”, experts, practitioners and policy-makers alike are concerned about the proliferation of cybercrime in our societies on various threat levels. It is no secret that these phenomena are posing serious challenges for police and other law enforcement agencies across Europe. In their article, **Wright, Garstka & Kumar** identify and outline some of those key challenges (e.g. shortage of resources, identification of cybercriminals, etc.) and depict, how the current Horizon 2020 funded CC-Driver project, which only started last year, is going to address those challenges.

In continuation of our section of project reports, this issue of the Bulletin is featuring three further article outputs by the European IMPRODOVA research project¹, dealing with the issue of domestic abuse and domestic violence. **Fagerlund & Houtsonen** review how the issue of domestic violence is framed in theoretical and data collection terms and discuss the problems arising from variations and deficiencies they found on the national levels. In turn, they call for further development of policy and practice on collecting fully comparable data on this topic. Complementing this conceptual and methodological perspective, the empirical case study provided by **Machado, Pais, Morgado & Felgueiras** takes the reader to the second biggest city of Portugal, Porto, where a new organisational, problem-based approach for tackling domestic violence seems to have made a notable impact on local crime figures. Differentiating between micro-, meso- and macro-levels of analysis, the authors believe that the attitudes towards domestic violence has changed over recent years in Portugal, and that the case of Porto can be taken as an example of broad social changes reflected on the local level. The article by **Sondern & Pfeiderer**, stressing the role of medical doctors as important institutional partners to law enforcement in reacting to cases of domestic violence, concludes the line of contributions from the IMPRODOVA project².

We hope that the articles of this summer edition of the European Law Enforcement Research Bulletin provides interesting, thought-provoking and inspiring reading for our audience. In this regard, we invite further contributions, particularly presenting cross-national research focusing on the European dimension³.

The next issue for publication is the Special Conference Edition No.5, featuring more than 30 papers delivered to the recent CEPOL online conference on the pandemic effects on law enforcement training and education.

¹ See also the contributions in the previous issue no. 20

² This project is about to end in August 2021.

³ Submission guide- and deadlines are posted on the [Bulletin's homepage](#).

Last but not least, it is a pleasure to announce the next CEPOL Research & Science Conference titled

Preparing Law Enforcement for the Digital Age

1-3 December 2021

Venue: Mykolas Romeris University, Vilnius, Lithuania.

Please visit the [CEPOL website](#) for the *Call for Papers* and further organisational information.

From the Editorial Board,

Dr. Detlef Nogala

Managing Editor

**ORIGINAL
RESEARCH
ARTICLES**

Mapping Demands:

How to prepare police officers to cope with pandemic-specific stressors

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Abstract

Frequent and varied training of police officers is crucial to optimally prepare them for the challenges they face in their police work and allow them to cope with these demands effectively. The Horizon 2020 project "SHOTPROS" aims to develop a training program in Virtual Reality (VR) to train appropriate decision-making and acting capabilities of police officers in high-stress situations. The current COVID-19 pandemic can be considered a prime example of such a high-stress situation. Therefore, the aim of the present article is to re-analyse data from a longitudinal survey among 2567 police officers across Europe, to identify pandemic-related demands experienced by the participating officers during the first COVID-19 lockdown that can be integrated and trained in (virtual) scenario-based training to better prepare police officers for the current and potentially future pandemic outbreaks. Following the constraints-led approach to training, pandemic-related demands are categorized as task, environmental, and individual constraints

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to provide police trainers with a toolkit how to change and manipulate training scenarios according to the trainees' needs. Offering high control over training procedures, VR might be an effective tool to incorporate pandemic-related stressors into current training practices.

Keywords: COVID-19, police training, constraint-led approach, stress, virtual reality

Introduction

Police training is of utmost importance to prepare officers for the challenges they face in their police work in the field and to enable them to cope with the work demands effectively. In order to be effective as a learning setting, police training should (a) be constructively aligned with the demands in the field, and (b) provide police officers with opportunities to learn what is needed to cope with the demands. As the COVID-19 pandemic and the resulting governmental measures continue to pose unprecedented challenges on European street patrol officers, they should be able to easily transfer the skills they acquire in training into real-life situations. Recently, the longitudinal study "SHOT-COVID19", as part of the SHOTPROS project under European Union's Horizon 2020 Framework, investigated the work demands, coping resources, and stress of European street patrol officers during the first months of the COVID-19 pandemic (Frenkel et al., 2021). The aim of the present article is to re-analyse this data to identify pandemic-specific demands that can be systematically translated into police training to better prepare police officers for current (and future) pandemic-related situations in the field.

SHOTPROS: Improving performance of European police officers by developing VR enhanced training

The European Union's Horizon 2020 project SHOTPROS (2019-2022; <https://shotpros.eu/>)² aims at improving the performance of police officers through the training of decision-making and acting in Virtual Reality (VR) settings, resulting in better abilities to keep control over threatening situations and a decrease in excessive use of force occurrences with potential casualties or collateral damage. To this end, SHOTPROS investigates the influence of human factors (HFs) on the decision-making and acting (DMA) of police officers under stress and in high-risk operational situations. This knowledge enables the design of effective training guidelines for police training in DMA under stress. This will ultimately lead to the development of a HF-rooted training curriculum and a corresponding VR-solution to be able to systematically manipulate the influence of HF on police officers' stress and DMA during training in order to complement 'traditional' live simulation training.

2 Funded by the European Union's Horizon 2020 Framework, grant No. 833572.

Policing in high-stress situations

As a first step in the identification of relevant HF that impact police officers' DMA, a total of 60 police officers and trainers participated in six workshops, one in each law enforcement agency (LEA) representing the SHOTPROS consortium (from Belgium, Germany, the Netherlands, Romania, and Sweden). During each workshop, one focus group was dedicated to the exploration of factors that participants considered to have a (negative) influence on their stress levels and their DMA capabilities during operational situations.

Results of these focus groups showed that the stressors could be assigned to four distinct categories. The first category comprised '*contextual factors*', i.e., elements that are present within the environment or situation of the specific police intervention. Examples of such factors are threats to the officers' physical integrity, the presence of bystanders (e.g., interfering with their police work), sensory overload (e.g., through noises, smells, many visual cues), unclear circumstances, and a loss of control over the situation at hand. The second category consisted of '*organisational factors*', which are elements that are specific to their LEA organisation. Examples of organisational factors are feeling a lack of support or appreciation by colleagues or superiors, personnel deficits, different and changing rules and regulations, and lack of training. The third category comprised '*individual factors*', which are personal characteristics that differentiate between individual police officers (e.g., lacking important skills, personality, personal stressors, and physical or mental strain). The fourth category contained '*societal factors*', which addresses the fear of negative media coverage and loss of good reputation of the police as an institution or of themselves as police officers.

These four categories of factors are assumed to influence police officers' stress levels in a given situation, and as such can have an impact on the quality of their DMA capabilities and work performance.

Policing during the COVID-19 pandemic

The rapid emergence of the COVID-19 pandemic and the subsequent lockdown in the beginning of 2020 have confronted police officers all over Europe with a new and unknown challenge in real-life. During the pandemic, LEAs have played an important role in trying to minimise the transmission of the disease, securing public order and keeping communities safe (Brito et al., 2009). Simultaneously, the unprecedented strict governmental measures that had been enacted to protect citizens' health have been increasingly challenged on political, economic, and legal grounds (Mohler et al., 2020; Stogner et al., 2020). In their responsibility to enforce these measures, street patrol officers have been confronted with various novel challenges: The risk of infection as a constant threat to officers' physical integrity, changing governmental measures leading to a shift in calls

for services, numerous alterations in policing protocols, high(er) workload due to infected and quarantined officers and more frequent encounters with anxious or intransigent individuals aggravated by the fear of contagion, economic uncertainty, and isolation (Drake & Altheimer, 2020; Jennings & Perez, 2020; Stogner et al., 2020). As such, policing during the COVID-19 pandemic can be considered a 'critical police incident' (although of longer duration and larger geographical impact than usual police incidents; Jennings & Perez, 2020), requiring the officers to respond to novel, uncertain, uncontrollable, and threatening situations (Stogner et al., 2020). Therefore, the pandemic constitutes an opportunity to (1) investigate the influence of the above-mentioned four categories of factors (contextual, organizational, personal and societal) on police officers' stress, to (2) identify perceived coping resources to meet pandemic-specific demands, and (3) to translate these results into specific recommendations for police training. To this end, a three-wave longitudinal study was conducted with police officers from various European countries reporting on their work stressors, coping resources and perceived stress levels during the first months of the COVID-19 pandemic (Frenkel et al., 2021).

Methodology of the study

The observational study was conducted online at four measurement points throughout an 11-week period during the COVID-19 pandemic from March 27, 2020 to June 5, 2020. Participating LEAs were recruited through the SHOTPROS consortium and its networks. To examine a large, diverse sample of officers, these LEAs widely distributed the survey online through mailing lists. In a longitudinal approach, each LEA participated at three measurement points (except the Dutch LEA that participated once) with a survey period of one week and two weeks in between survey periods. Due to internal approval procedures, LEAs started the online survey at different measurement points.

The sample consisted of 2567 police officers from six participating LEAs in five different countries, with Austria ($n = 1415$; 55%) achieving the highest number of participants, followed by Germany ($n = 711$; 28%), Switzerland ($n = 325$; 13%), the Netherlands ($n = 76$; 3%) and Spain ($n = 40$; 1%). In total, 3455 questionnaires were completed with an average of 1.35 ($SD = 0.65$) questionnaires per participant. The average participant was 36.69 years old ($SD = 11.64$) and had 17.22 years of work experience ($SD = 12.69$). Seventy-seven percent of the participating officers were male and 60% of participants were working in field service. The Social and Societal Ethics Committee of the KU Leuven provided ethical approval for this study (approval number: G-2019 081712). Informed consent was obtained from the participating officers. Participants received no financial compensation.

In a mixed method approach, the survey included quantitative and qualitative items. We repeatedly assessed police officers' perceived stress and fatigue (both measured with

a single item) and mood (subscales: *valence, energy, calmness*; Wilhelm & Schoebi, 2007), which collectively represented the strain they experienced (as confirmed by a Principal Component Analysis). To account for the nested data structure, three-level growth curve models assessed changes in strain and its relation to appraisal of the COVID-19 pandemic (as *stressful, challenging, controllable, and threatening*), emotion regulation (subscales: *adaptive and maladaptive emotion regulation*; Brans et al., 2013), preparedness through training (measured with a single item) as well as police officers' sex and years of working experience. To add context to the findings and to explore lived experiences, free response answers about officers' main tasks at work, private and work stressors, crisis and preventive measures taken by the organisation, as well as wishes for support were analyzed using the deductive category assignment in the qualitative content analysis according to Mayring (2014). For a more detailed description of the methodology, see Frenkel et al. (2021).

Summary of the initial results of the study

The final model included three levels (Level 1: country, Level 2: participant, Level 3: measurement point), with sex and work experience as Level 2 predictors and weeks since lockdown, appraisal of the COVID-19 pandemic, adaptive and maladaptive emotion regulation and preparedness as Level 1 predictors. The intraclass correlation of the final model was 0.72, meaning that 28% of the variation in strain occurred within each individual, 66% between individuals and only 6% between countries. This finding suggests that police officers' strain is rather determined by interindividual differences (i.e., personal factors) than by differences between countries or LEAs (i.e., organizational and societal factors). On the first day of the lockdown, an average police officer had a rather medium strain level of 3.56 on a scale ranging from 1 to 7 ($SE = 0.16, p < .001$). A slight decrease (Estimate = -0.02, $SE = 0.01, p < .01$) of the strain level by 0.24 over three months after the lockdown was observed. Since officers generally experience elevated stress levels (Allison et al., 2019; Giessing et al., 2020; Planche et al., 2019; Violanti et al., 2016) and changes in strain are rather small, it seems plausible to assume that the average officer was only mildly affected by the pandemic, although our data allows no direct comparison with pre-pandemic stress levels. Nevertheless, given the large individual differences in strain, Level 2 and Level 3 predictors can help to identify the participants that are at risk to show high levels of strain. Being female (Estimate = 0.22, $SE = 0.06, p < .001$), having less work experience than the average 17 years (Estimate = 0.01, $SE < 0.01, p < .01$), feeling unprepared (Estimate = 0.10, $SE = 0.01, p < .001$), appraising the pandemic to be stressful (Estimate = 0.46, $SE = 0.06, p < .001$), and using maladaptive emotion regulation strategies (i.e., rumination and suppression; Estimate = 0.16, $SE = 0.03, p < .001$) were significantly associated with strain, predicting higher strain levels.

Thus, the quantitative analysis demonstrated that personal factors, i.e., sex, appraisal of the pandemic, and emotion regulation, significantly contributed to police officers' stress. From the qualitative analysis of the officers' free response answers, two contextual factors emerged as major work stressors: risk of infection as a threat to the officers' integrity and information overload. While these findings are in line with theories that conceptualize stress as a person-environment transaction (Lazarus & Folkman, 1983), our analyses revealed that also organizational and societal factors contribute to the perception of work stressors. For instance, the risk of infection was perceived to be a result of or exaggerated by the lack of availability of personal protection equipment within the organization (i.e., organisational factor). Concerning the information overload, the daily changing governmental regulations and inadequate communication within the organization have been mentioned as a societal and organisational factor, respectively.

At the same time, police officers' reports on effective crisis measures and wishes for support showed that these HF can also be interpreted in terms of protective factors. As an organisational protective factor targeted at the risk of infection, officers suggested that LEAs should logistically prepare for (future) pandemics through stockpiling personal protection equipment, having plans for personnel adjustments (e.g., 50/50 work plan, remote work), and altering policing procedures (e.g., limiting public access to police stations). To address the information overload, governments can reduce police work stress during pandemics on a societal level by legislating unambiguous regulations and effectively communicate them through the media to increase public compliance.

Importantly, both the quantitative and qualitative results of the present study have highlighted training and work experience as important protective HF. It is impossible to completely remove stress from police work (during pandemics), as the experience of stress is intrinsically linked to being a police officer. While the above-mentioned practical recommendations might specifically target the perceived challenges and demands of the first lockdown, preventive (stress) training can prepare officers for both the acute and long-term impacts of pandemics on police work and any other high-stress situation. In the survey, police officers reported that they had already acquired various skills in scenario-based situational response training that proved to be effective in their police work during the pandemic: (1) the automatism of keeping sufficient distance from the police vis-à-vis as a mean of self-protection, (2) target-oriented communication, especially with upset, anxious or mentally unstable individuals, (3) the ability to make quick decisions, and (4) stress regulation in critical situations. These findings suggest that certain skills already integrated in police training curricula have indeed been utilized by the police officers during the COVID-19 pandemic. However, the transferability of skills into the field could be further increased by integrating pandemic-specific demands into police training, following a constraints-led approach for training under stress (Giessing, 2021; Giessing & Frenkel, in press; Körner & Staller, 2020b).

Integrating pandemic-specific demands into police training

The police officers' reports in the present study provide valuable insights that can be used to design (VR) training settings that are representative for the situations that officers might experience in the field during pandemics. Therefore, we have re-analysed the officers' reports on work stressors to identify concrete examples of pandemic-specific demands within the major themes of risk of infection and uncertainty of action. By systematically implementing and manipulating demands in simulation training that are representative of these stressors, police training allows for the development and refinement of individual functional behaviors that help a police officer to cope with these stressors in the field.

From the perspective of police trainers, the demands can systematically be implemented and manipulated using a pedagogical concept called constraints-led approach (Koerner & Staller, 2020a, 2020b). This approach builds on the premise that human behaviour is constraints-led, conditioned by the interplay of individual and environmental factors, which act as constraints (Renshaw & Chow, 2019; Torrents et al., 2020). It distinguishes between three categories of constraints that can be purposefully manipulated by the police trainer in order to allow trainees to experience the demands that they would also encounter in the field and to perform functional solutions to the demands posed. The three categories are: (1) task constraints, (2) environmental constraints and (3) individual constraints.

Task constraints refer to the specific factual and operational structure of the task, which is reflected in service regulations and guidelines. Pandemic-specific task constraints involve the application (and knowledge) of current COVID-19-specific regulations and operating under changing and recently implemented guidelines and procedures.

Environmental constraints include changing ambient conditions such as temperature, the spatial situation, the nature of the ground, the presence of people, and objects or light conditions. The current results show that pandemic-specific environmental constraints are (a) policing in confined spaces where the risk of infection is higher and (b) interacting with individuals that have specific characteristics or display specific behaviours. These include the obvious display of COVID-19 symptoms, being part of a COVID-19 risk group, the noncompliance with and/or constant and repeated violation of the COVID-19 specific regulations (e.g., not wearing face masks or maintaining physical distance).

Finally, *individual constraints* refer to individual prerequisites of the police officer. On the one hand, individual constraints are of a structural nature that is relatively constant and less variable, such as body size or weight. On the other hand, they include situational initial states such as the motivation, intentions, or emotional states, that is, factors that can

change from one moment to the next within persons. Concerning the pandemic-specific stressors, constant individual constraints involve personal protection equipment (including face masks) that must be worn on duty and during social interactions. Police officers need to develop adaptive solutions to communicate and interact with citizens under these constraints. Variable constraints involve (a) increased anxiety or concerns when dispatching to a call of service due to prior information about the involvement of (suspected) COVID-19 positive individuals and (b) potentially depleted resources due to a high number of calls for service without recovery.

The constraints-led approach allows learners to adopt functional behaviour through cleverly designed and manipulated learning tasks that simulate the demands in the field. Such learning tasks encompass a broad range of training activities ranging from solo activities over one-on-one partner simulations to complex scenarios. Concerning complex scenarios, police officers may be subjected to either unprecedented scenarios, such as the enforcement of restrictions on common behaviours (e.g., controlling quarantine, disbanding of small groups, banning civilians from public spaces), spitting attacks as hazardous behaviour of assailants, and navigating through larger groups (potentially during riots) while maintaining physical distance, or to familiar scenarios, such as domestic violence, identity checks, or vehicle controls which have been impacted by the COVID-19 pandemic and the resulting public health measures and may as such be adapted by integrating pandemic-specific constraints. As an example of a complex scenario, trainees may respond to a domestic violence call at a 60 square meter apartment involving several individuals. This situation already provides the frame for various possible stressors for police officers: There is a confined space to keep distance and a limited space to interrogate the involved parties separately. Following the constraints-led approach, additional stressors can be embedded to the scenario based on the learner's skill level: Facial masks are worn by all involved persons, leading to a loss of information due to the inability to read facial expressions, or masks are not worn, increasing the perceived risk of infection. The perceived risk of infection can be further increased by providing prior information about an involved person being COVID-19 positive. On top of that, the involved persons might display an unwillingness to comply with social distancing rules, resulting in a high initial potential for aggression (and as such for close contact situations).

VR offers a particular opportunity to implement the concept of the constraint-led approach (Giessing, 2021). A major advantage of VR training is the higher control over training procedures (e.g., order of events, level of complexity, risk mitigation) compared to traditional police training (Jaspaert & Vervaeke, 2020; Murtinger et al.). Police trainers can configure scenarios according to the needs of the trainees and training aims. As such, VR training offers a great variability in training scenarios for a range of situations. It allows for the introduction of a wide range of examples and permutations of situation-specific (pandemic-related) conditions, which are often very difficult to include in traditional and/

or real-life training due to practical (e.g., budget, logistics) or ethical (e.g., too dangerous for trainees or actors in the scenarios) reasons. Through this variability, trainees are encouraged to explore and train individualized strategies and functional problem solutions to cope with the specific demands (Körner & Staller, 2020a, 2020b).

Besides letting learners explore possible solutions and functional behaviour through representatively designed and constrained learning tasks, police trainers may also proactively provide options for functional behaviour if this is wanted and/or needed by the learners (Körner et al., 2020). These may include verbal communication skills, defence behaviour against spitting attacks and maintaining physical distance throughout the interaction. Besides providing opportunities for learning for the job, police training might also teach skills that allow for *learning on the job*. This refers to coping with - and learning from - demands in the field without prior acclimatisation to the demands officers are subjected to. The current results suggest that learning emotion regulation strategies might prove especially useful to maintain performance in high-stress situations (Giessing et al., 2021, e.g., mindfulness-based approaches, Giessing et al., 2019; Landman et al., 2016).

Summary and conclusion

Although overall officers seemed to tolerate the stress experienced during the first lockdown of the COVID-19 pandemic relatively well, the large inter-individual variance in strain indicated that female officers, officers with less work experience, officers who feel unprepared or engage in maladaptive emotion regulation are at risk to experience severe pandemic-related work stress. Given the persistence of the pandemic, LEAs are required to implement long-term strategies to better prepare (vulnerable) officers to cope with pandemic-specific work demands. Both our quantitative and qualitative results have highlighted that participants perceived their training in self-protection, target-oriented communication, decision-making, and stress regulation as effective coping resources during the pandemic. To increase the transferability of these skills into the field, police trainers should design training settings that are representative for pandemic-specific demands in the field by purposefully manipulating individual, environmental and task constraints. Based on the re-analysis of officers' reports about pandemic-related work stressors, we identified a set of such constraints that can be incorporated in unprecedented or familiar training scenarios, in order to better prepare police officers for the demands that they would encounter during pandemic-related situations. Offering high control over training procedures, VR is a prime tool for frequent and varied scenario-based training to better prepare for the current and potentially future pandemic outbreaks and other high-stress situations that do not occur frequently, but can have disastrous consequences if not dealt with appropriately (e.g., CBRNe-disasters; Murtinger et al., 2021). VR allows for the introduction of a wide range of situation-specific stressors that officers may encounter and

should maximally be prepared for, which are often very difficult to include in traditional and/or real-life training due to practical (e.g., budget, logistics) or ethical (e.g., too dangerous for trainees or actors in the scenarios) reasons. The project SHOTPROS is currently working on the development of a VR training solution to facilitate the training of police officers' DMA skills in stressful and/or high-risk situations, such as the COVID-19 pandemic.

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ARTICLES

The Impacts of the COVID-19 Pandemic on the Daily Work of SIRENE Hungary

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Abstract

The coronavirus posed an unprecedented crisis. The importance of assessing the impact of the pandemic has continuously increased worldwide. So far, there have been many estimations and predictions how life and people's daily routine and priorities might change after the end of COVID-19 pandemic. Some publications have already made assessments about the recent past. This paper shows how the operational and strategic assignments, methodologies, and work burden of SIRENE Hungary have been altered. The study has a particular focus on how the volume of international criminal information exchange decreased and the organisation could adapt to the new circumstances successfully. The article concludes, while the harmful effects on a wide range of law enforcement activities become a fact, that the unexpected situation also opened opportunities and even had positive impacts at several functions. For instance, the decrease of work burden in the international criminal information exchange opened timeframes for further development of human resources and their workflow review. This means that the Bureau could deal with pending, time- and resource-consuming assignments, which usually lead to sluggish procedures.

Keywords: law enforcement, SIRENE Hungary, COVID-19, management flexibility

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Introduction

Due to the COVID-19 pandemic, which posed unprecedented and high-scale challenges worldwide, countries have been extensively struggling with socio-economic and public health issues (Jennings & Perez, 2020). The importance of assessing the impact of the global pandemic has been continuously increasing.

There have been estimations and predictions how life and everyday priorities might change after the crisis. However, there is no need to forecast what the future brings, but to analyse what has happened in this emergency period and to identify and to learn the lessons. The re-evaluation of all walks of life including the aspects of law enforcement is necessary. Policing authorities have a crucial role, such as providing services, guarding state borders, maintaining public order and similar vital services for the society, and participate in daily interactions with people.

Realising the demand for a situational assessment, several academic and professional articles or reports have analysed the effects of the COVID-19 pandemic on law enforcement in multiple approaches. Examples may be found from international (Alcadipani et al., 2020; Horesh & Brown, 2020; Jennings & Perez, 2020; and Europol, 2020) and from domestic authors (e.g. Farkas, 2020; Herke & Sándor, 2020 or Hornyik, 2020).

This paper has a similar intention and addresses the topic mentioned above in a chain of cause-and-effect relations. The publication – inter alia - concerns how the border situation shifted, which had a direct impact on international criminal cooperation and led to organisational changes during the emergency period. The main idea of writing this paper was to summarise and to describe the effects of the pandemic on the daily work of SIRENE² Hungary³. Instead of focusing on well-known adverse circumstances, the positive and foreshadowing signs of progress will be highlighted. The study focuses at the primary responsibilities and the daily routine assignments of SIRENE Hungary to explain the changes and how the organisation adapted to the suddenly occurred situation.

Methodology

This study is based on the elaboration of relevant literature and professional experiences emerged during the pandemic. Since the main intention was to show what developments were achieved by adapting to the new situation, no other scientific research method was used. To avoid jeopardising the internal work during the discussion of the professional achievements, the paper will focus on the synoptic descriptions. Only a gen-

2 SIRENE stands for Supplementary Information Request at the National Entries. The role of SIRENE will be later explained in the text.

3 This paper is based on a version already been presented at the BORDERPOL Forum - Ports and Borders in a Pandemic conference on 19 June 2020 (Mogyoródi, 2020).

eral frame of information without further specification about the workflows and the unification, will be given.

The role of the Schengen Information System and SIRENE

Besides the detailing of the role of SIRENE Hungary this part of the paper contains brief information on the Schengen Area and the second generation of the Schengen Information System (SIS II). Currently, the Schengen Area is comprised of the EU Member States, excluding Bulgaria, Croatia, Cyprus, Ireland and Romania, and the non-EU, but associated countries, which are Iceland, Lichtenstein, Norway, and Switzerland.

For the citizens of the above-listed states, the free-movement is guaranteed within the Schengen Zone. The internal Schengen territories often considered as a 'border-free' zone, but as a compensation, the control-mechanism is strengthened at the external Schengen borders,

To further enhance the security and the safety of the Schengen area, several compensatory measures have been introduced, supplementing the security deficit which is due to the lack of border controls at the internal borders. These adjustments include improved cooperation and coordination between police services and the judicial authorities; common rules for external border crossings and control of people; standardised travel document requirements, a common visa system, and harmonisation of means of control and joint values on the processing of asylum requests (Delivet, 2015). As a result of the above measures, the 2nd generation of the Schengen Information System (SIS II) is one of the most extensively information-sharing tool used by the competent authorities. SIS II enables to search for persons and objects by creating alerts. These alerts contain instructions ('actions to be taken') for the end-users which measures have to be carried out according to national legislations. In case of a database hit, authorities may require further supplementary information from the national SIRENE Bureau. The national SIRENE Bureau serves as a single point of contact for information exchange and has a coordinative role. EU countries, except Cyprus and Ireland, the above listed Schengen associated countries and EU agencies (Frontex,⁴ Europol⁵ and Eurojust⁶) are using the SIS II. The cooperation of the SIRENE Bureau is an important part of the functioning of the SIS.

SIRENE Hungary

SIRENE Hungary is located in Budapest and is an element of a medium level police organisation, called International Law Enforcement Cooperation Centre (ILECC). As a fusion cen-

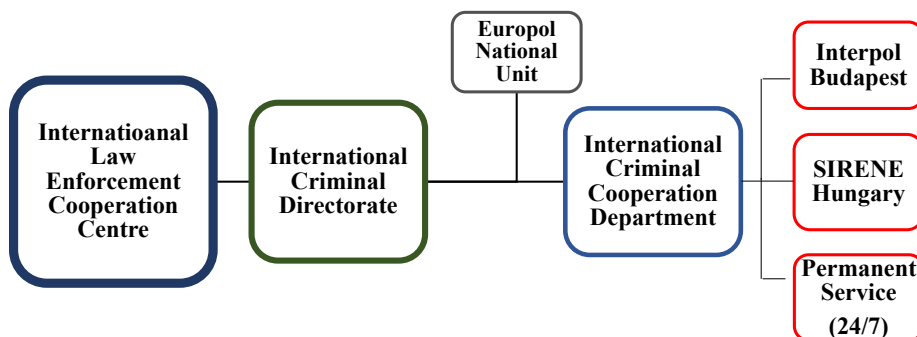
4 European Border and Coast Guard Agency

5 European Union Agency for Law Enforcement Cooperation

6 European Union Agency for Criminal Justice Cooperation

tre, ILECC merges various information exchange platforms, such as the Europol National Unit and the Interpol Hungarian National Central Bureau (Interpol Budapest) and is capable of providing additional values of information that may be crucial to their customers from the law enforcement community (Csaba, 2018a).

Figure 1: organigram item of ILECC [edited by the author]



The main operational tasks of the SIRENE Bureaux are defined by the binding legislation of the EU that was implemented in Act 181 of 2012 on the Exchange of Information in the Framework of the Second-generation Schengen Information System. Article 3 of the latter Act expansively sets out the primary duties of the SIRENE Bureau that can be categorised as follows:

- exchanging of supplementary information with other SIRENE Bureaux,
- coordinating data insertion into SIS II by Hungarian authorities,
- checking the data quality of SIS II alerts,
- creating links between Hungarian alerts inserted by Hungarian authorities,
- requesting and attaching flags on the alerts,⁷
- being responsible for complying with the data protection and data security regulations,
- receiving and processing information about hits on alerts and informing the eligible parties.

The Hungarian SIRENE Bureau and Interpol Budapest operate together as an integrated office (often called as 'back office'). Officers form three different working groups according to their targeting priorities such as individuals, objects and third-country nationals are connected to law enforcement actions. 'Back office' is responsible for the insertion of

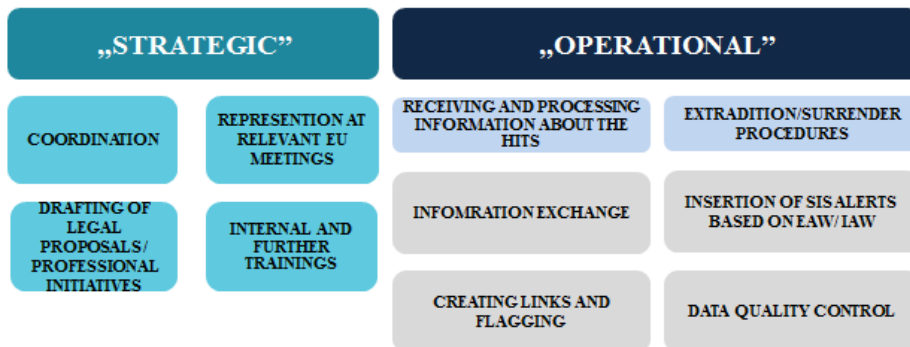
⁷ Flags are indications if a measure requested by another country will not be implemented due to some specific national implementation barriers.

new SIS alerts based on European and International Arrest Warrants (EAW/IAW). Surrenders, extraditions and transfers of convicts, the handing over of individuals to and taking over individuals from the foreign partner agencies are organised as well. SIRENE Hungary also manages information requests related to SIS alerts and takes care of false and inaccurate data stored in the database.

Contrary to the ‘back office’, the ‘permanent service’ of ILECC performs the 24/7 service availability requirement of SIRENE. Not only operational, but strategic work typifies the daily routine of SIRENE Hungary:

- representing professional interests at conferences and EU level meetings in relation to Schengen cooperation,
- organising and performing internal and further training courses for police staff,
- drafting proposals concerning relevant rules and regulations,
- preparation for and coordination of the ‘Schengen Evaluations’.⁸

Figure 2: the main operational and strategical areas of responsibility of SIRENE Hungary (Mogyoródi, 2020)



Positive effects of the COVID-19 pandemic

According to SIS II – 2019 Annual Statistics (eu-LISA, 2020), both the number of alerts and the number of database hits significantly increased compared to 2018. This confirms a long-run trend that sees back to 2013 from when such reports were published. Based on these figures, the estimation was that this trend might have continued in 2020. This may have meant that the previously listed operational tasks would have taken a large amount of human capacity, which was generally the case. During the recent years, the newly emerging strategic assignments, such as the Schengen Evaluation in 2019, IT sys-

⁸ The ‘Schengen Evaluation’ or SCHEVAL is a repeated procedure, where a member state, based on quantity and quality indicators has to prove that they can deliver Schengen rules as expected.

tem developments, a higher amount of resources, including human capacities, were devoted to fulfilling these tasks.

Due the COVID-19 pandemic, in March 2020 the Hungarian state of emergency was declared by the Government Decree 40/2020 [III.11.] on the Enactment of Emergency, which was prolonged until June 2020. During these months, special defence measures were put in place e.g. reinstated and strengthened border-control at the internal and external Schengen borders; travel bans were imposed to slow down the spread of infections; to support the healthcare system, and to keep the safety of the citizens. Not only Hungary, but other EU *'Member States have imposed extensive quarantine measures, including travel restrictions, limitations to public life and lockdowns'* (Europol, 2020:2). In practice, the Europe-wide restrictions resulted in masses of people remained at home. Those people, who could decrease their circulation within the territory of the country and across the borders followed advises voluntarily, and many others had to adapt the governments' preventive measures. As a consequence, the mobility slowed down.

What were the effects on the daily work of SIRENE Hungary?

A downward tendency was experienced in the volume of the incoming information concerning the Schengen cooperation that ended up in a considerable reduction quite soon because of the less human mobility in general. Less movement also meant fewer people came in contact with police services with fewer checks and fewer database hits in SIS II. To monitor the situation, the number of incoming and outgoing SIRENE messages was compared with the same periods of 2018 and 2019 through the workflow system. Both years had more or less the same figures, approximately 40 % higher than in 2020. At this point, the change became significant.

The implementations of the surrender of fugitives by air were either postponed or suspended. The reason for this phenomenon was simple; regular flights have not been operating and restrictions were put in a place at the airports Police authorities were unable of arranging handovers. Under exceptional circumstances, if the extradited person was Hungarian national from the neighbouring countries, the takeover could be achieved on land.

Due to the extensive measures, especially the temporarily restored border checks at the internal Schengen borders, the strengthened border-controls, and the shifting trends of criminality led to a highly decreased number of databases hits within the SIS II.

The cooperation with most of our partners, especially with border police units at the external borders responsible for a huge amount of database hits, calmed down. During the emergency, the arrest warrants become an issue due to the continuously changing national legislations and the handover bottlenecks required increased attention with the

Ministry of Justice. Overall, significant human resources had to be released from their operational tasks and regroup them elsewhere. As Csaba (2018b, p.48) specifies,

"...law enforcement agencies are often facing shortages of their resources. Their tasks, assignments and the area of responsibility are continuously changing, but not as quick as their resources do. Their flexibility is changing much slower with their resources than the demand requires. The so-called demand gap is between the two graphs area. This is the main challenge that law enforcement agencies have to compensate somehow."

This gap can be considered as a natural part of the administrative and law enforcement authorities that results in backlogs in processing the cases. Since the daily needs did not consume most of the resources, the arrangement of the backlogs was possible. Furthermore, the situation made it possible to keep the division up to date with files continuously.

The staff situation was unchanged, the Bureau remained fully operational during the pandemic. However, some of the fellow-workers received temporary exemptions from their duties or were authorised to work flexible hours. All risk and human resource management related issues were managed centrally. This meant that the aptitude tests (medical, psychological and physical) were suspended and postponed, while the transfers between police units, the recruitment and leaving the police service were not allowed.

The morale of the staff was strictly monitored and controlled by the management of ILECC. Most of the discussions concerned professional issues, and again with some exceptions, no genuine concern was experienced among them.

After managing officers to be up to date with the operational tasks and arranging the backlogs, the nature of the work of SIRENE Hungary turned to be a typical office job, since the fellow-workers had to remain behind the desk.

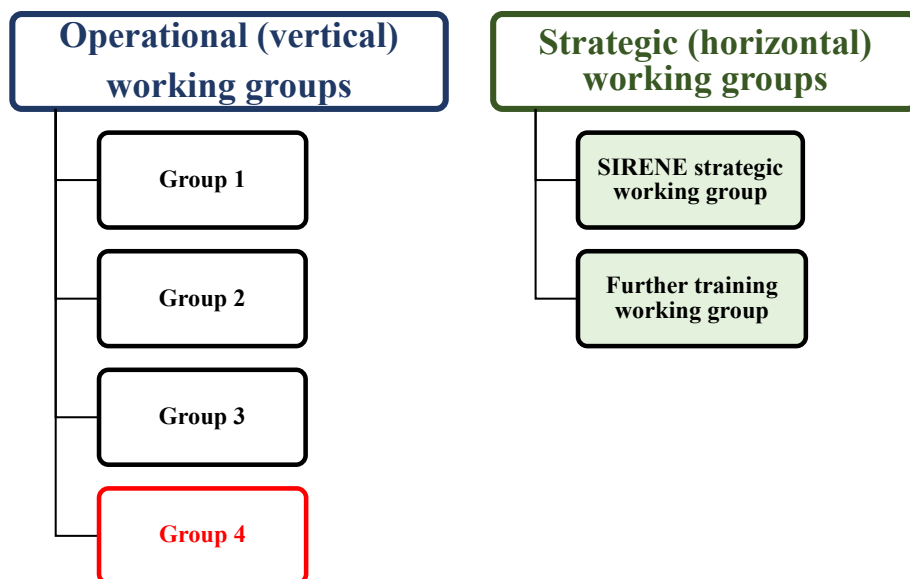
Previously, there have been many ideas and intentions to focus on staff development, but due to the operational engagements these were either postponed or dismissed. As a background, there had been a higher employee turnover rate, and many newcomers arrived in the unit in recent years, which resulted in shortage of experienced officers. On the other hand, there were many developments on international and national level; therefore, there was a strong need to keep abreast of these challenging times. Training courses and knowledge tests were introduced for the staff members who dealt with SIS-SIRENE and EU matters. Besides this, to facilitate transparency, a user-friendly intranet was set up which is a cost-free SharePoint application that was proven successful and entered into daily use.

Not only the staff development but also the review of the workflow and the use of human resources were found to be crucial in simplifying and rationalising the daily work. Previously, there were some intentions and discussions demanded by the operational needs how to restructure the work, but those remained just ideas. In spite of this, the decision-making was considered simple. The planning procedure was performed through different deputy-director led meetings where the division leaders and the deputies were involved. The developments did not burden the organisation with expenses and only concerned a department within three divisions. The major roles of these divisions remained unchanged, but some tasks have been rearranged from 'back office' to the 'permanent service', while many of the current workflows were either updated or rethought.

During the decision-making, one of the most influencing point was to avoid the deep intervention into the daily-life of the staff members and to keep in mind that the up-most purpose of the measures was to unify the procedures, to make more comfortable and understandable for those who work with them. Concerning the effects of the recast on individual level, earlier, there have been clear signs indicating some working groups and individuals' burden become overloaded, while others still had free capacity. To keep the expertise balance between the case officers also considering their situation that has sometimes been highly influenced preventive pandemic restrictions, and of course, to adopt the newly emerging needs, four working groups were formed instead of the previous three in the 'back office'.

Besides the regrouping, there was another concept which was that idea of generalist case officers should rather be specialised. From this latter mentioned measure, the exception is that the case officers would have an easier and better view on their daily work which would increase their expertise on that particular topic they deal with.

Not only new vertical, but new horizontal working and strategic groups were established. These groups handle the SIRENE related strategic issues and further training of the staff. The primary intension was to link the entire existing procedures and to have a more transparent and efficient strategical work. This would provide better involvement for the divisions targeting on SIRENE's assignments.

Figure 3: new working groups [edited by the author]

Some of the above-described measures, such as the rearrangement of the assignments have already proven successful, but others will be introduced from September 2020 as a pilot; therefore, the actual change management would start from that point.

Conclusion

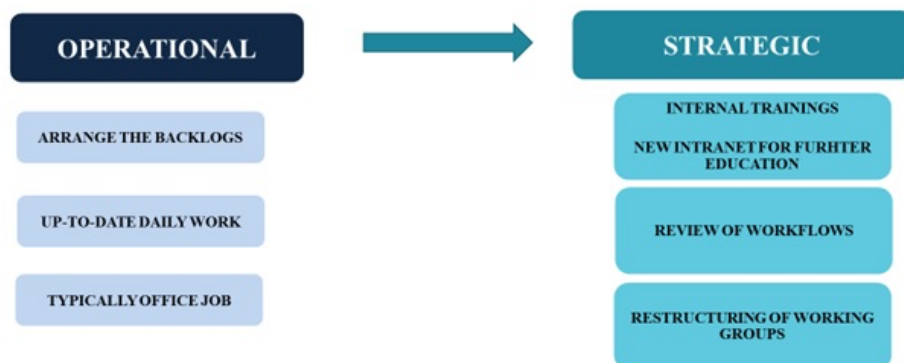
The overall conclusion is that the effects of the COVID-19 pandemic temporarily changed the daily work of SIRENE Hungary which meant that the operational assignments were decreased, and the focus shifted towards the strategic work.

Both the management and the staff of ILECC succeeded in adopting the new circumstances and used all opportunities for solving those problems which only could have performed with significant additional efforts or saving resources by tailor-made measures.

Many adverse effects of the coronavirus pandemic occurred, but these were turned to positive impacts. These were the additional opportunities: to develop further our human resources; elaboration and test of a new intranet solution; the introduction of new working groups and the extensive revision of our workflows. The Hungarian SIRENE Bureau has proven flexible and capable of adapting to extraordinary things in extraordinary times.

The figure below summarise how main tasks shifted during the pandemic (from normal to exceptional).

Figure 4: the main tasks of SIRENE Hungary during the pandemic (Mogyoródi, 2020)



The results of this extraordinary period proved that the balance between the operational and the strategic tasks shall be continuously maintained. This is the way to further develop which might be a key-solution to increase the effectiveness of the daily work and to better manage the workload.

This special situation has also proven that the importance of the international criminal cooperation, especially the use of and the need for SIS-SIRENE channel is always dependent upon the mobility. Since the pandemic caused a tremendous fall-back in the flow of people and objects, the downward tendency in the operational tasks simultaneously emerged.

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International Police Peacekeeping Missions - Recruitment and Selection of German Police Officers

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Abstract

International Police Peacekeeping Missions stand or fall with recruitment and selection of competent police officers. The present article starts with an introduction into missions from a German perspective. Specifically, Germany is providing law enforcement staff to perform a series of different tasks such as fighting crime, helping countries to develop their own police forces, and securing EU borders (Frontex). In this context, we focus on the topic of how to recruit and select qualified police officers. For this purpose, we present an overview of the personnel selection process and highlight the importance of intercultural competence. Finally, we discuss implications and research directions.

Keywords: *International Police Peacekeeping Missions; personnel selection; development center; assessment center; interview; recruitment; Frontex*

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Introduction

“German Police Officers help at the Greek Border” – in March 2020, you could read this title in a German newspaper (Schiermeyer, 2020). Indeed, it is quite rare to read about the international deployment of national police officers. While media coverage of military missions occurs virtually automatic, the fact that police officers are also involved in international services is often overlooked. Yet, the German police forces have already supported several missions since the fall of the Iron Wall in 1989, i.e. by the United Nations (UN), the European Union (EU) and the Organization for Security and Co-Operation in Europe (OSCE). By 2014, over 9 000 German police officers had served internationally. Compared to a total of 250 000 police officers in Germany, that number seems to be quite low. By the end of March 2019, there were only 109 officers serving in a foreign country (Albrecht et. al., 2019). In this article, we discuss challenges of International Police Peacekeeping Missions from a German perspective. As one of the first challenges, recruitment and selection of competent police officers are crucial for a successful service abroad. A wrong decision in the selection process will have a negative impact on the mission as a whole. Because almost no papers have been published on this issue and it is very hard to access data on this topic, we want to incite an international discussion on personnel selection practices for International Police Peacekeeping Missions.

Challenges and Shifts in International Police Peacekeeping Missions

Police Peacekeeping Missions in foreign countries pursue different aims. Mostly, they fight crime such as corruption or organised crime like drug dealing, piracy, or human trafficking. Moreover, they engage in missions to help other countries to develop their own police forces. More recently, they are deployed to secure EU borders (Frontex). In order to successfully promote mission outcomes, competent and well-trained law enforcement personnel are needed. Indeed, police officers in a mission are involved in crisis prevention, promotion of stabilisation and security, post-conflict support and humanitarian help to strengthen democracy, rule of law and human rights worldwide (Grosser, 2018, p.10).

An important field of activity are fragile states or conflict zones. Here, International Police Peacekeeping Missions contribute to the development of a functioning police force that operates based on the rule of law. Within the last couple of years, we have seen a change in the geographic focus of missions. Nowadays, there is an emphasis on conflict zones as origins of a high numbers of refugees, like Afghanistan and the Sahel region (i.e. Mali, Niger) (Albrecht, Kopp & Hof, 2019). Since a high number of refugees also creates challenges for European countries, European police forces may help to fight the causes of flows of refugees in those areas (Grosser, 2018, p.9). Moreover, in recent years, we have also seen

a change in task orientation of missions (Wehe, 2006). Specifically, tasks of police officers in conflict areas shifted from *capacity building* to *specialised counselling*, both, at an operative level and up to the strategic ministry level. Until a couple of years ago, there was need for a *generalist*. Now, there is need for a *specialist*. Both, changes in geographic focus to distant conflict areas and changes in task orientation to specialists produce challenges for recruitment and selection of police officers. Finding a “*competent, motivated specialist*”, however, seems very difficult. These challenges and the fact that there is often no binding obligation for a nation to support International Police Peacekeeping Missions, makes participation in such a mission de-facto voluntary (European Union, 2000). Summing up, these circumstances pose a challenge to find qualified staff for those missions.

Applicant Situation

As it is a challenging task to find the “*competent, motivated specialist*” for International Police Peacekeeping Missions, the applicant situation is tense in Germany. In recent years, there seems to be less and less interest in the service abroad. Although working in a mission may serve to fulfill individual work values such as altruism, personal development, task variety or salary surcharges (Thielgen, Schade & Carobolante, 2019), several hurdles may hinder applicants to apply. On the one hand, the deployment abroad may often be perceived as an obstacle for the career as a police officer in their home countries. That is partly due to the fact, that immediate supervisors are often unable to see the additional value of the competencies acquired abroad for the job back home. Moreover, demographic changes and increased societal demands have led to chronically understaffed police forces in many police organizations (Thielgen et al., 2019). Therefore, every single officer is needed in Germany. Thus, supervisors feel urged to keep their colleagues at home. With that being mentioned, most immediate superior officers are not very happy to see their officers apply for international deployment. In many cases, police officers are aware of that fact and refrain from applying, even if interested.

On the other hand, German police officers are not the only ones applying for International Police Peacekeeping Missions. Specifically, the pool of applicants, and therefore, direct competition is international. With that, the pool of applicants is bigger, the competition is higher, and a smaller percentage of applicants will be selected for the position. Furthermore, the fact that every country has its own policies when it comes to international missions is yet another strain. German police officers in the state of Baden-Württemberg, for example, can only stay for a maximum of 12 months, whilst other countries allow longer deployments. Being able to stay for a longer period might give certain applicants an advantage over those who are restricted in their length of stay. Before discussing possible directions on how to overcome these challenges, we need to understand how police officers are typically recruited and selected for such missions.

Task Force 'International Police Missions' (AG IPM) Recruitment and Selection Standards

In the year 1994, the German Ministry of the Interior initiated a strategic task force for International Police Missions (AG IPM). Specifically, AG IPM members defined standards and general regulations for employee selection purposes. Moreover, they created a pool of potentially suitable officers for international deployment. Notably, the creation of such a personnel base conforms with the guidelines by the EU for national personnel pools (European Union, 2000). Subsequently, if an International Police Mission is constituted, then the mission has access to a large pool of suitable police officers and therefore access to the best international talent.

Personnel Selection Practice and Development Center

Taking changes and circumstances of foreign deployment into account, the AG IPM task force has designed a Development Center (DC) for police officer selection. Typically, a Development Center is used as an internal Assessment Center (AC). It is based on a job profile of police officers deployed in International Police Peacekeeping Missions and comprises a variety of diagnostic tools to assess applicant's competencies. In contrast to an AC, candidates assessed in the DC already work for the organisation and will continue to do so. While with an AC one aspires to select the person that best fits to the job, with a DC one aspires to find high-potential individuals that can easily be trained and prepared for a new and higher work position. High-potential individuals are individuals inside an organisation who perform well, are fast learners and are able to adjust to new surroundings. Because international placement comes with all kinds of challenges, applicants are not expected to already be the best fit for the job but are expected to be eager to learn and motivated to grow into the new role as an expatriate. Thus, the DC has two advantages (Tett, Simonet, Walser & Brown, 2013). First, according to the principle *"find a person that fits to a job"*, the organization may assess police officers that are suitable for vacant positions abroad. Second, according to the principle *"develop a person to increase the fit between the person and the job"*, the DC may uncover potential development needs of police officers, in order to better prepare them for their future mission. In other words, the DC is used to find suitable staff within the organisation. Moreover, it is suitable to select for new and specialised jobs and to prepare applicants accordingly. So, the key question guiding this kind of selection is: *"Who has promising potential for deployment abroad?"*

In the German federal state of Baden-Württemberg, police officers having served for more than eight years can apply for the DC. After a security check, their superior gives a statement about the candidates' soft skills, such as stress resistance, self-discipline, communication and conflict management skills, intercultural competence, and capacity for teamwork.

The actual Development Centre predominantly aligns to specific cognitive skills, such as language skills, physiological fitness, as well as social and personality competencies. See Figure 1 for an overview of the Development Centre.

Figure 1. Overview of the Development Centre currently used for recruitment and selection of German officers for International Police Peacekeeping missions.



Next, we will describe each part in more detail.

At first, regarding language skills, all the candidates are required to pass a B2 level English exam, as English is the working language on International Police Peacekeeping Missions. Subsequently, language courses are offered to make sure that there are no additional complications due to a lack of language skills during the missions. Additional language skills on an advanced level may be considered as an extra asset.

Next, the Cooper test assesses physical abilities of the candidates. An assessment of physical fitness is important because living abroad in completely different climate conditions can cause severe physical issues. Therefore, it is important that the candidates show

a good physical health in all respects. The Cooper test specifically focuses on stamina. The distance run in 12 minutes determines if the candidate passes or fails the test. Norm tables are specified for age and gender.

Not only the language skills and physical performance but also psychological potentials are being tested. To do so, the candidates have to answer multiple psychological tests, which include questions to working and health behaviour (AVEM; Schaarschmidt & Fischer, 2008), and personality (FPI-R); (Fahrenberg, Hampel & Selg, 1994). In addition to those two tests, candidates also have to answer a resilience scale (RS25; Leppert, Koch, Brähler & Strauß, 2008) to prove their psychological capacity of resistance.

After passing the tests, candidates will be asked to participate in a role-play scenario. This interactive task will provide the opportunity to evaluate the candidates' ability to work under pressure, to show their diplomatic skills, and intercultural competence. For reasons of objectivity, all candidates are given the same scenario.

To test their social skills, the candidates are involved in a group task. In groups of four to eight people, they have to solve a task together. Observers watch and evaluate the candidates' behaviour and group interaction. Notably, observers are trained and familiar with the materials.

As the last step within the recruitment process, candidates have an interview with a panel of three people – two senior managers working in the department of International Police Peacekeeping Missions and one police psychologist. On grounds of quality criteria (e.g., Campion, Palmer & Campion, 1997) the interview is structured, and interviewers are trained and experienced. The selection committee has the opportunity to see the candidates' verbal skills, also in English. Furthermore, the motivation that makes a police officer apply for deployment abroad is of interest and is thoroughly explored by the committee.

For the finish of the DC procedure, one of the core principles is taken into account, i.e. to *"develop a person to increase the fit between the person and the job"*. Specifically, the candidate will be given feedback regarding their individual strengths and development potential. Moreover, they will also be informed about the further process.

Police Officer Pool and Onboarding Process

After having successfully passed the Development Centre, police officers are added to the pool of candidates for deployment. Here, they will remain for three years. If there is no deployment abroad during that period, a new application is required, and the candidate has to be re-assessed by undertaking the same recruiting process.

During the time of pool membership, police officers are required to attend several series of seminars. The basic requirement is a two-week seminar that is certified by the EU and the United Nations. Depending on the officers' English test results, they are also asked to take up English lessons to improve their language skills.

Once an officer is accepted for deployment, mission targeted trainings need to be attended. The competence set of the officers ought to be trained particularly for the host country and its unique culture. Therefore, there are trainings like '*Intercultural Management and Behaviour*', '*Monitoring, Mentoring and Advising*' or '*Women, Peace and Security*'. All of these trainings are held in English and are organised by the AG IPM. Participating in those seminars generally leads to a successful deployment abroad.

Discussion, Implications and Further Directions

International police peacekeeping missions stand or fall with recruitment and selection of competent police officers. A wrong decision in the selection progress can result in negative consequences like having to replace an officer on short notice, lower job satisfaction, or lower job performance. This is why the selection and recruitment process are crucial for the success of international police peacekeeping missions. Indeed, colleagues are involved in a series of different tasks such as fighting crime, helping countries to develop their own police forces, and securing EU borders (Frontex). In this context, we focused on the topic of how to recruit and select qualified police officers. Therefore, we presented an overview of the personnel selection process and highlighted the importance of intercultural competence in Germany.

According to the elements of the Development Centre described above, there is no particular test to assess the intercultural competence of a candidate. Elements like the group assignment or the one-on-one interview capture aspects of this particular skill. In other words, an elaborated DC is needed. However, given the importance of this skill set for the work of a police officer abroad, we are urged to persistently evaluate and further develop our assessment practices. For instance, it could be considered to add a specific measure of intercultural competence to the DC in the future. An example for a suited test is the TMIK, a situational judgement test to assess such a construct (e.g., TMIK; Schnabel, Kelaiva, Seifert & Kuhlbrodt, 2014). This measurement approach combines self-evaluation and situation assessment, and thus, it seems to be suitable for the selection process outlined in this paper. Moreover, intercultural competence is not the only aspect of the DC that could be reconsidered. In fact, to this day an adequate evaluation of the Development Centre has yet to be done. To do this, follow-up tests with recruits after their return home as well as analysing data of numbers and reasons of returning home early are foreseen. In addition, an exchange of best practices between different nations concerning their in-

dividual processes to find suitable officers for a mission abroad will help to create a more elaborated Development Center.

After completion of an International Police Peacekeeping Mission, the multifaceted work started abroad should not stop after coming home. In fact, one of the essentials of deployment is continuing, just at the moment a police officer returns to their department in the homeland. Building up to the help for the host country, the expatriate should transfer experience to the home organisation. Indeed, a reliable international network can be advantageous to that end. Unfortunately, this aspect of deployment still shows a great shortfall. So far, the question of how to utilise international mission experience back home and to generate added value within the German police has yet to be answered (Jacobs & Kunze 2017).

To this day, many opportunities have been missed out when colleagues have achieved higher levels of intercultural competencies. Indeed, intercultural competence is a skill not only required abroad. Like most countries, Germany is becoming more and more multicultural. By the end of 2019, about 20.8 million people of a total population of 83.1 million had foreign roots, i.e. roughly 25% of the German population (Statistisches Bundesamt, 2019). Indeed, a large variety of different cultures is represented in Germany police officers encounter. In a survey among 2630 German police officers, 90% agreed that they are involved with people from foreign cultures on a daily basis. Out of this group, 65% of the police officers considered knowledge about other cultures helpful for their day-to-day job (Hagenlocher, 2019). This emphasises the importance of intercultural competence for the police work on a daily basis.

Nevertheless, the topic of International Police Peacekeeping Missions and its personnel selection practices continues to be an important one. Future research should consider the issue of deployment of police officers to ensure that those missions are successful. In our opinion, media should cover those missions to appreciate this valuable facet of police work.

Conclusion

This paper offered an overview of the personnel selection process for International Police Peacekeeping Missions. We stress that it is important to recruit and select competent police officers for such missions since it is generally a challenging task in an intercultural setting. Only the German perspective was taken into account here, since the research topic is fairly under researched and no data from other countries are published so far. The outlined recruiting process was found to fit well with the specific needs of the institute of foreign police affairs. We hope to open the way for international discussion on this topic.

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SKALA - Predictive Policing in North Rhine-Westphalia

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Abstract

Predictive Policing (PP) is an umbrella term used to describe methodological processes utilised by law enforcement agencies to predict crimes and to aid in planning operational responses. Essentially, they are computer-assisted, spatially-based, probability calculations of crime. These processes have gained international popularity and have become a frequently discussed topic that has attracted the interest of policymakers and decision-makers in law enforcement circles. This article provides an insider's assessment of the implementation of one such process, SKALA (Crime Analysis and Anticipation System), by the State Office of Criminal Investigation of North Rhine-Westphalia (NRW), Germany. We explain the rationales both for PP and for SKALA and explain how the latter operates in practice. Piloted in six police authorities between 2015 and 2018, the State Office assessed that SKALA was a promising technique that could assist strategic decision-making; particularly, in the allocation of scarce police resources. When it was rolled out across the state, practitioners found the system to lack sufficient detail for their needs and the State Office, in conjunction with a higher education institution and with those practitioners, took steps to generate improvements in the analytical products produced for frontline staff and these have been more readily accepted. We (I) argue that it is too early to present definitive conclusions on SKALA's utility. We can say that as yet there is no statistical evidence to support the hypothesis that crime is reduced in NRW because of SKALA but it is interesting that a decrease in the number of burglaries has been observed in all areas (not just those in the areas where the system was applied). More research would be needed to explain why that is the case.

Key words: Predictive Policing, SKALA, Crime Analysis,

Introduction

Over the last decade, Predictive Policing (PP) has gained international popularity and has become a frequently discussed topic in both academic and non-academic literature. This paper is based on the understanding of PP as a computer-assisted method for spatially based probability calculations of crime (Seidensticker, Bode & Stoffel 2018, p.1). By applying PP, possible future crime targets are identified, and the planning of operational police can be determined. This means that PP forecasts where and when an increased risk of crime could probably be observed in the future. Therefore, the term 'prediction' in this paper is defined as spatio-temporal crime forecast.

Predictive Policing methodologies use mathematical algorithms to analyse large datasets to predict when and where crimes may be committed (Willems & Doeleman, 2014). Although the definition of PP is not uniform in science and practice, it is analogous with PP (Pollich & Bode 2017: 3). Predictive Policing utilises a wide range of methods. For example, some methods use perpetrator-related prognoses while others rely upon spatially-related prognoses.

According to Perry et al (2013), there are four broad categories of predictive methods. These methods are focused either on predicting: crime; offenders; victims; or perpetrator identities. The innovative aspect of PP is that it focuses on the prevention of 'future crimes' rather than on combatting 'previous crimes'. We have seen police forces and other actors in the security architecture focus on reinforcing methods of PP (e.g. Ferguson, 2017, pp.63-65; Perry et al, 2013, p.18). At the level of criminal policy, there are also more proposals for the implementation of predictive crime analysis (e.g. Hauber et al., 2017, p.82; Egbert, 2018, p.102). It is therefore not surprising that PP methods are now part of everyday police work in many police forces in many countries. By visualizing areas that pose a high risk of crime in the future (instead of retrospective hot spots), PP aims to stimulate proactive and future-oriented police work. In Germany, which consists of 16 federal states, many different PP solutions are currently running (KLB-operativ in Hessen, KrimPro in Berlin, precobs in Bavaria, PreMap in Lower Saxony and SKALA). The landscape of implementation possibilities in Germany is correspondingly diverse (see Bode & Seidensticker 2020).

Predicting crime

Predictive Policing is predicated on the assumption that criminality is not random, but that it is to some extent predictable because of patterns of crime and their continuation (De Vries & Smit, 2016). By analysing historical data, Predictive Policing systems aim to identify these crime patterns. Therefore, not all types of crime are suitable for predic-

tions. For example, a homicide is not the type of crime to which models can be applied. First, this type of crime is comparatively rare, so models can only be trained with a small sample. However, a sufficiently large sample is needed to train a model that is capable of making accurate predictions. Secondly, this type of crime is strongly influenced by impulsiveness and emotions rather than rational decisions, which rather contradicts the thesis of crime patterns based on rational choice. Technically, it should be noted that crime phenomena cannot be fully modelled in data, which is the main influence of the residual that is part of any predictive model.

Predictive models are commonly based on the phenomenon of near repeat victimisation, which has often been empirically proven. Studies show that crime events are often followed by a subsequent crime event in the following days and in the surrounding area. The near-repeat phenomenon has mostly been researched in context of residential burglary (Bernasco, Johnson & Ruiter, 2015). However, the near repeat phenomenon has also been tested in other types of crime such as bicycle theft (Bowers & Johnson, 2004) and shootings (Youstin, Nobles, Ward & Cook, 2011). Researchers have argued that each type of crime has a unique spatio-temporal pattern that determines the actual realisation of near repeat victimisation.

In summary, it can be said that before making spatio-temporal crime predictions, it must be examined whether a crime is, in principle, suitable for prediction (Seidensticker, 2017, p.295). Reviewing the international use of PP solutions, it becomes clear that crime predictions often are made for the offense of residential burglary (LKA NRW, 2018b, p.76-78). This offense is characterised by its almost exact spatial reference and its relatively low number of unreported cases. Furthermore, its spatio-temporal variability makes it particularly suitable for crime predictions (e.g. Albers, 2015, p.141). There is also the possibility of influencing the occurrence of residential burglaries through police measures.

Predictive Policing as a process

Predictive Policing is a method used to create crime predictions that refer to specific areas and to limited, usually short, periods of time. Advocates of PP claim that as a result, crime can be suppressed and consequently reduced. The extant literature suggests that the validity of the predictions must be considered as limited by time and they must be updated at regular intervals (see for example Stoffel et al. 2017; Seidensticker 2017). Predictive Policing must therefore be understood as a continuous process consisting of various steps.

The first step is to collect the data and analyse it using a statistical model. The results of this modelling are called predictions and often are visualised. However, this is only one

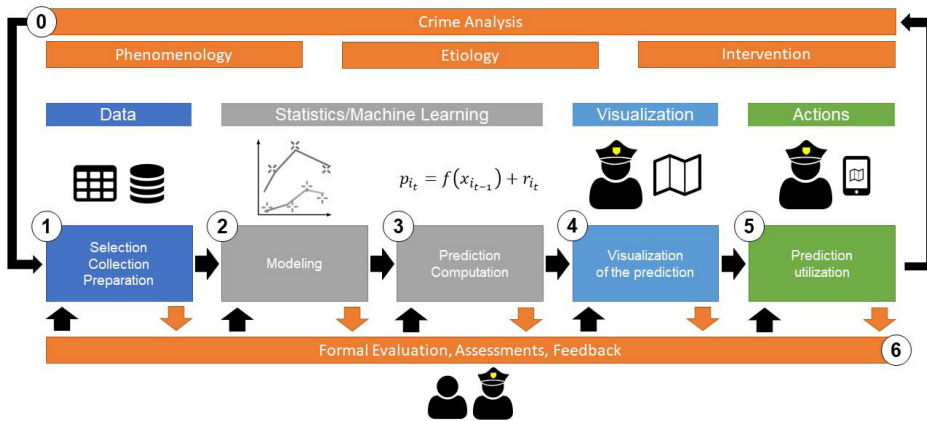
aspect of PP. Police interventions may be performed as a response to the predictions, which in turn can change or disrupt the environment. Police interventions may change the social situation and therefore new data must be collected in order to make new predictions that take account of those changes. In this way, the data used continuously represent the events of interest and bias in performance measurement is avoided.

The process we have described has been visualized by Perry et al as the “Prediction-Led Policing Business Process” (2013, p.12). This is a well-known model that explains the principles of the process and the interactions associated usually with the implementation of PP (figure 1).

Figure 1: Prediction-Led-Policing Business Process (Perry et al., 2013, p. 12).



However, Perry et al have given only limited attention to the methodological approach we address in this paper. Therefore, we have included a second illustration of the PP process, as explained by Stoffel et al, 2017 (see Figure 2). This process provides insight into the steps involved in implementing PP from a police perspective. Deviations from this are of course conceivable, but we argue that similar configurations normatively are used when machine-learning techniques are implemented in law enforcement settings (e.g. Bode et al, 2017). Bode et al’s model also provides us with a handy framework for explaining the SKALA system.

Figure 2: The Predictive-Policing-Process (Seidensticker, 2017, based on Bode et al., 2017).

Predictive Policing in North Rhine-Westphalia

The NRW police forces currently use PP to predict residential burglaries, commercial burglaries and motor vehicle offences. The application of PP to other offences such as robbery or bicycle theft is the subject of ongoing tests. As mentioned earlier, PP requires sufficient available data to generate accurate predictions. Consequently, it is not possible to provide predictions for all types of crimes requested by the police forces. Rather, PP must be considered as one possible reaction based on crime analysis (Step 0 of the Bode et al model).

From 2015, the State Office of Criminal Investigation NRW (LKA NRW) implemented the SKALA project in six major police authorities. The aim of the project was to investigate the possibilities and limitations of crime prediction and to test the efficiency and effectiveness of police interventions based on these predictions. SKALA focuses on predicting crime risks using spatial data for each residential district in police precincts, ensuring that crime predictions are produced for entire cities. SKALA uses a proprietary in-house programme. Many law enforcement agencies use ready-to-use applications created by private providers but that was not an option that was considered by LKA NRW.

A major advantage of developing such methods in-house is that potentially sensitive police data always remains under the control of the police organisation and not third parties. SKALA was evaluated in cooperation with external scientific consultants by the Gesellschaft für innovative Sozialforschung und Sozialplanung e.V. (GISS). The project ended in February 2018, the evaluation report and the final project report were published online (LKA NRW, 2018a; 2018b). LKA NRW came to the conclusion that PP was a promising technique that could be an important building block for strategic decisions, especially for

the allocation of police resources. After the end of the project, SKALA was subsequently taken over into regular service and implemented in 26 of 47 police departments in NRW.

Selection, collection and preparation of data

Using the Bode et al framework (Figure 2), we begin with the data. All components of the PP process depend on the data to be processed, the corresponding data collection and the data preparation for further processing. In addition to the problems of data collection, data uncertainty is a critical factor in data quality. These data uncertainties describe the problem of the unknowns. It usually is not known to what extent errors are contained in the data collected and processed. In this context, problems in data collection, such as measurement uncertainties, also are conceivable. For example, the presumed time of a burglary is usually uncertain (when the householder is absent and no witnesses to the crime are available) and has an interval between the time 'from' and the time 'to' in which the burglary was committed. Another potential source of uncertainty may be the problem that criminal offenses are either legally misjudged by police officers or are reported late or incomplete by victims (not uncommon when reporting burglaries; see Seidensticker, 2019, p.8; Stoffel et al., 2017, p.4f.).

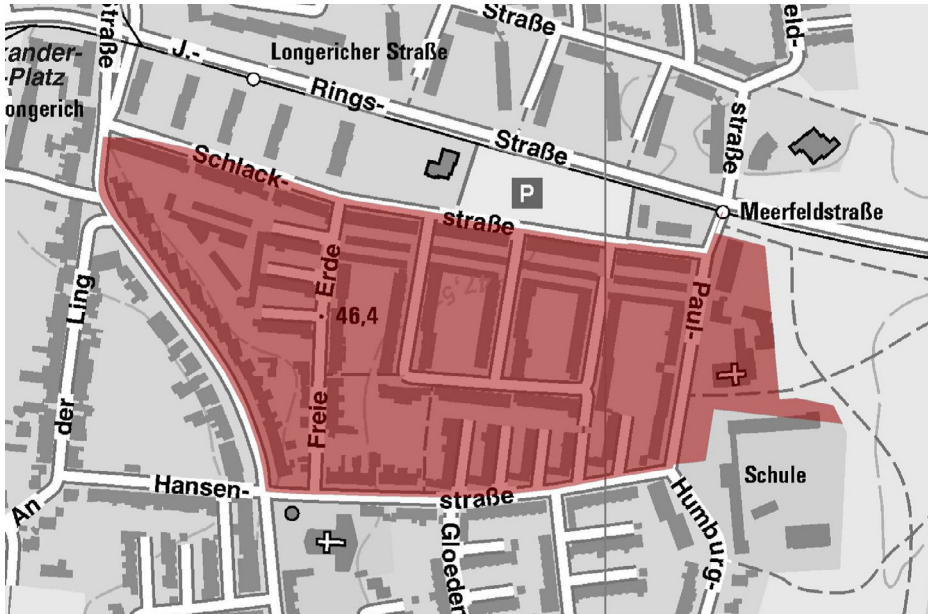
The predictions in SKALA are computed on the basis of a theoretical framework consisting of criminological and socio-scientific theories of crime, empirical evidence and professional knowledge. For example, rational choice theories are used as one approach explaining the spatial and temporal distribution of residential burglary. Many other theories are used to create a foundation that explains specific offenses. The system's programmers take a hypothesis-based approach. According to the relevant indicators for each of the hypotheses, the corresponding data is identified. In contrast to many other models that predict the occurrence of crime, data other than crime data is used for modelling and prediction. The socio-economic data include information on the residential location such as: population structure; building construction; income; infrastructure connections; and mobility indicators. A dataset, which consists of more than 200 variables, is acquired annually. In order to avoid "overfitting" and to avoid the "curse of dimensionality" (Bellman, 1957), only a subset of variables is used for modelling. The subset is created by a feature selection technique based on a random forest procedure, a classification and regression method consisting of several uncorrelated decision trees (LKA NRW, 2018b, 52 ff). The collected crime data mainly includes time and location of the offense, the *modus operandi* and the proceeds of the crimes (property stolen). Since SKALA follows the German definition of PP (it is defined as a computer-assisted method for spatially based probability calculations of crime and the aim is to identify areas of risk in which suitable measurements are to be used to deal with future police actions) there is no focus on perpetrator or victim data. Consequently, no personal data is collected or included in the computations (Seidensticker et al., 2018).

It is argued that socio-economic data are very stable over time (LKA NRW, 2018b). Only significant changes affect variables (such as average household income) and are even then their effect is expected to be gradual. As a result, such data are quite stable, and updates are required infrequently. In the SKALA process, they are updated annually while historical crime data included in the data set are updated weekly. Data from these different sources must be linked together before any calculations can be made.

Modelling and predictions

Once the data has been collected, amalgamated and processed, a prediction model is computed. In general, the models can be computed using different methods, such as regressions (Box et al., 2015, 305 ff.), decision trees (Kass, 1980) or artificial neural networks (e.g. Zhang & Qi, 2005). In addition, a suitable spatial reference for crime prediction is defined that refers to the specific offense, its occurrence in space and the police interventions intended to prevent its occurrence. In order to be able to create models that incorporate the spatial aspects of crime, SKALA uses so-called 'residential districts' as spatial references when modelling the occurrences of residential burglary (Figure 3). Originally, residential districts were defined by the extent of former constituencies, each district consisting of about 500 households (Nexiga, 2017).

Figure 3: Example of a residential district (LKA NRW, 2018b).



Generally, SKALA can be divided into two phases. First the project phase and second the transition to regular operation, which began in 2018. During the project phase, IBM SPSS Modeler was used for data processing, model training and prediction computations. The models were based on decision trees because they performed well and offered a high degree of comprehensibility. As an effect of testing the models, the same prediction model was used for all police authorities that were part of the project phase. It quickly became clear that the model performance was not appropriate for all urban environments, mainly because it did not consider the characteristics of different cities, e.g. the different infrastructure, density and interconnection of the street network and urban transport networks or the different peripheral areas of the cities. To address this problem, different configurations and methods were tested during the project phase. Today, in the second phase, SKALA uses a combination of spatio-temporal cluster analysis (STCA), random forests and regression models, which are trained independently for each police authority that is part of SKALA. More precisely, the current model consists of a spatio-temporal clustering of criminal offenses, strongly inspired by the near repeat phenomenon (Bernasco, 2008; Pease, 1998), followed by a regression analysis of the socio-economic data of the area to which the model refers. For performance reasons, data processing, model training and predictions are implemented with Python and R.

The trained models are used with historical and potential future data to compute the likelihood of the occurrence of an offense within the observed area, which is the most crucial part of the PP process. As a result, SKALA identifies areas that are likely to have a higher risk of future offenses than other areas during the time span the prediction is computed for. Since the computed crime risk is only valid for a defined time span and a specific prediction area, it can be labelled as a 'spatio-temporal predisposition factor' for the occurrence of a specific offense (Stoffel et al., 2017, p.4). Predictions by SKALA refer to a time span of seven days, Monday till Sunday, for residential and commercial burglaries and vehicle offenses. In principle, the methodology used allows shorter prediction periods. However, the following necessary steps, which include an individual rating by local crime analysts and the planning of appropriate interventions by the police, set a lower bound for the prediction period, which is currently one week.

Visualisation

After modelling crime occurrences in space and time and computing the prediction, it is necessary to effectively communicate the predictions to the subsequent actors, i.e. the local police departments. It is obvious to use geospatial visualisation for this purpose, since the predictions have a primary geographical reference. Therefore, the requirements of the addressed user group and their tasks in implementing the prediction in practice must be clear. Furthermore, it is essential to think about the effects of different visualisation techniques and their (un)intended effect on the user. For example, in SKALA, different data are combined to visualise predictions. As crime risks are computed for all

residential districts of cities, it was decided to highlight 1.5 to 2 percent of the areas with the highest crime risks in a single view layer. First, the three residential areas with the highest likelihood were filled with red, the remaining areas with yellow, without giving any information about the concrete risk level. Unfortunately, this visual coding influenced the selection of residential districts in the unintended way that only the red areas were considered relevant for police actions. In order to prevent these effects, it was decided to visualise the predictions in uniform yellow colour. Another unintended effect could be observed using residential areas that cover the entire area of a city: Since forests and lakes were also included in these areas, police forces expressed a low comprehensibility of the predictions, as it was not clear to them why they should prevent residential burglaries e.g. in an area partly covered with forests.

The LKA NRW sends all residential districts with a specific risk factor to the police authorities involved in SKALA and also highlights the top 1.5 percent with the highest risks for the week. The local police authorities themselves decide whether these 1.5 percent is visualised for the operational forces or whether a higher or lower number of districts is included in the map. In the beginning, the predictions in SKALA were mainly communicated as pdf files. While this seemed to be a suitable choice in the beginning, the users involved demanded a more sophisticated method. Crime analysts of the police authorities asked for a possibility to combine the predictions with local analyses in an interactive way. Therefore, in cooperation with the Chair of Data Analysis and Visualization at the University of Konstanz, further visualisation options were developed and constantly adapted. The visualisation tool created, SKALA | MAP, offers an easy and intuitive access to geographical visualisation of predictions on an interactive map and is adapted to the needs of local police authorities. It also provides every police officer with the possibility to easily combine the predictions as well as other crime data or basically any geodata set with basic analyses such as frequency analysis and heat map visualisation for classic hot spot mapping (Stoffel, Post, Stewen & Keim, 2018). The visualisation of predictions is done by the local police authorities themselves with the help of SKALA | MAP. A web-based visualisation has also been realised so that police officers can work with predictions on tablets in their patrol cars.

Forecast utilisation

Depending on the concrete implementation of the PP solution, the utilisation of the outcomes may vary. For example, it may be the case that local analysts monitor what is distributed to operational units, as they should be able to enrich the predictions with their expertise and knowledge that is only available at the level of a local police department. In general, a variety of activities are conceivable, depending on the objectives of the police.

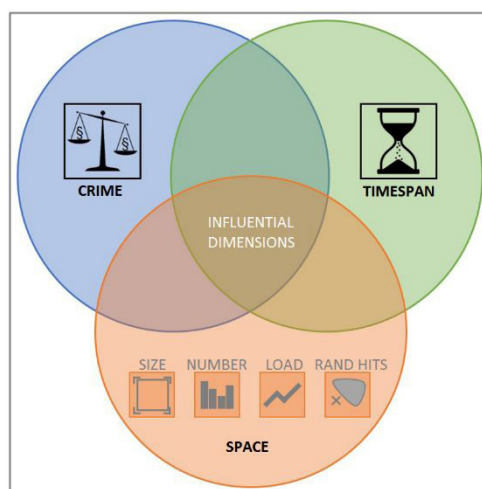
In NRW, there is no central decision on the specific activities to be initiated by the police authorities according to the predictions; the local police forces can make their own plans and measures on the basis of their own conclusions. The measures include preventive and

repressive activities, such as increasing the visibility of the police forces through increased patrols, traffic checks and prevention counselling in areas where the likelihood of offenses is high (cf. LKA NRW, 2018b, p.80). After the local crime analysis units have enriched the prediction with local knowledge, they usually hold weekly meetings at management level to decide on the concrete police measures to be taken. The results are communicated to the local operational units by e-mail, made accessible as web-based visualisations or displayed on screens in the staff rooms. Ultimately, the outcome of SKALA is a building block in a comprehensive strategy of the police authorities in dealing with crime.

Formal evaluation, rating, feedback

A general problem of PP using automatic data analysis methods also concerns the basic assumption that the offense can be adequately described with the available data, e.g. space, time and local conditions. However, an objective and comprehensive description of a crime phenomenon is not entirely possible, since unobservable or non-quantifiable effects, e.g. the non-public environment of a potential offender, are of importance. There are three main dimensions that influence the quality of measurement: first, the offense (crime), second, the spatial dimension (space) and third, the temporal dimension (time span), see Figure 4. Results of quality metrics of PP models that incorporate these dimensions can be calculated in very different ways, so that variability in these metrics is inherently manifested. This variability, in turn, affects the validity of the applied metrics when trying to compare different models. Based on this finding, no valid statement can be made that one model is better than the other or which model provides a “better” prediction (Bode, Stoffel & Keim, 2017).

Figure 4: Fundamental influence dimensions (Stoffel et al., 2017).



The Effectiveness of Predictive Policing

Newspapers report quite positively about PP, published articles imply that PP is successful in combating crime. In contrast, there is no scientific literature that provides convincing, peer-reviewed, long-term studies with scientific background that analyse and prove or disprove the effectivity of PP implementations. To date, SKALA does not bring any outstanding new findings in this area either, as these are quite new tools used by police forces. This is due to the relatively new techniques used in the context of PP, but also the inherent problem of PP as an instrument of police forces. Primarily, PP is a tool for resource allocation.

When computing crime predictions, the question arises whether the expected (predicted) event has occurred, regardless of the criminological and mathematical models used. Some of the international evaluation studies on PP focus on this issue, using many different measures to reflect some kind of 'effectiveness', e.g. the predictive accuracy of a particular model. Of course, a historically accurate prediction is the basis of PP. The majority of PP implementations target the strategic and tactical benefits, i.e. the responses at the operational level to change the environment. This article does not intend to compare the different solutions based on quality metrics such as hit rates (HR), predictive accuracy indices (PAI), standardised accuracy efficiency indices (SAEI) or confusion matrices, as such comparison is not meaningful and invalid. This becomes particularly clear when considering the three essential dimensions 'crime', 'space' and 'timespan' (Figure 4) and their characteristics in the respective model (Bode et al. 2017). For example, the hit rate is likely to be higher if the spatial reference covers a larger area.

Looking at the evaluation study of SKALA, the hypothesis can be formulated that the use of Predictive Policing should reduce the number of observed burglaries. Since PP is a tool that aims to prevent crime by allocating typically limited resources in places associated with a potential higher risk of crime, it seems a logical conclusion that this will reduce crime. In NRW there was no statistical evidence to support the hypothesis that crime is reduced as a result of the use of PP. Nevertheless, a decrease in the number of burglaries was observed, but in the areas where PP was applied there was no significantly higher decrease compared to areas where PP was not applied.

In addition to a reduction in the number of burglaries, other hypotheses have also been formulated to measure the effectiveness of PP, such as the hypotheses that the time taken by police forces to get to the scene of an emergency call will decrease in areas where PP is applied. The motivation for this hypothesis was that, due to the presence of police officers in high-risk areas, the time police forces would take to get to the scene would be shorter than usual, as they are more likely to be scattered in space. Again, there is no statistical evidence to support this hypothesis.

Conclusion

Predictive Policing is an instrument for managing police forces with a primarily preventive orientation. SKALA is able to enrich authority specific knowledge and to improve the basis for decision-making with regard to force control and operational planning. In NRW, prediction models are trained for a number of offences and the predictions are submitted to the police authorities for their own assessment. Obviously, there must be enough data on the selected crime to make predictions. However, it is crucial to select an adequate set of variables on which the prediction is carefully based. If incorrect prognostic variables are used in the modelling, spurious findings can emerge. Furthermore, the accuracy of the prediction is likely to decrease.

In particular, various steps in the compilation and modelling of crime predictions can be traced back to decisions made and parameters applied. It can be observed that SKALA does not only include police data. Instead, an added value is seen in the use of socio-structural data. The available budget and different legislations must also be considered, since, for example, external data have to be purchased and data protection laws may restrict the use of personal data. This includes the places of residence of known perpetrators, which in consequence cannot be used for predictions. In contrast, the Netherlands for example uses such variables and is able to increase the computed risk of burglary from 4.7% to 6.1% (Willems, 2015; for a short comparison of the German and Dutch implementation of PP see van der Ende & Seidensticker 2020).

Especially considering the ever-increasing availability of georeferenced data sets, the potential of PP does not yet seem to have been fully exploited. However, this is also the limit of the method: The results of the analysis and the quality of the model are always heavily dependent on the quality and temporal availability of the incoming data sets. Here, different recording modalities can have an impact on the creation of the models. It should be noted that the data quality of the police data limits the predictions, since much information on current acts is not yet available in the system at the time of the prediction and therefore cannot be used. Police organisations must be aware that even high data quality does not always create a true representation of reality, which means that forecasts are always subject to uncertainties. The aspect of legal limitations must also be kept in mind and always be subject to a strict evaluation. This is one of the reasons why NRW completely dispenses with the use of personal data in the calculation of crime forecasts.

It can be discussed in which cases PP can be considered effective. On the one hand, there are a number of factors that can cause and also reduce crime. Furthermore, the implementation of PP must be correct and effective on so many different levels, e.g. the statistical level, the interpretation level and the operational level. In such complex systems with

an interaction of different components, unintended side effects can occur. It is therefore difficult to evaluate a Predictive Policing implementation as a whole.

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LIGHTENING THE ECONOMICS OF ORGANISED CRIME IN THE EU: NEW SOLUTIONS FOR LONGSTANDING PROBLEMS

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Abstract

Organised crime represents one of the most serious threats to the EU Area of Freedom, Security and Justice, pressing the national authorities, EU institutions and agencies to discover new political, legal and operational solutions for existing and emerging problems. Although it is recognised that one of the best strategies to counter organised crime is to enhance financial investigation and asset recovery mechanisms – it has been reported that merely 1% of the proceeds of crime are confiscated (Europol, 2017). Notwithstanding the EU initiative led by the entry in force of the Directive 2014/42/EU in October 2015, and the subsequent production of dense political and operational packages obliging and encouraging the adoption of measures to enable assets recovery, the actual confiscation and freezing results highlight the increasing impunity and feeling across these criminal groups that crime pays. Aware of the legal and institutional gaps in the EU and national levels and acting as truly multinational enterprises, the organised crime groups are expanding their activities and enhancing their influence in almost all segments of the market. Based on a qualitative methodological approach, this article is the result of an analysis of primary and secondary sources, both from social and legal areas, related to organised crime characteristics in parallel with the legislative acts aimed to recover their illegal profits in the EU, within a highly dynamic and evolving environment - “law in context” research (Vibhute & Anyalem, 2009, p. 22).

Keywords: *Organised crime, organised crime economics, financial investigation, assets recovery*

¹ The present article exclusively represents the author perspective and conclusions and should not be taken as the official position of the European Public Prosecutor's Office.

THE ORGANISED CRIME ENTERPRISES

Analysing the organised crime assessments in the EU², we are currently experiencing exponential growth, intensification and diversification of activities and effects. Since 2013, the numbers evolved from 3600 organised criminal groups (OCGs) detected to more than 5000 under investigation³ in 2017, ranging from traditional ones to smaller groups and loose networks supported by individuals hired on an occasional basis (30 to 40% are these flexible structures) (Europol, 2017). The expansion of the activities performed by these groups to grey practices,⁴ which are enabled by legal gaps⁵, is accompanying the aforementioned trends - symbol of their flexibility, fluidity and permeability.⁶ Driven by capitalism and globalisation, they became multinational corporations⁷ dedicated to maximising their profits at any cost. Actually, their proceeds are around 110 billion Euros per year in the EU⁸ and, according to United Nations Office on Drugs and Crime (UNODC, 2018), its worldwide value reaching up to 3.6% of global GDP.

Their disrespect and abuse of the rules make organised crime highly competitive and flexible comparatively with the legally compliant operators⁹. Therefore, they enhance

- 2 Notably the last Europol European Union serious and organised crime threat assessment (SOCTA) from 2017 and 2021, the internet organised crime threat assessment (IOCTA) from 2017, 2018, 2019, 2020 and 2021, and the European Union Terrorism Situation and Trend report (TE-SAT), from 2018, 2019 and 2020.
- 3 Europol's SOCTA 2017 report mentioned that more than 180 nationalities were involved in serious and organised crime in the EU. The majority of OCGs operating on an international level were composed of members of more than one nationality. Nonetheless, the majority of the suspects were nationals of a Member State. (Europol, 2017: 14.)
- 4 As acts conducted within some specific legal frameworks that delivers to the operators some flexibility into blurring areas – especially tax Law and commercial Law. In such case, the investigation is rather dedicated to place the conduct into a crime than proving the conduct itself.
- 5 E.g. the transfer pricing, the permanent establishment concepts and the broader tax aggressive planning and avoidance.
- 6 According to Savona and Riccardi (2015), they are actually profiled as following: traditional mafia-type OCGs, hierarchical OCGs, loose criminal networks, criminal groups formed by ex-military members, former paramilitary and separatist/terrorist groups, current terrorist groups, intermediaries, and brokers.
- 7 Organised criminal groups are structuring themselves into corporate vehicles spread across the world with the aim to conceal structure and optimize their pluricriminal activities, such as tax crimes, money laundering or corruption. Nevertheless, they maintain their traditional structures, although exploring the new technologies and tactics, to conduct crimes such as drug sales/trafficking, human trafficking, and extortion. According to Europol (2021, p.10), "similar to a business environment, the core of a criminal network is composed of managerial layers and field operators. This core is surrounded by a range of actors linked to the crime infrastructure providing support services, such as brokers, document fraudsters, technical experts, legal and financial advisors, money launderers and other service providers".
- 8 This value represents the gross revenues generated from the final sale of illicit goods or services, which needs to be subtracted with the criminal costs (buying or producing costs, operational or living expenses), in order to determine the potential amount of money that may be available to OCGs for reinvestment – net profits.
- 9 A natural or legal person or public entity, which offers to execute works, supply products or provide services. within the context of market operations and in accordance with the Law (EUIPO, 2019). In fact, Europol (2021) found that legal business structures such as companies or other entities are used to

gradually their capacity to diversify and intensify their licit and illicit activities¹⁰, taking advantage of all the available opportunities left by the markets, technology, political and social contexts¹¹. The low censurability attributed by Criminal Law¹² and Procedural Law¹³ to minor crimes highly profitable, such as excise fraud or illicit gambling¹⁴, is as well explored. The crime demand is sought similarly as it is within the licit economy. Therefore, crime providers entered the market and crime became a service. As part of the aforementioned criminal circuits, business facilitators, gatekeepers and legitimate companies are covering the OCG's trading activities (Europol, 2021, p. 21)

In this context, money laundering turned into the complex and creatives processes¹⁵ ordered to disconnect part of them of their predicated crimes or illicit activities, merging inside licit businesses. Not all the proceeds are laundered: a substantial part remains in the crime economy in order to cover the crime costs, foster the undergoing activities and expand to new niches (Savona & Riccardi, 2015). These, whether legal and illegal, are

facilitate all types of criminal activity. All types of legal businesses are potentially and more than 80 % of the criminal networks active in the EU use legal business structures for their criminal activities (50% of all criminal networks set up their own legal business structures or infiltrate businesses at a high level).

- 10 Such all the legal trade of good and services as a way of cover and give a "legit" appearance to the crimes committed as Missing Trader Intra-Community (MTIC) Fraud, contraband, illegal gambling and betting activities or money laundering.
- 11 The referred exploitation can be observed in several cases. On the 8th May 2019, Spain dismantled a criminal organisation providing large-scale crypto money laundering services to other criminal organisations - <https://www.europol.europa.eu/newsroom/news/cryptocurrency-laundering-service-members-of-criminal-organisation-arrested-in-spain> (Europol, 2019). Since the outbreak of the COVID-19, Europol has identified the growth of unlawful sanitary waste treatment and disposal <https://www.europol.europa.eu/newsroom/news/world%E2%80%99s-most-dangerous-malware-emetet-disrupted-through-global-action> (Europol 2020). On 27th January 2021, Netherlands, Germany, United States, United Kingdom, France, Lithuania, Canada and Ukraine disrupted one of most significant botnets – EMOTET, a malware that evolved into the go-to solution for cybercriminals over the years functioning as a primary door opener for computer systems on a global scale - <https://www.europol.europa.eu/newsroom/news/world%E2%80%99s-most-dangerous-malware-emetet-disrupted-through-global-action> (Europol, 2021).
- 12 The low sanctions applied to those crimes compared with other traditionally more censurable, as drug trafficking, robbery or violent crimes, are a motivation for organised crime to place their economic activities into.
- 13 Beside the absence of dissuasive sanctions, the fact that most of the procedural Laws does not include these crimes for special investigation measures or assets recovery mechanisms allows the organised crime groups to feel comfortable conducting them, without the risk of being deeply investigated.
- 14 According to Savona and Riccardi (2015), excise fraud generated a total criminal revenue of 9.373 Million Euros, whilst illegal gambling generated 1.1 billion Euro in 1996 in UK, 130 million Euro in 2003 in Netherlands and between 326 and 522 million Euro in 2011 in Italy – the illicit gambling, due to his interdependence with other criminal activities (as money laundering) is not currently and accurately estimated. The Council of the European Union (2017) estimated an annual damage of 10.2 billion Euro into the national and EU budget.
- 15 In fact, the importance of this activity raised the creation of Professional Money Launderers (PML's) (FATF, 2018). Professional money launderers have established a parallel underground financial system to process transactions and payments isolated from any oversight mechanisms governing the legal financial system, including trade-based money laundering, account management mechanisms and underground banking and alternative banking platforms (Europol 2021).

globally driven by profit, control of the territory, influence on the political sphere, social consensus, personal benefit and concealment of criminal activities.

The geographic areas with a higher degree of infiltration were reported to be southern Italy, Lazio and north-western Italy (in particular Lombardy), Provence-Alpes-Cote d'Azur (France), Andalusia and Madrid (Spain), Amsterdam and Rotterdam (Netherlands), Berlin and Düsseldorf-Köln (Germany), and in Romania the capital Bucharest plus the border area with Moldova. These areas denote as characteristics a historical or well-rooted strong presence of OCGs, their border proximity or the presence of important ports, large urban areas, or places near the maritime coast and with a high touristic potential (Savona & Riccardi, 2015).

THE STOLEN ASSETS FROM ALL EU CITIZENS: NATURE AND FORM

On first-hand, the assets acquired through crime, whenever committed within EU Member States jurisdiction, are in fact owned by their citizens. According to article 2(3) and 4, of the Regulation 2018/1805, crime or any other illegal act does not constitute an acquisition title that offers to its committer, or a third interposed person, its legal ownership or property rights towards the crime proceeds, regardless its form or nature. From a legal perspective, when addressing criminal property or proceeds¹⁶, it concerns properties owned by the State but that unlawfully and fraudulently are under criminals' domain, control and ownership¹⁷. In this way, financial investigation, together with freezing and confiscation, is nothing less than the activity and measures addressed to discover, preserve and transfer assets from undue criminal ownership to its lawful and legitimate owner.

The assets portfolio of organised crime is considerable and divided into *registered assets*, *movable assets*, *real estate properties*, and *companies* (Savona & Riccardi, 2015).

The first category contains vehicles, vessels, jets, helicopters or other transport commodities, materializing a reinvestment – status-symbol, but also an instrumentality for the commitment of other crimes. Movable assets range from cash and bank accounts to bonds, financial instruments, artworks, valuables, jewels or fur coats. This kind of assets

16 As defined in article 2(3) of the Regulation 2018/1805: property of any description, whether corporeal or incorporeal, movable or immovable, and legal documents or instruments evidencing title or interest in such property, which the issuing authority considers to be: (a) the proceeds of a criminal offence, or its equivalent, whether the full amount of the value or only part of the value of such proceeds; (b) the instrumentalities of a criminal offence, or the value of such instrumentalities; (c) subject to confiscation through the application in the issuing State of any of the powers of confiscation provided for in Directive 2014/42/EU; or (d) subject to confiscation under any other provisions relating to powers of confiscation, including confiscation without a final conviction, under the law of the issuing State, following proceedings in relation to a criminal offence.

17 Logically, if the referred assets are subject to confiscation from all the EU Member States, therefore, they materially belong to them but are still remaining illegally under criminals ownership.

are fundamental for OCGs, as it is for multinational corporations: the availability and the capacity to manage liquidity (Savona & Riccardi, 2015)

Real estate properties are the preferred for investment by many OCGs as they consist in a safe investment, high returns potential, continuous 'white profits' through rents, facilitating other illicit activities as an instrumentality and allowing close control of the territory as well as a status symbol of prestige in power in these regions. Finally, we highlight the legal persons as an expeditious form to store the illicit proceeds. These entities can integrate proceeds of crime into their structures, circulate them and help financing their operations.

The main sectors where the criminal proceeds are reinvested consist in bars and restaurants, construction, wholesale and retail trade, transportation, real estate activities and hotels. These sectors offer ideal characteristics: cash-intensive, territorial-specific, low-tech and labour-intensive, protected sectors,¹⁸ high involvement of the public administration or public resources,¹⁹ small firms, sectors functional to illicit activities and with weak or developing regulation. Savona and Riccardi (2015) concluded that profitability is not correlated with OCGs investments in legitimate businesses.

There is a real estate predominance for the reinvestment of criminal proceeds (Remeur, 2019), based on price stability and the likely trend to appreciate over time. On the other hand, such assets assume a functional dimension, allowing the owners to use them as second home, a place where conduct criminal activities²⁰ or rented out, generating income. The economics used in this investment mainly relying on the use of complex loans or credit finance, non-financial professionals, corporate vehicles or investment schemes and financial institutions.

Assets recovery

Depriving the criminals of their proceeds is the key to transpose the aphorism '*crime does not pay*' to reality²¹. In this context, the asset recovery activity contains financial investigation as its core: the dismantling of complex financial flows aimed at hiding the illicit origin of assets and ownership structures with the view to disguise the true beneficiary of

¹⁸ Inelasticity of demand and low openness to international competition.

¹⁹ Beneficiating from infiltration and corruption in the political and administrative system.

²⁰ Cybercrime and managing/coordination/planning activities regarding other crimes can be conducted from any kind of space/local.

²¹ A priority set by EU Commission on several policy documents and communications, *inter alia*, the Commission 2021 work programme launched 19 October 2020, the Commission report named *Asset recovery and confiscation: Ensuring that crime does not pay*, in June 2020, its Staff Working Document that provides an *analysis of non-conviction-based confiscation measures in the European Union*, or the *Inception Impact Assessment: Fighting organised crime – freezing and confiscating the proceeds of crime*, launched in March 2021.

them²². According to the European Commission (2020, p. 2), the assets recovery process is constituted by the following phases:

- Identification and tracing of illegal assets;
- Freezing and seizing the assets to guarantee their future confiscation;
- Management of frozen and seized assets to preserve their value;
- Confiscation of the referred illicit assets;
- Disposal of the confiscated assets in order to satisfy the victims or affected persons; and
- Rights, as well as their public or social use.

In that sense, the first crucial step is nothing more than the financial investigation by competent law enforcement or judiciary authorities. At EU Level, through Council Decision 2007/845/JHA, of 6 December, the Member States created specialised units to that end: the nationals Asset Recovery Offices (ARO). ARO and the previously created network of Financial Intelligence Unit (FIU) are fed by intelligence and information²³ in order to draw up the financial profile of the OCG, reconstitute its financial flows, as well as establishing the factual and real ownership of these assets, through domain and control criteria.

To perform these activities, EU, in 2014 and through the Directive 2014/42/EU, introduced minimal rules and harmonised the EU Member States legislation regarding the detection, tracing, freezing, management and confiscation of criminal assets. We highlight the provisions on *non-conviction-based confiscation*, *extended confiscation* for a specific list of criminal offences, *third-party confiscation*, *freezing of property* with a view to subsequent confiscation, including urgent freezing, *safeguards and rights* concerning the affected persons, the *detection and tracing of property*, and, finally, the *management of frozen and confiscated assets*.

In fact, according to the European Commission (2020), the conviction-based confiscation of Article 4(1) of the Directive is in force in all Member States, with smooth nuances regarding the possibility of confiscating other assets²⁴ or obliging to pay an amount

22 Even though article 30 of the 5th Anti-Money Laundering (Directive 2015/849) establishes the obligation to the corporate and other legal entities incorporated within their territory of obtaining and holding adequate, accurate and current information on their beneficial ownership, including the details of the beneficial interests held. Nevertheless, this information depends on the statements of the assets holders, therefore, highly susceptible to intentional manipulation.

23 With the aim to fuel financial investigation, through Directive 2019/1153, of 20th June, the EU Member States fostered and simplified the use of financial information by law enforcement authorities and ARO by their direct access to bank account information for the purposes of fighting serious crime.

24 Belgium, Bulgaria, Czechia, Greece, Spain, Cyprus, France, Italy, Latvia, Luxembourg, Malta, Hungary, Austria, Poland, Portugal, Slovenia, Slovakia, Finland and Sweden apply this method.

corresponding of the value of the criminal proceeds subject to confiscation.²⁵ In its turn, the freezing institute (Article 7(1)), whether urgent/without previous judicial authorisation and the judicial one, and regardless of its possession by a third party, is transposed in all MS.²⁶ In the area of the safeguards and remedies oriented to protect the fundamental rights of the affected persons, despite the utilisation of different legal venues, the Article 8 clauses are also entirely transposed.

Not everything is that positive in this harmonisation process. Notwithstanding the defined transposition deadline²⁷, some EU Member States have not fully introduced those mechanisms.²⁸ On the other hand, the flexibility given still allows a high rate of discrepancies that jeopardize cooperation to face organised crime, namely regarding legal concepts,²⁹ the scope of its application,³⁰ the non-conviction-based confiscation,³¹ and the extended confiscation mechanism.³²

25 Germany, Estonia, Ireland, Croatia, Lithuania and Netherlands are currently using this legal solution on their national legal order.

26 Despite the fact that the national legal orders are not so explicit in the case of urgent freezing in Belgium, Bulgaria, Greece, Spain, Hungary, Cyprus, Lithuania, Malta, Netherlands, Austria, Slovenia and Romania.

27 According to article 12(1) of the Directive, Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 4 October 2015. They shall forthwith transmit to the Commission the text of those provisions.

28 Beside Denmark and Ireland, that chose to not take part in the adoption of the Directive, only 8 EU MS notified the EU Commission of complete transposition of the referred Directive in their national legal order and, after notification, 15 of the 18 missing MS subsequently informed the transposition conclusion. Actually, just Bulgaria, Luxembourg and Romania are facing infringement procedures for non-communication.

29 Starting from the definitions of proceeds, property, instrumentalities, confiscation and criminal offence, just Greece and Cyprus established definitions of all these concepts while the others Member States defined part of them as proceeds (Bulgaria, Czechia, Estonia, Ireland, Croatia, Malta, Portugal, Finland and Sweden), property (Bulgaria, Czechia, Estonia, Ireland, Croatia, Latvia, Hungary, Malta, Portugal, Romania, Slovenia and Slovakia), instrumentalities (Czechia, Malta and Portugal), confiscation (Bulgaria, Latvia and Lithuania), and freezing (Austria, Hungary and the Netherlands).

30 The majority of the MS includes all crimes specified on Article 3, of the Directive 2014/42/EU (Belgium, Czechia, Germany, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Finland and Sweden), other for all offences sanctioned by imprisonment for at least 1 year (France and Malta), for all intentional crimes (Bulgaria, Estonia, Greece and Spain), for all offences (Slovakia), and for a different set of them (Ireland).

31 Belgium, Estonia, Netherlands and Slovakia have in its national legal order the proceedings *in absentia* and Malta and Austria are limiting its existence to cases of illness and absconding. All the other EU MS overpass the referred requirements with specific mechanisms to confiscate assets without a criminal conviction.

32 In that field, the Member States presents a high diversity of different evidence requirements to allow this legal hook. Several countries have defined clear legal criteria in order to determine the illegality of the properties and the allow their extended confiscation (Belgium, Bulgaria, Cyprus, Czechia, Germany, Estonia, Spain, Croatia, Hungary, Ireland, Italy, Luxembourg, Poland and Portugal). These criteria stand as the disproportion between declared and owned assets, value thresholds and certain time limits. In others, this procedure is more ambiguous. For example, it can be needed to demonstrate a reasonable assumption of a illegal conduct as origin (Austria), a presumption (Estonia, Cyprus and Netherlands), that part of the property derived from illegal activities (Czechia), strong and objective evidences that highlight the illegality of the assets (Spain), that the court reasonably believe (Malta, Latvia and Lithuania), the existence of serious and concrete

Due to its importance, non-conviction-based confiscation is now subject to a deeper analysis. These regimes were created to bridge the confiscation gap when the conviction of the criminals is not possible³³, in spite of the existence of clear proceeds generated by the illicit activity. Under these circumstances and through separate judicial proceedings (criminal, administrative or civil nature), these criminal assets can be seized and confiscated independently of the proceeding against the persons and the link between a specific offence and the assets subject to confiscation. They can be divided to two civil or administrative categories: the actions *in rem*³⁴ or the unexplained wealth procedures;³⁵ and two criminal categories: the classic non-conviction-based confiscation³⁶ and the extended confiscation.³⁷ Member States, based on historically very different national confiscation systems, chose different and sometimes incompatible legal venues to achieve such confiscations, jeopardising the cooperation on asset recovery.³⁸

Included in this Directive (Article 6), another discrepant legal procedure is the confiscation of proceeds³⁹ from a third party, protecting the rights of the *bona fide* entities. Only Belgium, Hungary and Slovakia⁴⁰ address/govern/regulate this issue through general rules of confiscation regardless of the ownership thereof as long as the illicit origin of the asset is proved. On the other hand, France, Latvia and Luxembourg⁴¹ demand that the assets

indications (Belgium), that the court consider more likely that it constitutes proceeds from a criminal activity (Sweden) or the court conviction that the property were originated by a criminal conduct (Romania).

33 Absconding, death, illness, immunity, or even the simple possibility to insufficient evidences of the criminal conduct or of the link between the assets and the criminal conduct.

34 Proceedings against the assets themselves that have been identified as proceeds of crime without being linked to any action taken against an individual.

35 Based on the disproportion between the assets acquired by a person and his/her declared income.

36 In this case, the proceeds have been connected to an offender, however this person cannot be brought to justice due to his death, absconding, immunity, mental state or age. Then, the proceeding is conducted separately in order to effectively confiscate that illegal proceeds.

37 On the base of several criteria, as the criminal conduct committed and the assets origin evidences, the link between the assets, criminal conducts and the individual or legal person are presumed, without necessity to demonstrate it in trial. Usually, that mechanisms reverse the prove burden to the criminal regarding the unexplained owned assets.

38 25 Member States rely primarily on classic non-conviction based confiscation proceedings (except Bulgaria, Ireland and United-Kingdom, which are relying primarily on *in rem*/unexplained wealth proceedings), 26 EU Member States have extended confiscation mechanisms (except Ireland and Greece), and 13 EU Member States have some form of *in rem*/unexplained wealth procedures or have draft law in order to implement such regimes (Estonia, Germany, Greece, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Slovakia, Slovenia and Spain). Regarding the way they cover the different situations (death, absconding or illness), we can observe a higher discrepancy between regimes.

39 Only Czechia, Germany, Estonia, Ireland, Greece, France, Cyprus, Lithuania, Luxembourg, Netherlands, Austria and Portugal extended these measures to the instrumentalities transferred or acquired by a third party.

40 Articles 42 and 42 of the Belgian Criminal Code; Sections 72 to 76, of the Hungarian Criminal Code, and Articles 32, 33, 58 to 60, and 83 to 83b, of Slovakia Criminal Code.

41 Articles 131-6, 131-14, 131-16, 131-21, 213-1, 213-13, 215-1, 215-3, 222-49 of the French Criminal Code, Sections 36 and 42 of the Latvian Criminal Code, and Articles 31 to 33 of Luxembourgish Criminal Code.

are at the disposal of a convicted person to be confiscated. Italian legislation defines the interposed person figure (a physical or legal person(s) between the real owner and the asset). Croatian legal regime stipulates the concept of transfer or acquisition in good faith as the criteria to disable confiscation⁴². According to the European Commission (2020), all other Member States transposed the requirement related to the consciousness of that third party: *one must know or ought to have known that the purpose of the transfer or acquisition was to avoid confiscation*.

Finally, concerning the management of frozen and confiscated property, according to Article 10 of the Directive,⁴³ although all the Member States adopted legal provisions pertaining to that aim, only 13 of them⁴⁴ have set up, or are in the process of setting up, the Asset Management Offices, and 19⁴⁵ related to the use of confiscated property for public interest or social purposes (European Commission, 2020).

Directive 2014/42/EU is complemented by the Regulation (EU) 2018/1805⁴⁶ that institutes the mutual recognition of freezing and confiscation orders, with application to all freezing and confiscation orders issued within the framework of proceedings in criminal matters, including classic, extended and non-conviction-based confiscation mechanisms. However, such regulation does not cover the freezing or confiscation orders issued within the framework of proceedings in civil or administrative matters, all of which cover a considerable part of the non-conviction-based confiscation mechanisms.

Asset recovery results

Understanding and assessing the practical application of the aforementioned freezing and confiscation legal mechanisms are challenging. This is because the statistical studies are few, not current (the most recent issued in 2016) and even if they exist they lack the necessary rigour and details including, decentralisation of data; no or low data systematisation; and storage and non-cooperation/no-response to information requests. Nevertheless, we will present the results of the main studies realized in this matter by *Transcrime OCP*, *Europol* and the Organisation for Economic Cooperation and Development (OECD).

In 2015, the OCP Transcrime report, on a very conservative estimate, established the EU illicit markets annual revenue to be 110 billion Euro (1% of the EU GDP). On this EU-wide

42 Articles 5 and 77 to 79 of the Croatian Criminal Code.

43 More specifically, the adequate management of property that is frozen with a view to subsequent confiscation (Article 10(1)), the sale or transfer of frozen or seized property where necessary (Article 10(2)), and the reusing of confiscated property for the public interest or social purposes (Article 10(3)).

44 Belgium, Bulgaria, Czechia, Ireland, Greece, Spain, France, Croatia, Italy, Luxembourg, Netherlands, Portugal and Romania.

45 Belgium, Bulgaria, Czechia, Germany, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Austria, Poland, Portugal, Romania and Slovenia.

46 Originated from the European Commission proposal, issued in 21 December 2016 COM(2016) 810 final.

value, the MTIC VAT fraud revenues⁴⁷ alone overpassed the ones originated through the trade of illicit drugs – 29 billion Euro per year against 28 billion Euro. Still counterfeiting remains the most profitable illicit activity with estimated revenues around 42 billion Euro per year. More concretely and regarding confiscation results, notwithstanding limited to 5 EU Member States, the following results are presented:

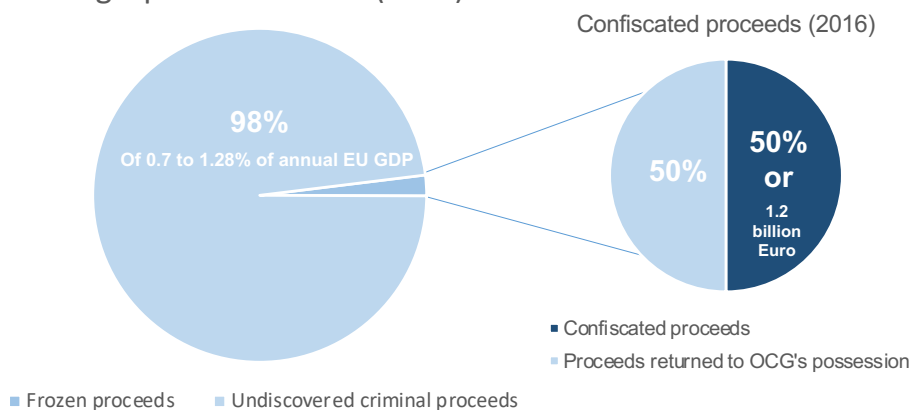
- Italy leads the confiscation and seizure statistics with 113.753 assets seized and confiscated related to organised crime between 2009 and 2013, 47.7% were real estate, 6.7% companies, 20.1% registered assets and 25.5% movable assets;
- Spain confiscated 27.541 assets related to drug offences between 1996 and 2012: 1% real estate, 49.1% registered assets and 49.9% movable assets.
- France registered between 2008 and 2012 the seizure of 18.373 assets (0.7% real estate, 3.1% registered assets and 96.2% movable assets), which 56 (87.5% real estate, 5.4% registered assets and 7.1% movable assets) were confiscated. The value gradually increased from 212.8 in 2011 to 1148.5 million of Euros in 2013.
- Finland confiscated 302 assets between 2003 and 2013, through seizure mechanisms (3% of real state, 34.1% of registered assets and 62.9% of movable assets).
- Ireland confiscated between 2005 and 2015, through confiscation mechanisms (16.8% of real state, 1% of companies, 9.8% of registered assets and 72.4% of movable assets), and an assessed value of 9.090.445 Euros between 1997 and 2013.
- Netherlands confiscated between 2003 and 2014 approximately 25.733.754,45 Euros of criminal proceeds;

In parallel, confiscation results demonstrate that many EU Member States do not confiscate the assets of legal entities.⁴⁸ Savona and Ricciardi (2015) verified in their study that the confiscated value and numbers were increasing in the last 10 years.

47 Crime considered in Article 3(2)(d) of the Directive 2017/1371, on the fight against fraud to the Union's financial interests by means of criminal law, as affecting EU financial interests - any act or omission committed in cross-border fraudulent schemes in relation to: (i) the use or presentation of false, incorrect or incomplete VAT-related statements or documents, which has as an effect the diminution of the resources of the Union budget; (ii) non-disclosure of VAT-related information in violation of a specific obligation, with the same effect; or (iii) the presentation of correct VAT-related statements for the purposes of fraudulently disguising the non-payment or wrongful creation of rights to VAT refunds.

48 Even in the cases or legal entities confiscation is established, their practical application is jeopardized by the difficulty to trace and identify legitimate businesses (increasingly complex money laundering and concealment techniques), the gaps in the regulation of EU countries (extended confiscation just allow companies confiscation in a few countries), and the problems in the disposal/management phase (confiscated companies are difficult to manage leading prosecutors to avoid the seizure of companies unless strictly necessary).

Illegal proceeds frozen (2016)



In 2016,⁴⁹ Europol stated that only 2% of criminal proceeds are frozen and just 1% are finally confiscated in EU, as well as that between 0.7 to 1.28% of annual EU GDP is associated with suspect financial activities.⁵⁰ This means that around 50% of all provisionally seized/frozen assets, around 2.4 billion Euros, are ultimately confiscated – 1.2 billion Euro. It seems that an average 96.3 million Euro are seized/frozen in each EU MS per year⁵¹ (0.018% of the average GDP of the respondent countries in the period of analysis), and 38.8 million Euro are confiscated as a result (0.009% of the average GDP).⁵² The report's conclusion is clear: *Crime still pays in the EU, as 98.9% of the estimated criminal profits are not confiscated.*

Finally, analysing the OECD report named *"Few and Far – The Hard Facts on Stolen Asset Recovery"*⁵³, published in 2014, a total of 1.398 billion US dollars were frozen between 2010 and 2012 in the OECD countries and most of them through the recognised best legal avenue – non-conviction-based confiscations, court-ordered reparations and restitution,

49 At EU level, there is not an updated assessment of the results. The referred statistics were the results of a survey realized between 2010 and 2014.

50 It has to be referred that this study includes responses from 25 out of 28 EU MS at the time, 21 provided statistical figures and 20 answered the questionnaire. These collection problems are due to the decentralization of the requested data as well as the absence of answers from the courts that issued those final decisions.

51 This value range between a minimum of 62.9 million Euro and a maximum of 129.6 million Euro, which represents, per EU citizen, a value between 4.8 to 7.6 Euros per year.

52 This value range between a minimum of 16.3 and 61.4 million Euro, which represents, per EU citizen, a value between 1.2 to 2.1 Euros per year.

53 Taking into account that it extends the EU reality, nevertheless, due to the lack of assessment data, the obtained results are delivering a partial picture of assets recovery in EU, merged with its counterparts.

based on civil law provisions. During the same period, only 147.2 million US dollars were returned by OECD members, and 276.3 million US dollars between 2006 and 2009, a fraction of the 20 to 40 billion US dollars estimated to have been generated each year by OCGs.

More countries are pursuing asset recovery cases in foreign jurisdictions; still the overall number of OECD members doing so remains small – Belgium, Canada, Luxembourg, Netherlands, Portugal, Switzerland, UK and US⁵⁴ - with 29 freezing cases involving a total of 1.398 billion US dollars. When it comes to return of stolen assets (effectively confiscated), only Switzerland, UK and the US had related 12 cases involving 147.2 million US dollars. So, despite some countries (Belgium, Canada, Netherlands, and Portugal) reported stolen asset freezing, they could not effectively confiscate them⁵⁵ (OECD, 2014).

After their confiscation, OECD members return more assets to developing countries that had collaborated with them in this process. In fact, between 2010 and June 2012, 80% of the referred returned amount were directed to 15 developing countries: Algeria, Bangladesh, Brazil, Costa Rica, Cote d'Ivoire, Arab Republic of Egypt, Equatorial Guinea, Iraq, Kazakhstan, Libya, Malaysia, Nigeria, Tanzania, Tunisia and Zimbabwe (OECD, 2014).

In conclusion, the freezing and confiscations of criminal assets statistics are disappointing especially in this last field, whereby an average of just 15% of the frozen criminal assets are effectively confiscated, and confiscations encompass only 1% of the annual revenue generated by organised crime in the EU.

As an encouraging signal of recovery, we can observe an increasing trend in their effective utilisation, as well as the best performance of non-conviction-based confiscation mechanisms (OECD, 2014).

Final remarks: the development of a more dynamic and effective assets recovery in the EU

The primary conclusion of this study is that there is a dramatic discrepancy between what criminals earn, invest and what is confiscated by EU and national authorities, making OCGs gradually more comfortable and profitable. In this context and based on the

54 Australia, Denmark, France, Germany, Israel, Italy, Japan, New Zealand, Norway, Slovak Republic, Spain and Sweden didn't reported pursuits of stolen asset recovery cases involving foreign proceeds, and the rest of the countries didn't reply to the survey.

55 Luxembourg is the most paradigmatic case with 535.4 billion Dollars in assets frozen, however without any confiscation order issued.

before-drawn obstacles, we highlight the following paths, sequentially organised, to optimise the assets recovery in the EU:

- *Effective transposition, implementation and impacts assessment of the Directive 2014/42/EU*
According to article 12(1) of the Directive, Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this EU Law from 4 October 2015. Nevertheless, in 2020, the Commission concluded that only 8 EU MS notified the complete transposition of the Directive in their national legal order and, after notification, Bulgaria, Luxembourg and Romania are still facing infringement procedures for non-communication. This slow pace and the infringement procedures highlight the lack of prioritisation towards the main legal solution against organised crime in the EU.

As exposed, being organised crime transnational *per nature*⁵⁶, the reluctance to harmonise and create a common legal basis for assets recovery in EU jeopardise the capacity of each MS to trace, freeze, manage and confiscate criminal assets. On the other hand, there is as well a lack of data collection, treatment and communication to the Commission⁵⁷ allowing a clear assessment of the impact of the created or adapted laws regarding assets recovery in each legal order and globally in EU. Therefore, the first step needs to encompass the effective application of the Directive and the reliable assessment of the impacts that will, in turn, enable the decision-making procedure by the European Parliament and the Council.

- *Non-conviction-based confiscation and rebuttable presumptions*

Through the Council doc. 7329/1/14 REV 1 ADD1, Article 54(1)(c) of the UNCAC, Article 24(5) of the Warsaw Convention, and FATF Recommendations 4 and 38, different international organisations alerted their members to the urgent need to consider non-conviction-based confiscation mechanisms inside their National systems (European Commission, 2019).

The first development line presented consists of the strengthening of the non-conviction-based confiscation common rules in the EU with the specific aim to enable the recovery of unexplained wealth or assets regardless of any criminal responsibility of their owners, satisfying simultaneously the fundamental rights requirements set out by national courts and the EU Chart of Human Rights (EUCHR). The main legislative developments needed are related to the use of circumstantial evidences in order to overcome the impossibility to obtain direct evidences. This indirect evidence standard is based on a defined set of circumstances considered sufficient to raise a presumption, and the party against whom the presumption exists has the burden to overcome it by presenting

⁵⁶ As stated by recital one of the Directive: "organised criminal groups operate without borders and increasingly acquire assets in Member States other than those in which they are based and in third countries."

⁵⁷ According with Article 13, of the Directive.

proof – inextricably linked with the burden of proof reversion. These rebuttable presumptions are commonly used in extended confiscation, criminal lifestyle mechanisms, unexplained wealth provisions⁵⁸, or illicit or in just enrichment laws, activated with an offense conviction, raising an inference of the illicit nature of all assets. The differences, despite their specific scope, methodology and functioning, are the evidence standards used according to their integration in criminal or civil law: the beyond any reasonable doubt principle (*in dubio pro reo*) against the maximum probabilities principle.

The main challenge is to make those regimes respecting the innocence presumption principle in the extent that there is not a criminal conviction, and, on the other hand, to enforce this patrimonial sanction outside the criminal umbrella. The rights to a fair trial, effective judicial remedy, the presumption of innocence and the right of property⁵⁹ are strongly affected. However, ECtHR⁶⁰ has recognised that if granted the same procedural safeguards that are offered by criminal law, as also stated in Article 6 of the European Convention on Human Rights and Article 1 of its Protocol 1, there are no objections on the freezing or confiscation orders under administrative or civil law.

Therefore, there is a clear green light for establishing a common non-conviction-based confiscation mechanism throughout the EU MS. Where the mutual recognition principle in criminal matters is still the predominant mechanism, the harmonisation and settlement of minimum rules is the key to recover assets within any EU jurisdiction disabling, therefore, the rational legal exploitation strategies of organised crime.

- *Legal persons confiscation*

As explained earlier, organised crime organisations systematically use legal persons in order to allocate, transfer and disguise the actual ownership and origin of the crime originated assets; however none or very few of those are confiscated. On this assumption, as for the needed minimal rules as regarding confiscation mechanisms, it is paramount for the EU to define a standard basis for confiscating companies in order to duly cooperate and apply the same or equivalent regimes. Although, this step alone is ineffective. The

58 According to the European Commission (2019), 13 MS (Estonia, Germany, Greece, Italy, Latvia, Luxembourg, Netherlands, Poland, Romania, Slovakia, Slovenia and Spain) have some form of unexplained wealth procedures in addition to the classic one or have draft law envisaging such regime, whilst 2 MS (Bulgaria and Ireland) primarily rely on this provisions.

59 According with, respectively, Articles 47, 48 and 17 of the EUCHR.

60 By *Engel* criteria, the distinction between a criminal or a civil or preventive sanction depends on: the classification of the measure in national law; the nature of the offence; and the degree of severity of the penalty risked. On this basis, ECHR had taken different decisions, varying on considering it a preventive sanction (ECtHR, *Butler v. UK*, No 41661/98; ECtHR *Webb v. UK*, No 56054/00) to a criminal one (ECtHR, *Welch v. UK*, No 17440/900).

success of these mechanisms depends on the EU's ability to manage the confiscated companies, maintaining their intrinsic value, assets and the related jobs⁶¹.

- *Expansion of the scope for traditional and extended confiscation*

Consulting the list of criminal offences to which confiscation measures can be applied, both traditional or extended, we can conclude that several highly profitable criminal conducts were forgotten, e.g. illicit gambling and betting, MTIC Fraud, or excise fraud. Therefore, it is of outmost importance to dedicate efforts to assessing the generated revenues of the most profitable crimes, with accurate and updated data, to dedicate the most agile tracing, freezing and confiscation mechanisms to them.

- *Cooperation across EU borders*

The EU asset recovery activity is not confined to the EU borders. As previously highlighted, most of the economic and financial investigations are crossing the EU borders to gather information and pieces of evidence, as well as to enforce freezing and confiscation orders in these territories. The success of asset recovery requires coordinated action by all stakeholders in both requested and requesting jurisdictions, including those responsible for setting policies, law enforcement and justice officials, banks, private companies and their intermediaries, development cooperation actors, civil society, and the media (OECD, 2014). Several conventions⁶² are in force to *enable the tracing, freezing and confiscation of illicit assets in their state parties*, and to exchange information and cooperate in the asset recovery process.

Apart from these multilateral mechanisms, informal networks of asset recovery practitioners are potentiating the economic and financial investigations activities all around the world through mainly the identification and tracing of assets, and the preparation of MLA requests – as CARIN (Camden Asset Recovery Inter-Agency Network)⁶³, ARINSA (Southern Africa)⁶⁴, RRAAG (Latin America)⁶⁵, ARIN-AP (Asia Pacific)⁶⁶, ARIN-EA (Eastern Af-

61 One of the most favourable solution is to implement a clear support to judicial administrators, assigning to them stronger managerial skills.

62 The 2000 United Nations Conventions on Transnational Organised Crime, the 2003 United Nations Convention Against Corruption (both ratified by more than 185 countries) and the 2005 Council of Europe Convention on Money Laundering and Confiscation (Warsaw Convention) (21 EU MS and all third countries part of Council of Europe)

63 More details in <https://www.carin.network/>.

64 More details in <https://new.arinsa.org/>.

65 More details in <https://www.gaflat.org/index.php/es/espanol/18-inicio/gaflat/49-red-de-recuperacion-de-activos-del-gaflat-rrag>.

66 More details in <http://www.arin-ap.org/main.do>.

rica)⁶⁷, ARIN-WA (Western Africa)⁶⁸ and ARIN-CARIB (Caribbean)⁶⁹. The Global Focal Point Network⁷⁰, supported by StAR and Interpol, constitutes also a network of practitioners from 99 jurisdictions. They also foster trust, informal assistance and fast cooperation/information sharing.

Therefore, there is a strong need to establish across the EU the same bilateral or multilateral cooperation, mutual recognition, conviction-based, extended or non-conviction-based confiscation with the aim to enable asset recovery with the same rules and dynamism as inside EU borders. Nevertheless, this legal step needs to be taken altogether with the EU active participation fostering within those intelligence and informal cooperation mechanisms, generating the grounds to activate these tools, as well as highlighting their absolute necessity.

- *Identification and tracing illegally acquired assets combined with an opportunity reduction approach*

The discussed ARO has been working through Europol SIENA, as the preferred secure information-exchange system, on the past 7 years with an impressive communication intensification – 539 information exchanges in 2012 to 7.659 in 2019 (European Commission, 2020, p. 15). However, some development lines are still pending, namely the:

- Swift access to a minimum set of data by ARO;
- SIENA use to enable the swift and secure communication of crime-related information;
- Enhancement of ARO powers, as urgent freezing powers and ability to trace assets following a final criminal conviction, and;
- Fixation of a strict deadline for ARO answer to its counterparts.

The ARO network represents the principal EU agency mechanism throughout all the Member States, enhanced by information sharing informal networks across the world, which can actively be the gatekeepers of the Directive 2014/42/EU implementation and assessment in EU.

- *Building capacity in developing countries and returning the proceeds of corruption and crime to the origin countries*

It is paramount to build an effective EU capacity that can support asset recovery efforts of the rest of the community, especially neighbour jurisdictions, with the aim to prioritize and initiate cases, build trust with foreign counterparts, and eventually generate evidence

67 More details in <https://eaaaca.com/about-arinea>.

68 More details in <http://www.arinwa.org/en/arinwa/accueil/>.

69 More details in <https://arin-carib.org/>.

70 More details in <https://www.interpol.int/Crimes/Corruption/Anti-corruption-and-asset-recovery>.

or a court order to support asset recovery. These countries need technical assistance and development of their agencies through training, mentoring, and finally stable joint work over time towards priority cases (OECD, 2014).

As an example, countries with well-established asset recovery policies and solid legal and institutional frameworks, as Switzerland,⁷¹ USA and UK⁷², have repatriated corruption and crime proceeds. This practice motivated developing countries to enhance their cooperation with some EU MS and allowing their own asset recovery capacity building through joint training programmes as well as joint investigations.

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71 In 2004 and 2012, Angola and Switzerland worked together to channel recovered assets worth 64 million US\$ to priority development needs (clearance land mines, support agriculture development, establishment of a hospital structure, water supply, and local capacity building for reintegration of displaced persons), money recovered in the last country originated through corruption crimes in the first one (OECD, 2014).

72 In 2010, following a settlement agreement, 29.5 million GDP ex-gratia payment was made for education needs (primary school enabling through teaching materials and school desks, classrooms rehabilitation, and building teacher accommodations in rural, remote, and hard-to-reach areas) in Tanzania by UK authorities, value generated by asset recovery in a case of bribes involving a 40 million Dollar contract to supply radar control systems to Tanzania (OECD, 2014).

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RESEARCH PROJECTS

RIISING TO THE PROLIFERATION OF CYBERCRIME CHALLENGING LAW ENFORCEMENT AGENCIES ACROSS EUROPE

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ABSTRACT

Law enforcement agencies (LEAs) face serious challenges in addressing the growing wave of cybercrime across Europe. They have limited human and financial resources to push back against this wave. Their tools and technologies are often a generation behind those of cybercriminals and terrorists on the dark web, deep web and dark nets. LEAs have to operate with ethical, data protection and social constraints that are meaningless to cybercriminals. They also have to respect national borders that don't exist in cyberspace. This article briefly refers to the economic and social impacts of cybercrime, before discussing some of the principal challenges facing LEAs in responding to those impacts. We then focus on the EU-funded CC-DRIVER project, which is helping LEAs to address those challenges. Finally, we draw some conclusions on the near-term future of responses to cybercrime.

Keywords: *social and economic impacts, proliferation of cybercrime, technological challenges, jurisdictional limitations, stakeholder collaboration*

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1 Introduction

Cybercriminality² is now ubiquitous and continues to grow.³ Multiple stakeholders face multiple threats from multiple sources; for instance, in 2019, Mastercard had to fend off some 460,000 intrusion attempts on a typical day, up 70 per cent compared to 2018 (Cowley & Perloth, 2019).

The coronavirus pandemic has greatly increased the amount of time and activities conducted online. As a result, there is already evidence of a corresponding increase in cybercrime. The recent Global Incident Response Threat Report (2020)⁴ found that, in an April 2020 survey, 53% of incident response specialists encountered or observed a surge in cyberattacks exploiting COVID-19. In the same month, the US FBI reported a spike of more than 300% in cybercrimes since the beginning of the COVID-19 pandemic (Miller, 2020).

Law enforcement agencies (LEAs) face serious challenges in addressing this growing wave of cybercrime. They have limited human and financial resources to push back against this wave. Their tools and technologies are often a generation behind those of cybercriminals and terrorists on the dark web, deep web and dark nets.⁵ LEAs have to operate with ethical, data protection and social constraints that are meaningless to cybercriminals. They also have to respect national borders that don't exist in cyberspace. And, despite attempts to harmonise the laws, the limits and constraints of harmonisation are a challenge for LEAs (Schroeder 2008, Rozmus et al. 2010).

This article briefly refers to the economic and social impacts of cybercrime, before discussing some of the principal challenges facing LEAs in responding to those impacts. We then focus on the EU-funded CC-DRIVER project, which is helping LEAs to address those

2 Eurojust and Europol (2017) use "cybercrime ... in a broad sense... i.e. attacks on information systems (cyber-attacks), cyber-enabled crimes (such as non-cash payment frauds and various crimes related to child sexual exploitation online) and investigations in cyberspace, in the context of organised and serious cross-border criminality" (p. 2). Sallavaci (2020) distinguishes between cyber-enabled and cyber-dependent crime. Cyber-enabled crimes are traditional crimes facilitated by the use of ICT. Unlike cyber-dependent crimes, they can still be committed without the use of ICT (p. 2).

3 <https://www.hiscox.com/articles/cost-and-frequency-cyber-attacks-rise-yet-companies-are-less-prepared-combat-attacks>

4 <https://www.carbonblack.com/blog/black-hat-usa-2020-vmware-carbon-black-releases-global-incident-response-threat-report-detailing-surge-in-cyberattacks-amid-covid-19/>

5 Europol (2019) says the darknet is the encrypted part of the Internet accessed using specific software that in themselves are not criminal, such as the Tor browser. The dark web comprises the many criminal websites and services hosted on these networks (p. 44). The European Commission & the High Representative of the Union for Foreign Affairs and Security Policy (2017) define the darknet as consisting of content in overlay networks that use the Internet but require specific software, configurations or authorisation to access. The darknet forms a small part of the deep web, the part of the Web not indexed by search engines (p. 15).

challenges. Finally, we draw some conclusions on the near-term future of responses to cybercrime.

2 Proliferation of cybercrime and its economic and social impacts

Measuring the growth in cybercrime is not straightforward; cybercrimes frequently cross jurisdictions and available statistics are fragmentary. Even more challenging for LEAs, cybercriminality is proliferating, evolving and taking on new forms (McLean, 2019). The space where offenders used to meet has moved into cyberspace, further challenging law enforcement operations with jurisdictional fences. Cybercrime is significantly under-reported, so it is difficult to precisely estimate its scale and cost. Such crimes can have a pecuniary and non-pecuniary impact on victims.

Despite the difficulties in obtaining accurate measurements of the societal and economic scale and impact of cybercrime, most experts agree they are severe. Cybercrime seriously impacts the physical and psychological safety, security and stability of our society (Europol, 2019, p. 4). Cybercrimes and cyberattacks put at risk the infrastructures and networks on which we rely for energy, transport, financial services, hospitals and much else. The threat of falling victim to cybercrime, whether real or perceived, might have a significant impact on people's trust in online services and, as a result, many legitimate uses of technology may suffer. In addition, widespread cybercrimes such as bullying, grooming or stalking may have a devastating impact on the psyche of the victim, sometimes resulting in the victim's suicide.⁶

Our economies suffer serious damage from cybercrime. In 2018, cybercrime was generating at least \$1.5 trillion in profits in the US, according to one study (McGuire, 2020). Of this amount, \$860 billion came from illicit, illegal online markets, \$500 billion from illicit trade in trade secrets and intellectual property, \$160 billion from data trading, \$1.6 billion from crimeware and cybercrime as a service and \$1 billion from ransomware. It should be noted, though, that each ransomware incident can have devastating consequences; in one attack alone, a company lost €60 million in revenue (National Crime Agency, 2019, p. 46).

While there are many studies on this topic, there can be no doubt that cybercrime has a substantial economic impact, it can generate significant profits, and it can cause great harm to our society, to individuals, companies, public bodies and more. This cybercrime swamp poses great challenges, in particular to law enforcement agencies, who need to

⁶ https://www.stltoday.com/suburban-journals/stcharles/news/stevepokin/my-space-hoax-ends-with-suicide-of-dardenne-prairie-teen/article_0304c09a-ab32-5931-9bb3-210a5d5dbd58.html; also see: <https://eu.news-leader.com/story/life/2014/11/19/pokin-around-biggest-story-young-girls-suicide/19291825/>

investigate cybercrimes and apprehend their perpetrators. We address some of these challenges in the following section.

3 Challenges facing Law Enforcement Agencies

As criminals adopt new technologies, apps and platforms, law enforcement and legislators must also innovate in order to address these challenges. This section gathers a selection of challenges that LEAs face when tackling various forms of cybercrime.

3.1. Shortage of resources

The first such challenge is the chronic lack of resources. Publicly funded LEAs have limited resources (financial, human, technological) to deal with the ever-changing cybercrime landscape of threats and agents; cybercriminals are not bound by such resource constraints. This challenge can be demonstrated through two distinct examples.

First example: Fighting cybercrime requires many experts in cyber investigation, law and regulation, cutting-edge technology and management, economics. There are three main lines of competition in this regard. First, the lucrative private sector may offer prospective candidates employment conditions beyond those that LEAs can afford. Second, cybercriminals themselves can recruit individuals who could otherwise be their adversaries. Third, LEAs are competing among themselves as well as the rest of the world for cybersecurity talent, of which there is a growing shortage. The situation is exacerbated by the cybersecurity skills gap for professionals working in the private sector in Europe, predicted to be 350,000 by 2022 (European Commission & the High Representative of the Union for Foreign Affairs and Security Policy, 2017, p. 15).

Second example: The transnational and technical nature of cybercrime requires co-operation between various private and public actors, which in turn requires LEAs to invest matching resources. This need manifests in the context of detecting and tackling specific crime incidents. In 2019, referrals from industry and third country partners reached a record high, putting a serious strain on the capacity of LEAs in the EU to investigate these crimes. At least 18 Member States received referrals from the USA through Europol (2019) alone which further constrains the limited resources available to LEAs (p. 30).

The less visible, yet in the long run crucial, category of co-operative expenses is tied to multiangular analysis of data hiding valuable information about the cybercrime ecosystem. LEAs often lack resources to gather and analyse the data about cybercrime. For example, the increasing amount of child sexual exploitation material (CSEM) detected online by law enforcement and the private sector continues to strain LEA resources to conduct criminal investigations (Europol, 2019, p. 7). LEAs need to leverage their limited

resources by collaborating with private and public actors to identify and apprehend cybercriminals.

3.2. Identifying cybercriminals

Identifying cybercriminals is a multi-pronged challenge for the LEAs with two core aspects being technical and human identification.

Technical identification is made difficult by technologies focused on helping cybercriminals to hide their activities by leaving misleading tracks – or no tracks at all. Recent trends such as the increasing criminal use of encryption, anonymisation tools, virtual currencies and darknets have led to a situation where law enforcement may no longer (reasonably) establish the physical location of the perpetrator, the criminal infrastructure or electronic evidence. It is often unclear which country has jurisdiction and what legal framework regulates the real-time collection of evidence or the use of special investigative powers such as monitoring of criminal activities online and various undercover measures (Eurojust & Europol, 13). The use of obfuscating technologies and platforms is evident – more than three-quarters of cybercrime investigations in the EU have involved the use of encryption (Europol, 2015, p. 50).¹⁸

Human identification is made difficult by diversity in the ranks of cybercriminals. Cyber threats come from both non-state and state actors: they are often criminal, motivated by profit, but they can also be political and strategic (European Commission & the High Representative of the Union for Foreign Affairs and Security Policy, 2017, p. 2). There are many types of cybercriminals, including individual threat actors, organised gangs and states along with technologically talented young people who may not be aware of the consequences of their behaviour. In some cases, state agencies are directly involved; in other instances, states sponsor free-lance gangs who work on their own behalf as well as their state handlers. Consequently, cybercriminals are driven by a range of motives that include profit, idealism, curiosity, thrill-seeking and the desire to harm and/or target others (Dalins 2018, Turvey 2011, Toby 1962).

3.3. Confronting the availability of new cybercrime technologies

In addition to increases in sophistication of cybercrime-related technologies, their accessibility and ease of use pose another crucial challenge for the LEAs (National Crime Agency, 2019). In many cases, it no longer requires a sophisticated or carefully planned operation to break into IT systems. The hacking tools and malware available on the dark web have lowered the barrier to entry into cybercrime, making it possible for amateur and unsophisticated hackers to cause enormous damage.

An important contributor to this state of affair is the rise of cybercrime as a service (CaaS), which makes easy-to-use exploit kits, ransomware and customised malware easily avail-

able on the dark web for use in assisting the commission of cybercrime. Cybercrime as a service offers every service as a conventional business ranging from product development to technical support, distribution, quality assurance, and even help desks. Some groups offer subscription services for exploiting unpatched system vulnerabilities (Osborne, 2017).

3.4. Approaching young people

Young people may be more digitally savvy than their parents or grandparents, but they may also be more complacent about cybersecurity. The most vulnerable members of society, children, are being targeted, radicalised, groomed, coerced, monetised, sexually abused and exploited. Young people are not just victims of cybercrime; they are also at risk in terms of entry into cybercrime, from cyber risk-taking to cyber juvenile delinquency. Increasingly, they are being drawn down pathways into cybercriminality.

Europol describes the amount of child sexual exploitation material (CSEM) online as “staggering” and continuing to increase. The online solicitation of children for sexual purposes remains a serious threat in the EU, with many Member States reporting a rise in the crime (Europol, 2019: p. 31). Self-generated explicit material (SGEM) has also become common, driven by growing access of minors to high-quality smart phones and a lack of awareness about the risks. Offenders use various ways and platforms to disguise online CSEM, making it more challenging for LEAs to detect such images and videos. Peer-to-peer sharing remains the most popular conveyance of CSEM (Europol, 2019: p. 30).

Europol has also expressed concern about improvements of so-called deepfakes. Cybercriminals have already put the faces of celebrities on existing pornographic videos. Although deepfake technologies are relatively new, they are rapidly improving, becoming more accessible and easier to use. It may be just a matter of time before the first deepfakes appear depicting online CSE, in the generation of new ‘personalised’ CSEM. This can also have serious implications for law enforcement authorities, as it might raise questions about the authenticity of evidence and complicate investigations. Fighting CSE is a joint effort between law enforcement and the private sector; a common platform is needed in order to coordinate efforts and prevent a fragmented approach and the duplication of effort (Europol, 2019, p. 34).

3.5. Cybercrimes don’t respect national boundaries

In 2018, the European Commission found that in the EU “more than half of all investigations involve a cross-border request to access [electronic] evidence.”⁷ The principle of territoriality limits the jurisdiction and investigative powers of LEAs and the judiciary in such cases. Differences between domestic legal frameworks in the Member States and

⁷ https://ec.europa.eu/info/policies/justice-and-fundamental-rights/criminal-justice/e-evidence-cross-border-access-electronic-evidence_en

international instruments continue to be a serious impediment to the international criminal investigation and prosecution of cybercrime (Europol, 2019, p. 57).

Transnational cooperation in criminal matters, including cross-border access to evidence located outside the jurisdiction of the investigating or prosecuting authority, has traditionally been regulated via international agreements. Within the EU, the European Investigation Order (EIO) provides for the gathering and transfer of evidence between MSs and for deadlines of 120 days, which is still too long for accessing e-evidence in cybercriminal investigations given the particular fast-paced nature of the evolution of cyberspace and cybercrime. The proposed e-evidence framework seeks to address the problems with the existing mechanisms for cross-border access to e-evidence while respecting fundamental rights and the principles enshrined in the Charter of Fundamental Rights (CFR) of the EU and other key international instruments (Sallavaci, p. 30).

3.6. Legislation as a challenge to effective actions against cybercrime

In the case of *Digital Rights Ireland Ltd v. Minister for Communications, Marine and Natural Resources and Others and Kärntner Landesregierung and Others* (2014) Joined Cases C-293/12 and C-594/12, the European Court of Justice (CJEU)⁸ overturned the Data Retention Directive (DRD).⁹ This and further judgments in the field¹⁰ and the implementation of the General Data Protection Regulation (GDPR) in 2018 have left law enforcement and prosecutors uncertain about the legality of obtaining data from private parties. In some Member States, there is (still) legislation in place to ensure that Internet service providers (ISPs) retain data for law enforcement purposes, whereas in other MS, national legislation has been annulled in the wake of the CJEU judgment.

8 With the entry into force of the Treaty of Lisbon on 1 Dec 2009, the official name of the European Court of Justice (ECJ) was changed from the “Court of Justice of the European Communities” (CJEU) to the “Court of Justice”. The Court was -- and is -- often referred to as the European Court of Justice, with the abbreviation ECJ still frequently used in preference to CJEU. In this article, we are using CJEU for all decisions after 2009 in line with the Treaty of Lisbon.

9 Joined Cases C-293/12 and C-594/12 *Digital Rights Ireland v Minister for Communications, Marine and Natural Resources*.

10 Such as *Tele2 Sverige AB v. Post-och telestyrelsen* and *Secretary of State for the Home Department v. Tom Watson and Others* (2016) Joined Cases C-203/15 and C-698/15.

Data retention legislation in EU Member States post-Digital Rights Ireland and Tele2/Watson – (2019) – selection of countries¹¹

Country	Data retention legislation in force?
Austria	No – Constitutional Court invalidated the national legislation
Belgium	Yes – references to the CJEU pending
Bulgaria	Yes – pre-Data Retention Directive legislation is still in force
Croatia	Yes
Cyprus	Yes – national legislation upheld by Supreme Court in 2015
Czech Republic	Yes – currently challenged before the Constitutional Court
Denmark	Yes – challenged at the national court (Eastern High Court)
Estonia	Yes
Finland	Yes
France	Yes – preliminary ruling requests pending at the CJEU
Germany	Yes – legislation currently challenged before the German Constitutional court
Greece	Yes
Hungary	Yes
Ireland	Yes
Italy	Yes
Latvia	Yes
Lithuania	Yes
Luxembourg	Yes
Malta	Yes – challenge brought at national level
Netherlands	No – data retention act no longer applicable after Hague Civil Court ruling from 2015
Poland	Yes
Portugal	Yes – national legislation (pre-DRD) upheld by Constitutional court
Romania	Yes – new, post-Digital Rights Ireland law enacted
Slovakia	Yes – provisions contradicting CJEU rulings were annulled by the Slovak Constitutional Court
Slovenia	No – Slovenian Constitutional Court annulled the legislation
Spain	Yes
Sweden	Yes

¹¹ Council of the European Union, Working Paper on Data Retention Legislation, WK3103/2019 INIT, 6 March 2019, available at <https://www.statewatch.org/media/documents/news/2019/may/eu-council-data-retention-ms-situation-wk-3103-19.pdf>

The lack of unified retention of electronic communication data across the EU has proven a key challenge to investigating cross-border cybercrime. LEAs contend that electronic communication data is key to the successful investigation and prosecution of serious crimes (including cybercrime) (Eurojust & Europol, 2017, p. 4).

While some LEAs may find responding to the strictures of the General Data Protection Regulation to be somewhat challenging, Europol has spoken hopefully of the GDPR's having a positive impact on data breaches and leading to enhanced data security as a result of the high fines allowed by the GDPR in the event of data breaches as well as the media headlines that often arise from big data breaches. It has also emphasised the need for law enforcement to engage with policymakers, legislators and industry to "have a voice in how our society develops" (Europol, 2018, p. 4).

3.7. Finding the right degree of reliance on new technologies

Many LEAs look to new technologies that might help compensate for a shortage of human resources. While some technologies are helpful in their investigations, some have generated a lot of controversy, even among LEAs. One of those has been predictive policing applications. Essentially, there are currently two main types of predictive policing tools, both of which are problematic. One type is based on location – it identifies where and when crimes have occurred, so LEAs can police those areas more to apprehend actions before they happen.¹² The second type focuses on the likelihood that someone will commit a crime. It's a form of profiling. There have been increasing calls for abandoning predictive policing algorithms until such time as the biases can be better addressed (Heaven, 2020).

Another technology used by LEAs that has also generated a lot of controversy is facial recognition. Clearview AI, a US start-up, has devised a ground-breaking facial recognition app that enables a police officer to take a picture of a person, upload it and then get to see public photos of that person, along with links to where those photos appeared. The Clearview AI app includes programming language to pair it with augmented-reality glasses; users would potentially be able to identify every person they saw in the street. The system's backbone is a database of more than three billion images that Clearview claims to have scraped from Facebook, YouTube, Venmo and millions of other websites. The company also claims that more than 600 LEAs are already using its app (Hill, 2020).

The Estonian Forensic Science Institute is leading a consortium of European agencies undertaking the EU-funded TELEFI project (Towards the European Level Exchange of Facial Images) on how facial recognition is currently being used for the investigation of crime across Member States.¹³ The consortium is also considering the potential for implement-

¹² See, for example, <https://www.predpol.com/hot-spot-policing/>

¹³ <https://www.ekei.ee/en/projects>

ing the exchange of facial images within the Prüm framework, which enables mutual searching of interconnected DNA, fingerprint and vehicle registration databases for law enforcement.

A report drawn up by the national police forces of 10 EU Member States, led by Austria, calls for the introduction of EU legislation to introduce and interconnect such databases in every Member State, with a central role played by Europol in the exchange of facial recognition and other biometric data (Campbell & Jones, 2020).

3.8. Gaining public trust and raising awareness

Despite the challenges they face, LEAs do have a relatively good standing amongst the public. Data from European countries shows that trust in the police tends to be higher than trust in the political and legal systems. In the majority of European countries, people trust the police more than they trust each other.¹⁴ Trust is important for many reasons, for social solidarity and the effective governance of our institutions. Some studies have shown that trust has a causal impact on economic outcomes (Algan & Cahuc, 2010).

Trust is hard to earn, but easy to lose. Hence, the use of controversial technologies such as predictive policing, facial recognition and other Big Brother surveillance risks damaging public trust in the police.

As held by CJEU in its Opinion 2/13, “the principle of mutual trust between the Member States is of fundamental importance in EU law” (CJEU, 2014). This principle hinges on the mutual trust of MS in each other’s criminal justice systems: trust “is grounded, in particular, on their shared commitment to the principles of freedom, democracy and respect for human rights, fundamental freedoms and the rule of law” (Sallavici, 2020: p. 30).

Trust is built on transparency. Hence, LEAs must find the right balance between transparency and confidentiality in everything they do. Europol (2019) favours cyber simulation exercises to help raise awareness of the roles, responsibilities and capabilities of each actor in the exercises and increase the level of trust and collaboration. It also says law enforcement must continue to build trust-based relationships with cryptocurrency-related businesses, academia, and other relevant private sector entities, to more effectively tackle issues posed by cryptocurrencies during investigations (p. 24).

¹⁴ <https://ourworldindata.org/trust>. See also <https://www.nwo.nl/en/news-and-events/news/2018/05/police-enjoy-greater-level-of-trust-than-other-institutions-in-europe.html>

4 How CC-DRIVER addresses the challenges

In this section, we refer to the EU-funded CC-DRIVER project, a three-year project that began in May 2020. The project is aimed at understanding the technical and human drivers of cybercrime and how to use that knowledge to reduce cybercrime and to deter young people from a life of crime. The CC-DRIVER consortium comprises 13 partners from nine countries across Europe: Finland, France, Germany, Greece, Finland, Romania, Spain, Switzerland, UK. The CC-DRIVER consortium is addressing the challenges, in whole or in part, mentioned in the preceding section.

4.1. Leveraging resources

CC-DRIVER responds directly to the lack of resources described in section 3.1 above. With public funding in the fight against cybercrime, we are alleviating some of the financial pressure on LEAs by reviewing legislation, developing policy and technical toolkits that may assist them in tackling cybercrime. By engaging the project's LEAs with a diverse team of European researchers, we are helping to remedy the pressure on LEAs' human resources while developing synergies and possibilities of collaboration among LEAs across Member States. We are also leveraging the project's resources and impacts by having formed a cluster with eight other H2020 projects focused on LEAs and new technologies to ensure that each project develops new and effective technology to cater to LEA challenges with minimal duplication.

4.2. Identifying cybercriminals

CC-DRIVER is responding to the challenges of technical and human identification of cybercriminals, as follows.

First, our project aims to assist in technical identification of perpetrators by developing and enhancing sets of cybercrime awareness and investigation tools. They include a threat intelligence portal, analysing and correlating data and intelligence across multiple relevant sources, including OSINT, data available for LEAs and data collected by cybersecurity vendors; an automated notification tool for LEAs and CERTs for cases when attack-related information can be attributed to a specific country or area; and technologies for extracting forensics data from breached systems, with added automated analysis and data mining capabilities.

Second, in the search for relevant human factors, CC-DRIVER is identifying different types of cybercriminals and undertaking a broad review of the characteristics of offenders, victims and societal impact. The consortium will better understand these drivers after interviews with experts working directly with young people involved in cybercrime to further explore motivations, human factors and key drivers of cybercriminality. In addition, the partners are interviewing academics across the key disciplines of psychology,

cyberpsychology, criminology, neurobiology and anthropology and specifically digital anthropology.

Third, the consortium is interviewing LEAs to have their perspectives on cybercriminality and juvenile cybercriminality, in particular. The consortium is especially interested in how young people act differently online. A major input to understanding such drivers will be the results of a CC-DRIVER survey of 8,000 young people between the ages of 16-19 in each of eight EU countries. Led by University of East London, these questions will address the prevalence of juvenile delinquency and cybercrime, drawing on digital anthropological constructs along with theories of criminology that may have explanatory value regarding deviance and anti-social behaviour, digital anthropological constructs with theories of criminology (<https://www.ccdriver-h2020.com>).

4.3. Confronting the availability of new cybercrime technologies

CC-DRIVER is approaching the trend of growing availability and accessibility of cybercrime tools by investigating the various manifestations of cybercrime as a service (CaaS), its modalities, purveyors and trends. The survey will review the range of cybercrime as a service activities on the surface and dark web, including cyber theft, cyber fraud, espionage, money-laundering, ransomware, blackmail and extortion, social engineering and phishing, disinformation, fake news, deepfakes, cyber sabotage, cyber stalking, bullying and child sexual abuse, defacement, denial of service and more.

The survey includes those in the EU who offer and use cybercrime as a service and will investigate different types of business models. It will report on the evolution of websites that support cybercriminal services over time and the ways in which human factors influence technical and business strategies and choices of criminals. The survey will also include a review of trends: is cybercrime as a service increasing? Does it have geographic roots? How are cybercriminal tactics, techniques and models evolving? Attention will be given to emerging threats that target IoT and related devices.

4.4. Approaching young people

One of the principal tasks in the CC-DRIVER project is to understand how to divert young people and teenagers from cybercrime towards non-criminal cyber activities. Thus, the project is conducting a multidisciplinary study of the drivers of cyber juvenile delinquency and cybercriminality across a range of offences. Cyber offences vary between jurisdictions; hence, we will investigate a range of online behaviours from risk-taking and delinquency to criminality, to include an analysis of drivers and motivations. The online survey will be self-completion, employing a stratified sample of youth population in each of the eight EU countries.

The partners will create an online questionnaire that young people and organisations can use to assess their vulnerability to cybercrime. We will create an online assessment, awareness and educational tool to enable youth to develop insights regarding their vulnerability to becoming involved in cybercriminal activity. Our “Cyber Expert or Cybercriminal” metric will build on Europol’s public awareness and prevention campaigns. We will create a parent, caregiver, educator and other stakeholders’ ‘Pathways into Cybercrime’ checklist (PCC), a resource that will ‘red flag’ youth behaviours or attitudes that may facilitate cyber delinquency or criminality.

4.5. Overcoming jurisdictional limitations with practical results

The CC-DRIVER consortium has taken several initiatives to address the challenge of timely, cross-border co-operation in addressing cybercrimes that don’t respect national boundaries. The initiatives bring together different stakeholders, especially LEAs, from different countries. The CC-DRIVER consortium and project themselves are good examples of how different partners from different countries can come together in common cause to address the cybercrime challenges that affect them all.

The consortium has created a relatively large Stakeholder Board (SB) with 24 members, 11 of whom are LEAs. There are also six academics and representatives from an association, two companies, two CERTs, one military and one NGO. The SB members come from 16 different countries. The consortium convenes quarterly meetings with the SB, so that stakeholders have an opportunity to exchange views, not only in regard to the project but also related cybersecurity issues and raising public awareness.

In another initiative, the consortium has created a working group of LEAs from across the EU to discuss their common challenges and different approaches to addressing them and identifying good practices. The working group consists of the four LEA partners from the CC-DRIVER consortium as well as six LEAs from the project’s SB. The consortium justifies the disproportionate number of LEAs on the SB because the project is targeted at LEAs, helping them understand the drivers of cybercrime and giving them tools they need to counter cybercrime.

As another initiative and as co-ordinator of the CC-DRIVER project, Trilateral contacted eight other projects funded under the EU’s Horizon 2020 security work programme to suggest that they form a cluster since all of the projects include LEAs as partners and are focused on improving the tools at the disposition of LEAs in combatting organised crime and terrorism. All responded positively. The LEA cluster meets quarterly and have begun inviting each other’s partners to webinars that might be of interest. In this way, the projects leverage the results their projects, discuss issues of mutual interest and formulate coherent recommendations.

4.6. A comparative analysis of cybercrime legislation in eight countries

Eurojust and Europol (2017) have said that the challenges to LEAs “could further benefit from more extensive (and broader) research and a closer comparison of existing legislation at national and international levels” (p. 2).

The CC-DRIVER project is undertaking a comparative analysis of cybersecurity legislation and policy in eight European countries, namely UK, Spain, Germany, Romania, France, Italy, Sweden, Netherlands. We chose eight countries to provide us with a dataset that can be extrapolated to understand similar legislative and regulatory gaps in other contexts. The consortium is examining to what extent such policies include provision for (1) assessing risks, threats and vulnerabilities – human and technical, youth and adult (2) identifying and deploying relevant security measures, (3) taking into account legal and ethical rules of operation, (4) cost-benefit considerations, (5) fundamental rights such as the rights to privacy, protection of personal data and the free movement of persons. The CC-DRIVER partner Information Security Forum (ISF) is sending a questionnaire to its 450 members regarding the provisions that should be included in a comprehensive cybersecurity framework addressing crime as a service and young people. The partners will host workshops with LEAs and ISF member organisations in each of the eight Member States on examples of good cybersecurity practice and how we can turn off young people from cybercriminal pursuits. The partners are also interviewing members of national cyber security and cybercrime organisations on their key recommendations to SMEs and CSOs on measures they can take to reduce the impact of cybercriminality.

Based on their analysis, the partners will identify a set of good cybersecurity policy practices, especially concerning young people and cybercriminality for inclusion in our policy toolkit. We will also develop a cybersecurity policy framework, which we will commend to policymakers in Member States.

4.7. Finding the right degree of reliance on new technologies

LEAs are, in some sense, fortunate that they are being offered a range of new tools, technologies, applications and platforms from EU-funded projects, such as CC-DRIVER. Any ethical, data protection and societal issues that might arise from the development and use of these new technologies can be considered through the conduct of an impact assessment. The CC-DRIVER consortium is carrying out an ethical, data protection and societal impact assessment to identify potential impacts that could arise in each of the project’s work packages and tasks. It is then discussing those potential impacts with the WP and task leaders and reaching agreement on which issues need to be addressed and how. Trilateral will next outline the proposed solutions to those impacts to the project’s ethical advisory board, which comprises four external ethics experts, as well as the project’s Stakeholder Board.

Thus, the impact assessment can help uncover the ethical and other issues that can arise from new technologies like predictive policing, facial recognition and such surveillance systems. An ongoing impact assessment, from the beginning to the end of a project, is useful also in raising the awareness of all partners in a consortium about the various issues that could arise from project developments and how best to solve those issues.

4.8. Gaining public trust and raising awareness

To best meet their challenges, LEAs should understand the importance of earning the public's trust as well as raising the public's awareness of the different types of cybercrimes and how they can avoid becoming victims.

The CC-DRIVER partners are undertaking various efforts to raise public awareness about the drivers of cybercrime, particularly as they come into play with young people, and the various measures CC-DRIVER is taking to counter those drivers.

An important way of gaining public trust depends on engaging stakeholders. To that end, CC-DRIVER is engaging stakeholders in several ways. It has created a large Stakeholder Board and an ethics advisory board, as mentioned above. It also has a Security Advisory Board which reviews project deliverables for whether they raise any national security issues. The project has created an LEA working group, comprising 10 LEAs, some partners and some from the Stakeholder Board, to discuss issues of mutual concern, good practices and sharing information about cybercrimes and cybercriminals. There is also the cluster of eight other EU-funded projects, also as mentioned above. All of the boards and working groups will help substantially in stakeholder engagement and improving trust.

The project also undertakes various dissemination activities to raise awareness via the project website¹⁵, press releases, workshop presentations, social media accounts, etc.

5 Conclusion

One of the key conclusions we can draw from the challenges facing law enforcement agencies in Europe is the importance of co-operation and collaboration between different stakeholder groups, including LEAs, CERTs, CSIRTs, the private sector, academics, agencies such as Europol and ENISA, among others. The EC is stimulating such collaboration in various ways, not least of which is funding security projects that bring together several different types of partners, as is the case of CC-DRIVER.

¹⁵ <https://www.ccdriver-h2020.com/>

A second conclusion (or observation) we can draw is the need to resolve jurisdictional issues and expedite information exchange. Criminals and terrorists can hide their data anywhere in cyberspace, which complicates questions of jurisdiction. The loss of location results in competing claims to prosecution, underlining the need for early involvement of judicial authorities through Eurojust, direct police-to-police channels for co-operation and communication facilitated by Europol, and continuous innovation in the process of operational collaboration.

CC-DRIVER is bridging jurisdictional issues in various ways, particularly through its creation of a working group of 10 different LEAs. The project is contributing towards the alignment of legal frameworks through its comparative analysis of legislation and policy combatting cybercrime in eight European countries. Its gap analysis will identify benchmarks for good and comprehensive legislation and create a policy brief, which it will discuss with LEAs and policymakers across the EU.

We will only begin to turn the tide on cyber-attacks when we increase the chances of getting caught and sanctioned for committing them as well as diverting our youth towards non-criminal cyber activities. Cyber-attacks should be promptly investigated and perpetrators brought to justice, or action taken to allow an appropriate political or diplomatic response. The tools and applications being developed in CC-DRIVER will help achieve that, but we need to agree that cybersecurity is everyone's responsibility.

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PROJECT REPORTS

STATUS QUO OF NATIONAL DATA SOURCES CONCERNING DOMESTIC VIOLENCE ACROSS EIGHT EUROPEAN COUNTRIES

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Abstract

Official police records and victimisation surveys are key sources of information on domestic violence. One of the first tasks in the international IMPRODOVA project¹, with an overall aim to improve frontline response to domestic violence, was to examine the properties and availability of these data provisions across eight partner countries. The established theoretical perspectives to examine domestic violence – feminist and family violence perspectives – accompanied by their methodological implications for data collection are reviewed. Project data are examined utilising enhanced analytical strategy. The results indicate substantial variation and deficiencies in national data provisions; the foremost problem being the lack of representative and regularly repeated victimisation surveys. Concerning police data, regionally separate information systems and the potential unreliability of the data present the biggest challenges for examining domestic violence and its frontline response. The differences in what is considered 'domestic' and 'violence', as well as the weight given to gender in defining these concepts, are evident, creating substantial obstacles for international cooperation in research, policy formation and innovations to prevent and mitigate domestic violence. The paper aims to spark conversation for further development of policy and practice on collecting appropriate and comparable data concerning domestic violence.

Keywords: domestic violence, police data, victimisation, survey, comparative research

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Introduction

The necessity to detect and prevent domestic violence is widely agreed upon, whereas the definition of it is more controversial. In order to understand the scale of the problem and to develop effective means to intervene, reliable information on the prevalence and characteristics of domestic violence are needed. Data has a key role in formulating, implementing and assessing strategy, policy and action plans for intervening in domestic violence. Article 11 of the Council of Europe (2011) Convention on preventing and combating violence against women and domestic violence (the Istanbul Convention) addresses the demand for both relevant statistical data and population-based surveys, as well as research on all forms of violence covered in the Convention, and the public availability of the aforementioned information. Still, obtaining knowledge on domestic violence is not straightforward. Two contesting approaches to define domestic violence and collect data can be summarised as gender-neutral and women-only strategies (Walby & Towers, 2017), and they entail differing research traditions and theoretical perspectives. These perspectives lead to divergent definitions and indicators of domestic violence, followed by incomparable data, complicating the debate concerning appropriate policy and frontline responses.

Two focal sources of information on domestic violence are official police records and victimisation surveys. Police data and crime data can be utilised to examine incidents that come to the attention of the police and to assess the criminal justice procedures, particularly on how these cases proceed, or do not proceed, in the system. Domestic violence is, however, a largely hidden crime, meaning that most of it never comes to the attention of authorities (e.g. Aaltonen et al., 2014). Therefore, surveying people is necessary to obtain a more comprehensive picture of the phenomenon (Walby & Towers, 2017). Population-based surveys offer estimates on total prevalence of victimisation, its characteristics, and, complemented with police data, on official social control and the proportion of crime that remains hidden.

Mapping the availability and characteristics of the key data provisions was one of the first tasks in the international project *Improving Frontline Responses to High Impact Domestic Violence* (IMPRODOVA). The main goal of the research project is examining the human and social factors that shape the institutional responses to domestic violence, and to find ways of developing the frontline response to domestic violence in eight European countries that have cooperated for the project: Austria, Finland, France, Germany, Hungary, Portugal, Scotland and Slovenia. The national reports from these partner countries concerning the two key sources of data, police records and victimisation surveys, are utilised in the empirical section of this paper.

The purpose of this paper is to highlight both gaps and successes in data collection and eventually feed into recommendations that are relevant on a European level. We focus on three key concepts – ‘domestic’, ‘violence’ and ‘gender’ – that are central in defining the issue and understanding the possibilities, limitations and diversity of domestic violence data. We explore how these concepts are approached in the key data provisions on domestic violence based on material collected as part of the IMPRODOVA project. The intention is not to argue for or against a particular theoretical perspective, method or source of data, but rather to point out the degree the data is or is not commensurable both nationally and internationally. There are some prior assessments on domestic violence data provisions or, more specifically, concerning intimate partner violence (IPV) on the European level (EIGE 2019), but to our knowledge, no prior publications have examined how data provisions in several European countries connect to theoretical perspectives rather than only evaluating how they comply with one specific definition of domestic violence. This paper aims to address this shortcoming.

After reviewing literature analysing the theoretical perspectives to study domestic violence and the interlinked methodology for collecting data, we describe the methods and materials of this article. We then describe how the three key features of defining domestic violence appear in police data and victimisation surveys, with examples of data from the IMPRODOVA partner countries. We start with the definition of ‘domestic’, followed by the concept of ‘violence’, and how ‘gender’ is considered in different data sources. We also briefly discuss representativeness of the victimisation surveys, especially the situation of the most vulnerable groups. Finally, we conclude and discuss the implications of this review for the broader academic debate on collecting domestic violence data.

Theoretical perspectives to examine domestic violence and implications to collecting data

Domestic violence (DV), domestic abuse (DA), family violence (FV), IPV, are all terms that teem across the multidisciplinary research field concerning violence within family and other close relationships. The term used may indicate the theoretical stance of a particular study and its analytical strategy, but similar terminology is also used when referring to considerably differing definitions (Fagerlund et al., 2020). While the purpose in this paper is to examine definitions, rather than to predefine domestic violence, it is acknowledged that to operate under a title including ‘domestic violence’ is likewise not a neutral choice. Choosing to use the term domestic violence is supported by its considerably long span in violence studies across different theoretical perspectives; it was also chosen to comply with the terminology preferred in the project that this paper draws from (IMPRODOVA project website, 2020). Because of the breadth of literature on domestic violence from several decades, as well as our focus on concepts and definitions rather than causes,

mechanisms and prevalence of violence, a comprehensive meta-analysis falls outside the scope of this paper. Instead, we focus on utilising some of the relatively recent analyses on theoretical perspectives and their methodological implications, an approach supported by the observation that the groupings and conclusions on perspectives of these reviews tend to converge.

One way to understand theoretical perspectives of domestic violence is to differentiate between FV theories and feminist theory (e.g. Lawson 2012). The FV perspective is characterised by perceiving conflict between family members “as universal and inevitable, and violence between any family members (including violence between spouses) is viewed as one method utilized by those members to resolve this predictable conflict” (Lawson 2012, p. 575). While sociological theories, introduced as part of the FV paradigm as well as the feminist perspective, all tend to view violence as a function of social structures rather than individual pathology; in FV theorisations, gender is merely one of the potentially intertwined social disadvantages. By contrast, the feminist perspective recognises gender at the core of the problem so that IPV “cannot be adequately understood through any lens that does not include gender as the central component of the analysis” (Lawson 2012, p. 579). Domestic violence is argued to have more in common with sexual assault of women than elder abuse and violence between siblings, for instance; therefore violence against women (VAW) in an intimate partnership should not be studied as part of a larger phenomenon of FV (Lawson 2012).

Bonnet (2015) has described the incongruity between theoretical perspectives of FV and VAW, with focus on American literature. FV and VAW approaches are based on differing definitions of violence as well as on different studies. The overall empirical data shows FV being the most frequent type of violence in Western societies, including that between heterosexual and homosexual couples, between siblings, violence perpetrated by parents against their children and against elders. Owing to the general sociological and criminological theories on violence, the context of poverty and alcohol consumption are seen as relevant to understand violence within family (Bonnet 2015). On the contrary, similar to Lawson’s (2012) compilation on feminist perspectives, VAW approach is characterised as defining IPV separate from other violence in the family, in the context of gender inequality, male dominance and female subordination (Bonnet 2015).

Concerning the methodological choices entwined in theoretical perspectives and definitions, Bonnet (2015) notes three debates. First, the discrepancy of findings based on large-scale quantitative surveys and those conducted in women’s shelter services and hospitals. For researchers collecting data in support services, the victims of domestic violence have consisted almost entirely of women, contributing to the claim that surveys indicating a more gender-symmetrical victimisation and perpetration rates are misleading. Authors drawing on such surveys would, in turn, criticise studies carried out in support and health-

care services as biased because of their highly selective samples, and interpret the findings of gender-symmetry as proving the superiority of large-scale surveys. Second, following the first debate is the contrasting of two types of surveys: from the FV perspective, those utilising Straus' (1979) Conflict tactics scale (CTS), and VAW surveys by feminist scholars. Both of these camps around different choices of data collection will be discussed here. The third debate listed by Bonnet (2015) sparks from the findings of gender-differences in probability to report violence. Studies from several countries have found men being less likely to report their domestic violence victimisation to the police (e.g. Brown 2004; Danielsson & Salmi 2013; MacQueen & Norris 2016), which can be connected to gender differences in what is perceived as domestic violence, i.e. sensitivity to violence (Kivivuori 2014) as well as to prevailing gender norms and greater social stigma related to men as victims of domestic violence (Brown 2004; Douglas & Hines 2011; Arnocky & Vaillancourt 2014).

Owing to the FV perspective, CTS and its later modifications (CTS2) (e.g. Straus 1979; Straus et al., 1996) measure conflict and tactics to resolve it. As mentioned above, this approach has resulted in relatively symmetrical rates of victimisation between women and men, contributing to the criticism that such measures fail to depict the reality of power-relations and particularly women's experiences as victims of domestic violence (Bonnet 2015). Johnson, who has developed typologies to distinguish patriarchal terrorism and common couple violence, later revised into intimate terrorism and situational couple violence (Johnson 1995, Johnson & Ferraro 2000), sees the ostensible gender-symmetry produced by CTS-surveys as misleading particularly because of the failure to capture motivation. Motivation is in the very essence of Johnson's distinction between the sub-types of domestic violence; whereas for Straus, self-report surveys essentially measure actions and not motivations (Bonnet 2015). According to Walby and others (2017), the main deficiency with CTS and its modified versions is that asking about actions alone is not sufficient to define violence or crime, because seemingly similar violent acts may have different consequences for women and men, physically and mentally.

General crime victim surveys aiming for nationally representative samples introduce gender as a background or control variable, and not as a property of the definition of domestic violence (e.g. Walby & Towers 2017). Built on national legislation, with focus on acts defined as criminal, these surveys are understandably somewhat restricted to national contexts, because legislation related to domestic violence varies considerably. Survey and statistical research is preferred particularly among mainstream criminology, which according to its critics, due to counting victims and violent acts, is insensitive to the particular characteristics of domestic violence, context and consequences, and fails to recognise and measure the continuum of violence and controlling behaviour by men against their female partners as well as its underlying motivation (Bonnet 2015; Walby et al. 2014). Motivation, on the other hand, can be studied with qualitative methods without the possibility of generalising from those findings (Bonnet 2015).

Even though an emphasis on qualitative methods has been recognised among studies examining VAW specifically, the importance of also producing statistical knowledge from this perspective has been recognised (e.g. United Nations 2014). Thus far, perhaps one of the most ambitious attempts to internationally examine domestic violence among other forms of VAW is the European Union Agency for Fundamental Rights survey, published in 2014 (FRA 2014a). Around 42,000 women across 28 EU Member States participated in the survey, and reported on their experiences of physical, sexual and psychological violence, including incidents of IPV. Only women as victims were surveyed, with focus on violence perpetrated by partners in addition to violence by strangers and in work contexts. The survey also featured a brief section asking to recall violent experiences in childhood, including those perpetrated by respondents' parents.

Walby and Towers (2017) focus on another survey in addition to the FRA Survey (FRA 2014a; 2014b), the Crime survey for England and Wales, but argue that both these representing contrasting theoretical perspectives on domestic violence fail to produce adequate data. Walby and Towers' (2017) criteria for mainstreaming gender in surveys on IPV includes their suggestions to operationalise 'violence' and 'gender', albeit they do not problematise the concept of 'domestic'. Their checklist developed for the purpose of mainstreaming gender into domestic violence research and utilised in our methods section also helps to assess, besides surveys, police data to examine national domestic violence data sources.

Definitions of domestic, violence and gender

The Council of Europe (2011) Convention on preventing and combating violence against women and domestic violence, so-called Istanbul Convention, fundamentally takes part in defining 'domestic', 'violence' and 'gender'. The first and foremost purpose stated in the Convention is to protect women against all forms of violence, and prevent, prosecute and eliminate violence against women and domestic violence. The definition of domestic violence in the Convention includes "all acts of physical, sexual, psychological or economic violence that occur within the family or domestic unit or between former or current spouses or partners, whether or not the perpetrator shares or has shared the same residence with the victim" (Council of Europe 2011). The Convention defines gender as "the socially constructed roles, behaviours, activities and attributes that a given society considers appropriate for women and men".

The European Institute for Gender Equality (EIGE) has assessed the role of data in understanding IPV in the EU (EIGE 2019). The assessment is outlined for gender-based violence (GBV) against women, with special focus on violence perpetrated by men against women within intimate partnerships. The definition of IPV by EIGE is largely congruent with domestic violence definition stated in the Istanbul Convention: "Any act of physical, sexual, psychological or economic violence that occurs between current or former spouses or

partners, whether or not the perpetrator shares or has shared the same residence as the victim” (EIGE 2019, p. 12; 2017). It should be noted that the definition by EIGE excludes all other family and close relationships and equals domestic violence with IPV.

In the purpose of standardising violence surveys with other data sources and also across countries, Walby et al. (2017) recommend harmonising the definition of violence in surveys in accordance with the definitions of violence in law. Since jurisdictions vary considerably, it is unclear as to what extent this approach will help solve problems of comparability internationally. In terms of ‘gender’, Walby and Towers (2017) identify three approaches to collecting survey data. First, ignoring gender as unimportant to ostensible gender-neutrality. This approach is attributed to general crime surveys and creation of official crime statistics. Second, the women-only approach collects data only on women’s experiences of violence with the aim of highlighting the gendered nature of violence. And finally, the gender mainstreaming approach, which strives to make gender and experiences of both women and men visible in all surveys and official statistics. Rather than giving their definition of gender, Walby and Towers (2017) list five ‘gender dimensions’, four of which are described through biological sex: sex of the victim, sex of the perpetrator, relationship between perpetrator and victim (whether they are intimate partners, other family members, acquaintances or strangers), and a possible sexual aspect. Whether a gender-motivation can be identified is suggested as the fifth dimension of advanced gender mainstreaming.

Data and analytical approach

The data examined in this paper comes from the EU-funded Horizon 2020 project entitled Improving Frontline Responses to High Impact Domestic Violence (IMPRODOVA). One of the first tasks in the initial stages of the project was to map the availability and characteristics of domestic violence data provisions in eight partner countries of IMPRODOVA: Austria, Finland, France, Germany, Hungary, Portugal, Scotland and Slovenia. The data utilised in this article was initially collected for a deliverable report of IMPRODOVA (Fagerlund & Houtsonen, 2019) and country reports provided by the project partners. We focus on two main data sources on domestic violence: police data and survey data, and develop the analysis initially carried out for the purposes of the project reporting.

The policing process of domestic violence can produce at least three types of data: calls from the emergency response centres, defined as domestic violence tasks for the police, crime reports, and records of pre-trial investigations. Based on preliminary reports of IMPRODOVA partner countries, we decided to focus on crime report data, because it was deemed as most promising in terms of availability across the partner countries. Therefore, it could enable us to compare the data provisions internationally and, at best, the results attained with such data. Guided by the anticipation of preliminary findings and utilising criteria presented

by Walby, Towers and Francis (2014) and Walby and Towers (2017) we developed a template to examine data provisions on domestic violence in IMPRODOVA partner countries. The templates were similar for survey and police data, although the survey section also includes features distinctive to survey research, such as sampling method, representativeness, recurrence and regularity of data collection, and the instance responsible for collecting the data.

The availability of other quality data, which may provide means to assess nature, prevalence and response in relation to domestic violence, were also examined. A particular interest in other data sources concerns marginalised groups that may not be sufficiently represented in national victimisation surveys and could also have more barriers to seek police assistance, such as immigrant women (e.g. Wolf et al. 2003) and LGBT+ population, that may simultaneously be at a heightened risk to experience domestic violence (e.g. Edwards, Sylaska & Neal 2015; Messinger 2011).

For the purposes of this article, guided by studies reviewing theoretical perspectives to study domestic violence and adapting the criteria suggested by Walby, Towers and Francis (2014), we searched for the key indicators in data provisions to compare the relationships and acts or behaviour included in the definition of domestic violence, and indications of acknowledging gender (see also Walby & Towers, 2017). These premises for analytical strategy are summarised in Table 1.

Table 1. Summary of theoretical perspectives to examine domestic violence and implications for collecting data.

	Feminist perspectives / women only -approach	Family violence perspectives, mainstream criminology
Relationship ('domestic')	Intimate partnerships	Family relations, other close and dependant relationships
Acts/behaviour ('violence')	Continuum of violence; broad spectrum of violence including physical, sexual, psychological or economic violence and coercive control	Criminal law definitions, counting crimes and victims, emphasis on physical violence
Gender	Gender-based violence against (heterosexual) women	Gender as a background variable
Implications to collecting data	Qualitative methods, surveying women as victims of violence	Representative population surveys, crime data

Results

The main findings of the data collection sorted by country are presented in Table 2. The results of the analysis for this paper are elaborated in the following in terms of what was found incorporating in 'domestic', 'violence' and 'gender' with examples from the data.

Table 2. Overview of data provisions in IMPRODOVA partner countries

A) Victimisation survey data provisions								
Measures	IMPRODOVA Partner Countries							
	AU	FI	FR	GER	HU ⁴	PT ⁵	SCT	SLO
1. Definition of violence covered in the data source								
Broad definition (not only crimes)	y	n	n	y	y	y	y	y
Varied types (econ., physical, mental, sexual...)	y	y	y	y	y	y	y	y
2. Definition of relationship between the perpetrator and the victim								
Differentiate (domestic/relatives/family, acquaintance, strangers)	y	y	y	y	y	y	y	n
Inclusive (includes other than formal domestic relationships)	y	y	y	n	y	y	y	n
3. Indications of gender								
Victim	y	y	y	y	y	y	y	y
Perpetrator	y	y	y	y	y	y	y	y
4. Indicators for repeated and serial offences								
5. Indicators for seriousness of harm								
6. Indicator for reporting to police								
7. General information about data source								
Representativeness (National or Regional)	y	y	y	n ³	n	n	y	n ⁶
Repetitiveness (not necessarily regularly)	n	y	y	n	n	n	y	n
Availability	n	y ¹	NA	n	y	y	y	y

¹ Since 2015, there has been an option for data availability through the Finnish Social Data Archive.

² No indicators of physical harm, but psychological trauma.

³ Only partly representative and no response rate was documented.

⁴ FRA 2014 only includes women as respondents and victims, and no nationally representative survey was identified.

⁵ Portugal did not report any national victimisation survey; therefore, the summary here is based on FRA 2014.

⁶ Only included women as respondents; response rate was 25 %.

B) Police data on domestic violence								
Measures	IMPRODOVA Partner Countries							
	AU	FI	FR	GER	HU	PT	SCT	SLO
1. Definition of violence covered in the data source								
Broad definition (scope not only crimes)	n	n	n ³	n	n	n	y	n
Varied types (econ, physical, mental, sexual...)	y ¹	y	y	y	y	y	y	y
2. Definition of relationship between the perpetrator and the victim	y	y ²	y	y	y	y	y	y
3. Indications of gender								
Victim	y	y	y	y	y	y	y	y
Perpetrator	y	y	y	y ⁴	y	y	y	y
4. Indicators for repeated and serial offences	n	n	y	n	y	y	y	n
5. Indicators for seriousness of harm	y	y	y	y	y	y	y	n
6. Indicators of police actions/proceedings	NA	y	y	n	y	y	y	n
7. Availability (raw data with research permission)	y	y	y	n	n	y	y	y

¹ Including offences against physical integrity, offences against personal integrity, and offences against sexual integrity.

² Certain crimes can be categorised as family violence, although this categorisation is optional.

³ Other than crimes can be reported as informal claims, but the police crime report data only include reported crimes

⁴ Not consistent.

What is domestic?

In general, police data on crime reports in IMPRODOVA partner countries contain information about the relationship between the victim and the suspect. This information can be utilised to determine whether certain contexts would qualify as 'domestic'. This depends, however, on the way information systems are structured and how explicitly the relationships between different individuals are described in the reports. For research purposes the properties of relationships that are observed within the category of 'domestic' might have to be individually collected from each crime report. In some countries, domestic violence or FV can be flagged or categorised directly and explicitly in the crime report, but this categorisation may also be optional and not utilised consistently, as is the case in Finland. In Portugal, the police maintain a domestic violence database that is separate from other crimes and which allows an easier identification of the victim, suspect and the context, helping to more accurately define what is included in the 'domestic' sphere.

Offences recorded by the police and entered into a police information system could be used to link the victim and the suspect with other register data. For instance, in Finland the official statistical authority, Statistics Finland, combines offences recorded by the po-

lice with the information about domicile and family status to establish whether the victim and suspect are or have been cohabiting together, and concerning adults, whether they have children together (Statistics Finland 2020). While the FV categorisation of crime reports made by the police is optional, the statistical authority can produce and analyse refined data on police detected domestic violence for which the recognition of a 'domestic' setting is not dependent on police entries.

Crime victim surveys can quite flexibly comply with the identification of relationships between victim and perpetrator as suggested by Walby and Towers (2017); looking at IM-PRODOVA country data, the distinctions are commonly available. Most partners reported some type of nationwide crime victim surveys in their country that allows differentiating between at least family relationships and relationships between relatives from acquaintances and strangers. However, in Slovenia, the crime victim survey on domestic violence only covers the private sphere and partnerships therein, and 'domestic' is defined, as well as in Germany, in terms of formal relationships such as marriage. Furthermore, in Hungary and Portugal, VAW survey by the European Union Agency for Fundamental Rights (FRA, 2014a, 2014b) seems to be the only nationwide survey covering the issue of domestic violence. Even though the survey examines VAW in a broad sense, it is limited with regard to the definition of 'domestic'. The questionnaire focuses on IPV and other forms and contexts of violence specifically relevant to women, with a few inquiries to prompt memories from childhood victimisation, including those perpetrated by parents. With the exceptions of FRA survey's few questions to recall women's childhood experiences and the Finnish Child Victim Survey (Fagerlund et al. 2014), no child victim surveys were appraised of. Non-recurring small-sample studies on violence against children and sexual abuse have been conducted in Hungary.

What is violence?

Intrinsically, in almost all partner countries, the data originating from the police documenting domestic violence incidents is limited to acts defined as criminal by law, reported to and recorded by the police. An exception is Scotland, where police also collect data on domestic abuse incidents that are not reported as crimes. Also, in France incidents other than crimes can be registered as informal claims. In all countries, a variety of forms of violence is captured through corresponding titles of crimes defined in criminal code. Portugal and Scotland have defined domestic violence or domestic abuse as a distinctive crime and Slovenia has adopted a law on preventing domestic violence. In general, domestic violence is investigated and prosecuted under a range of crime titles.

Even though crime reports indicate titles of crimes suspected in each case, they also include a description of events, which may cast more details about violent actions than a mere title of crime can capture. Crimes reported to the police can be classified into various categories, such as physical, psychological, sexual, and economic. If the descrip-

tion of events is available, it may be possible to get information about modus operandi and mediums being used. However, some project partners expressed doubts about the quality of police data stemming from filing incorrect information about the nature of the crime. Police data is not primarily gathered for research purposes, which results in limitations for its availability, use and interpretation. Internationally, there is also variation in criminal law, police proceedings, locality of data systems and access granted for research.

Crime data can also shed light on the repeated or serial offending and the seriousness of harm of violence. Indications of repeated and serial offending are part of crime data in France, Hungary, Portugal and Scotland, while not being as straightforwardly derivable from official records in Austria, Finland, Germany and Slovenia. In the latter four countries, serial and repeated offending could be gathered and analysed from police information systems, but it cannot be retrieved directly. In addition, seriousness of harm could be assessed in all of the countries' crime data except in Slovenia. Seriousness could be assessed using the crime title or the maximum sentence, but that does not necessarily disclose information about the seriousness of harm. On the other hand, police officers' written description of the incident may contain information about the harm caused by the suspect. Pre-trial investigation files typically contain the most detailed documentation of events and harm. Most countries, with the exceptions of Austria, Germany and Slovenia, reported that descriptions of police proceedings were part of the crime report data. The availability of data for research purposes is encouraging, since crime report data was reported to be available via research permission in all countries except Germany.

Official crime data has been assessed to most accurately illustrate the most serious forms of violence, which are less open to interpretation of whether 'violence' has occurred (e.g. Kivivuori 2014). However, as the grey area of violence definition grows in the milder end of the spectrum, so does the dark figure of violence that is not reported to the authorities. Therefore, to obtain a more reliable view of the prevalence of domestic violence, we need to look at surveys. Besides some established and widespread measures, such as the CTS, crime victim surveys across Europe have employed a variety of definitions of domestic violence. In addition, several sampling frames and methods to select survey participants and collect data have been used.

Within our project data, victimisation surveys that have broad definitions of violence, instead of focusing only on violence defined as crime in criminal law, were found in all countries except Finland and France. However, even in these two countries, secondary surveys and other types of data were found, which include a definition broader than that of the otherwise most distinguished crime victim survey. Indications of repeated and serial offences were available in all eight partner countries, even though most of them do not seem to meet the criteria of including all violent events as suggested by Walby and Towers (2017). Reporting domestic violence to the police was examined in all of the

main surveys, with the exception of Austria. Survey questions involving both action and harm could be more consistent with criminal law definitions and recognise that the consequences of similar acts are not always similar for different people, for example women and men (Walby & Towers, 2017). On the other hand, despite EU-level efforts for alignment in some areas of judicial decision-making, national legislation concerning domestic violence issues has considerable variation. Therefore, standardised questionnaires less directly tied into legislation, such as those based on the CTS, may be more easily translated into different societies and compared across countries.

How does domestic violence relate to gender?

As discussed in the review of theoretical perspectives to study domestic violence, theoretical stances differ in the terms of how they treat gender, and this is followed by methodological implications. Concerning data collection, it is inherently connected to what is being observed and collected. If domestic violence is defined predominantly as men's violence against women, incidents and experiences of victimised women are examined. For crime data, this would be accumulated in countries that have introduced domestic violence as a specific crime if the definition only includes women as victims. In research traditions leaning towards the FV perspective, gender is a control variable, and crime is understood in connection to sociological and criminological theories focusing on social disadvantage, such as poverty, unemployment and social disorganisation. From the feminist perspective, gender and gender-relations are a fundamental conceptual element in the theoretical system. The differences in theoretical approaches, particularly concerning survey methodology, have also been categorised as gender-neutral and gender-sensitive or women-only approaches. Data generated by applying these two different approaches cannot be compared in any simple manner. Gender-neutral studies have commonly included both women and men as respondents. In turn, the women-only studies, restricted to enquire about women's victimisation, cannot provide data on gender distribution of violence (Walby & Towers, 2017).

In most of the partner countries, at least some victimisation survey addressing the issue of domestic violence, and including both female and male respondents, was found; whereas, the inclusion of other genders and the existence of victimisation surveys for children across partner countries remains unclear. For two of the countries, Hungary and Portugal, the FRA survey on VAW (2014a) was reported as the only nationwide survey covering the issue of domestic violence, which is probably the most comprehensive international survey data collected on VAW, though it focuses on IPV and excludes other respondents except those identified as women. This is consistent with the feminist approach of examining domestic violence only as IPV and examining men's violence against their female partners as a separate phenomenon from other violence in close relationships.

Police data is commonly collected as incident-based or crime-based, not using gender as the determining factor. Recording GBV would, in principle, involve a gender-based crime title and a congruent recording system, which were not generally reported from the partner countries. However, gender of the victim and perpetrator are distinguished in all countries' police data; only in Germany was the gender of a perpetrator reported as inconsistently available. It is not possible to assess the gender-effects directly in police recordings, that is, whether the gender of the victim and perpetrator are considered by the police when dealing with domestic violence. However, there are research findings from Finland indicating that the FV task categorisation of the police is more likely to result in police actions, such as arrest and recording of crime in cases of a male perpetrator and female victim (Fagerlund, 2021; Fagerlund, Kääriäinen & Ellonen, 2018). This would seem to suggest emphasis of the VAW perspective in policing domestic violence even in a country with seemingly gender-neutral parlance in the police data systems and legislation.

Survey repetition and representativeness

With considerable variation in the assessed quality, all IMPRODOVA partner countries reported at least some type of victimisation survey that addresses domestic violence. Most of the deficiencies in cross-national survey data were found in representativeness and repetitiveness. The primary survey data was reported as comprising nationally representative samples in Austria, Finland, France and Scotland, whereas considerable limitations were found in Germany, Hungary, Portugal and Slovenia. Only in Finland, France and Scotland were the nationally representative surveys also conducted repeatedly. Linked to the federation structure in Germany, the survey efforts have mostly been regional, but they are also limited to certain groups of victims. Availability of survey data or results was deemed sufficient in Hungary, Portugal, Scotland and Slovenia, whereas limitations to access and utilise data were recognised in Austria, Finland, France and Germany.

As mentioned above, in Hungary and Portugal, the FRA survey on VAW (2014) was reported as the only nationwide survey covering the issue of domestic violence. The limitations of the FRA survey have been discussed in more detail in the technical report of the survey (FRA 2014b), by Walby and Towers (2017) and in the IMPRODOVA data provision report (Fagerlund & Houtsonen, 2019). In addition to the differences in sampling, response rates, and in the methods of data collection, the main limitation of the FRA survey is that it only surveyed women, therefore excluding at least half of the population and obstructing the examination of the gendered nature of violence. Even to draw conclusions from the data concerning women only, the national sample sizes are small for many forms of violence, particularly for comparisons at EU level (Walby & Towers, 2017).

Related to the representativeness and sampling is the question of vulnerable groups, which are not usually acknowledged in national crime victim surveys. The examination of other data sources resulted in a finding that quality datasets covering or focusing on

marginalised and particularly vulnerable groups, such as the elderly, sexual and gender minorities and immigrants, were not commonly available in IMPRODOVA partner countries. Germany and Hungary represent positive exceptions to this rule. This may suggest that, despite issues related to data sources covering domestic violence in the general population, research efforts in these countries have better succeeded in taking into account those in particularly vulnerable positions.

Discussion

The Istanbul Convention takes note of collecting “disaggregated relevant statistical data at regular intervals on cases of all forms of violence covered by the scope of this Convention” (Council of Europe, 2011, p. 5). In this article, we focused on police crime data and victimisation survey data because they are complementary and have a central place in understanding the prevalence of domestic violence as well as in assessing the effectiveness of measures and policies to intervene and prevent domestic violence. We presented the divergent definitions of the three concepts – domestic, violence, and gender – linked to the conceptual approaches to and theoretical perspectives on domestic violence.

The mapping of data sources indicates considerable variation in the quality and availability of police data concerning domestic violence, and concerning measures and the mere existence of victimisation surveys. Overall, across IMPRODOVA partner countries, victimisation surveys are heterogeneous in their sampling and data collection methodology, representability, definitions of domestic violence, inclusion of questions about reporting violence to police and other authorities, consequences (seriousness and harm) of violence and in their relation to national legislation. Police data are more systematically connected to criminal legislations, even though a few countries stand out as the police also collect other data than the crime report data concerning domestic violence incidents. There are also deficiencies in the quality of police data, because, for instance, regional police forces have different data systems and guidelines, and systematic intervening accompanied by making domestic violence visible in recording data has not been rooted in working culture and practices. It can be concluded that police data may be more illustrative of police actions, such as police recording behaviour and use of data systems, and of the allocation of resources for policing domestic violence, than the actual phenomenon of domestic violence itself.

To be able to share good practices and to create European-level recommendations for measuring domestic violence, some level of comparativeness is necessary, starting from defining ‘domestic’, ‘violence’ and ‘gender’. Such contributions could also potentially be informative for European-level policy formation and guidelines, which are currently either internationally incompatible because of diverse legislative contexts in which they should

apply to, or take VAW as a starting point in defining domestic violence and therefore rule out a considerable amount of victims of violence who do not identify as cisgender, heterosexual women. The women-only principle in data collection does not enable examination of prevalence and characteristics of violence *by* gender and in relation to other genders. Furthermore, research knowledge on violence experienced in childhood has to rely on adult women's retrospective reporting when nationally representative child victim surveys do not commonly exist.

We found that data provisions for IMPRODOVA partner countries do not enable a direct or easy comparison of the results of national victimisation surveys, nor a sophisticated secondary analysis including such comparisons. Based on our analysis, the requirements presented in the Istanbul Convention concerning nationally representative data, gathered at regular intervals and including all forms of violence covered by the convention, are currently insufficiently met across IMPRODOVA partner countries. In many European countries, the form of official statistics and their information sources, as well as the national victimisation surveys covering domestic violence, have not been firmly established. Where a trajectory of comprehensive data sources exists, their cross-national comparison currently seems to be a mission impossible. Concerning the most extreme form of domestic violence, homicide within intimate partnerships and other family relations, cooperation already exists in the form of the European Homicide Monitor (e.g. Corradi & Stöckl, 2014), and research efforts in IMPRODOVA and beyond ought to examine the possibilities of their secondary analysis.

In addition to the academic debate and its consequences to obtaining reliable domestic violence data, it is noteworthy to consider the interlinkages between defining the concept of domestic violence and the frontline response to it. While measures across the globe undisputedly show that most victims of domestic violence coming to the attention of the police are women, it seems ethically unsustainable to dismiss the masses of child victims, victims identifying themselves as men, whether heterosexual or not, for example. International human rights organisations, as well as government policies in their definitions and action plans aiming to promote, not only women's, but also minority rights, should recognise the downsides in presenting domestic violence first and foremost as violence against (heterosexual, CIS-gender) women, targeted at them because of their gender. Findings from different countries have indicated that the police are better prepared to interact with children in other contexts than domestic violence (Richardson-Foster et al. 2012); most likely to criminalise male children for attacking their mothers than fathers, or female children victimising either of their parents, regardless of injury (Armstrong, Muftic & Bouffard, 2018); and less likely to intervene in domestic violence when the victim is male or the incident involves a homosexual couple (Lee, Zhang & Hoover, 2013). Furthermore, in Finland, recording an offence, arresting and informing about support services as police responses have been found least likely to occur when

the victim is male and the task undertaken by two male police officers (Fagerlund 2021). This is just to name one frontline responder and a few consequences, while it seems plausible to expect the naming and defining violence and credible victims have an effect among social and healthcare professionals too, if the normative control of their work and prevailing discourses in the society continue to foster a women-only approach to domestic violence victimisation.

As a limitation concerning our analysis, we acknowledge the possibility that relevant data may have been collected and come to the attention of the project partners only after the completion of their country reports in 2018. However, quick changes in police data systems are not likely, and establishing nationwide, representative and repeated surveys likewise takes time. Despite the considerable deficiencies in data sources across IMPRODOVA partner countries, the examination of data sources as such is valuable, and the summary of the findings may help to move forward in developing survey methodology and police data systems in detecting domestic violence. By mapping the data provisions concerning essential criteria, we are able to find good practices, lessons learned and national experts. Bringing all this information together can help in recognising the pitfalls of defining domestic violence, its implications to policy, data collection and practice, and at best to move towards European standards for better quality and comparativeness of data sources on domestic violence.

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AN INTER-ORGANISATIONAL RESPONSE TO DOMESTIC VIOLENCE - THE PIVOTAL ROLE OF POLICE IN PORTO, PORTUGAL

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Abstract

When studying the current Portuguese domestic violence landscape, some police professionals highlighted the case of Porto as a different approach to domestic violence occurrences. We discovered an organisational experience involving a broad partnership and an evident interest in the media. Corresponding to the IMPRODOVA² Conceptual framework, the Porto experience merges both an organisational arrangement from the Public Security Police, which involves intra-organisational cooperation and inter-organisational cooperation between the police, several NGOs, health services, and public prosecutor services. Altogether, they aim to clarify the problem at hand, goals and stakes, resources and actors involved. In this article, the case study of the Porto experience is presented and discussed within broad critical thinking about social changes in contemporary societies.

Keywords: domestic violence; IMPRODOVA project; police work; social change.

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A FRESH APPROACH TO LEGAL AND EMPIRICAL ISSUES ABOUT DOMESTIC VIOLENCE IN PORTUGAL

One of the Portuguese constitutional principles is the Principle of the Equality of all citizens (Article 13 of the Portuguese Constitution³). Also, the Portuguese Constitution (firstly approved in 1976) protects the right to life (Article 24) and physical integrity (Article 25). However, during the '90s, domestic violence (DV) rose from the shadows and started to be tackled as a significant societal problem. The coming decades would be the period that revealed the very nature of domestic violence as a wicked problem, showing the complexity of the domestic violence phenomenon.

Since the middle '90s, Portugal has a political orientation regarding the attention devoted to domestic violence victims. National political guidelines were translated, during the decade of the '90s and the early '2000s into the implementation of proximity policing programmes, led mainly by the Central Government, with the creation of teams with some degree of specialisation in the security forces (PSP⁴ GNR⁵ and a considerable mobilisation of resources.

Domestic violence is a public crime since 2000 (Law no. 7/2000, 27 May, related to adjustments to the Penal Code). It means that knowing that a domestic violence crime is being committed is sufficient for the authorities to intervene, open a criminal procedure, and take protective measures.

In 2007, the Portuguese Penal Code (PPC; Law no. 59/2007, 4 September) finally made the crime of domestic violence autonomous from other felonies against women, children, elders or other people living with the aggressor⁶

Law no. 26/2010, 30 August, changed the scope of domestic violence crime, assuming its classification within the violent criminality. The Public Prosecutor is now obliged to inform the victims about compensations and immediate financial support and the supporting net that the crime victims can apply for assistance.

The changes mentioned above revealed that the legislative power is the driving force to face the complexity of the domestic violence phenomenon. Within society, changes seem to occur slowly with relevant signals of resistance to eliminate such violent behaviour, mostly in intimate partner relationships.

3 <https://www.parlamento.pt/Legislacao/Paginas/ConstituicaoRepublicaPortuguesa.aspx>

4 Polícia de Segurança Pública (Portuguese Public Security Police),

5 Guarda Nacional Republicana (Portuguese National Republican Guard)

6 <https://dre.pt/pesquisa/-/search/640142/details/maximized>

Nevertheless, this gave domestic violence the attention needed to promote and implement the necessary policies, resulting in increased complaints. Data from the Domestic Violence's National Monitoring Report carried out by the Ministry of the Interior show:

- In 2018 there were in Portugal a total of 1088 staff in the Security Forces with specific responsibilities within the scope of domestic violence;
- There were more than 120 specialised teams and 800 officers assigned to the investigation of domestic violence all over the country;
- About 63% of the police stations for security forces with territorial competence had a room for victim's assistance. Some 38 more rooms can be found in other subunits/units, totalling 457 rooms for victims of domestic violence;
- In 2018, the Security Forces carried out 26107 risk assessments and 19723 reassessments (Ministry of Interior, 2019).

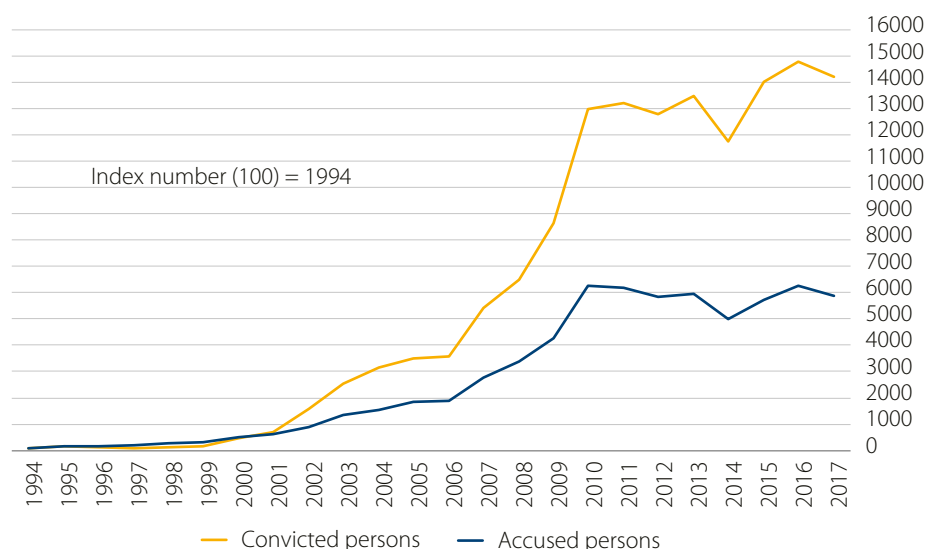
These numbers are notable for a country with a structural lack of resources. The change would not have been possible without the reformist political impulse of the mid-90s. This impulse was partly triggered by domestic violence crimes resulting in deaths, the penal reforms between 2000 and 2013, and the civic shock related to cases of domestic violence experienced during the past fifteen years.

There are still many unexplored areas concerning the scope of domestic violence in Portugal. For instance, economic costs of domestic violence are barely known since a large part of costs relates to the services provided by the State to victims of domestic violence, which are currently not accounted for. In addition to domestic violence's immediate physical and psychological consequences, the broader economic ones must also be considered. Domestic violence binds economic development (Day, McKenna & Bowlus, 2005). However, these costs of domestic violence are estimated to be massive in Portugal (Moura, Torres & Morgado, 2016), and these authors acknowledge that they have been increasing. First, domestic violence induces costs to law enforcement and judicial agencies. Domestic violence also increases the demand for various social, health and welfare services. Direct tangible costs, such as hospitalisation costs, and indirect tangible costs, such as absence from work and loss of potential, are measured by the fall in the victim's labour productivity. There are also direct intangible costs, such as sick leave for coping with the loss of a loved one, and indirect intangible costs, such as adverse psychological effects on children who witness violence (Day *et al.*, 2005). All these factors contribute inevitably to massive public and private costs that reinforce the idea of domestic violence as a wicked problem.

Two indicators point to the social change concerning domestic violence, even in such a conservative organisation as the justice system. On the one hand, the number of people convicted of domestic violence crime in Portugal has increased 140-fold since 1994,

and the growth in convictions was linear. On the other hand, the evolution of the number of accused was also accentuated, although less expressively (see Figure 1). The growth differential between these two trends reveals the increased capacity of the prosecution system (accusation) in recent decades and, even more, the courts' tendencies to convict. The effect of convictions and the ability to control the conduct of offenders explain the difference between the two trends.

Figure 1. Convicted - cases ended - and accused in domestic violence criminal cases. Index number (1994 = 100).



In the last six years, the total number of reported crimes decreased almost four times as much as the crimes related to domestic violence. However, simultaneously and for the same period, the number of accused and convicted persons increased, meaning that the system became much more effective. The ratio between domestic violence crimes and total crimes increased slightly, from 7.3% in 2013 to 7.9% in 2018.

Additionally, in the very same period, the city of Porto registered a very different development. The prevalence rate and the figures of domestic violence in the last few years suggest that Porto is part of a cluster illustrated by some statistical stability (low coefficient of variation) regarding the number of known victims. The years before denoted a steady growth of accounted domestic violence occurrence in Porto (and also in the country). One reason was that domestic violence-related crimes became subject to public prosecution, with no need for the victim to formalise his/her complaint.

Despite all these figures, the public response is still a matter of intense debate. This debate is mainly because some victims are not adequately protected (lack of resources, victims without legal status, short, medium- and long-term support). Rates of convictions also seem to be short. Furthermore, there is a malfunction in terms of partnerships resulting in the increased number of lethal domestic violence victims.

Basing on the above-described Portuguese domestic violence landscape, our research questions are: What factors are blocking an optimised domestic violence response? What are the reasons for having different results in Porto? Is it possible to envisage an inter-organisational response to domestic violence? We conducted a case study in Porto, which will be presented in the following, in order to answer these questions.

METHOD AND PROCEDURES

The Porto experience was selected because some police professionals highlighted it as a different and promising approach to domestic violence occurrences. We discovered a pilot experiment involving a broad partnership and with an evident interest by the media. We investigated the case by interviewing domestic violence-relevant stakeholders and by analysing data referring to the Porto case.

Study participants

Interviewees come from diverse domains of intervention: police (4), health (3), social work/NGOs (2), and justice (1). They were selected by convenience. We applied an *in situ* research strategy that had the advantage of meeting the professionals at their workplace. However, the specific panorama in Portugal is facing a currently high number of deaths resulting from domestic violence. This uncomfortable situation seems to have inhibited some social actors from participating in this study, thus diminishing the number of interviewees and the sample representativeness.

Instruments

The interviews were conducted by using the IMPRODOVA semi-structured interview template. The template tackles issues like information about the interviewee organisation and professional career; understanding and conceptualising domestic violence; the specific work with domestic violence; goals and priorities while working with domestic violence; cooperation, learning and training; guidelines and assessment tools for domestic violence; and evaluation of specific practices, initiatives or programmes.

The authors conducted a thematic content analysis (e.g. Ghiglione & Matalon, 1993).

Further materials

In addition to the interviews, we included statistical material in our study to gain a comprehensive view of our case by examining the following material:

- Data from Porto Metropolitan Command (COMETPOR) of Public Security Police (PSP);
- General data from the evolution of domestic violence in the city (long term time series);
- Characterisation data;
- Data from in-depth interviews (10);
- Domestic violence Monitoring Reports data from General Secretariat of the Ministry of Interior;
- Domestic violence data from the Directorate General of Policies of Justice database.

Procedure

Formal authorisations were asked for by providing all the information about the research project's (IMPRODOVA⁷) goals and methods, an invitation to participate, the interview guide, an informed consent form, and the IMPRODOVA project data protection/ethics notification, including anonymisation procedures. All participants were also provided with these elements, and they signed an informed consent form.

The interviews were conducted during the interviewees' working time. The average duration of the interviews was 66 minutes, and they were all tape-recorded and transcribed *verbatim*.

CASE PRESENTATION

As mentioned above, Porto is perhaps part of a cluster illustrated by some statistical stability in terms of the number of known victims. However, Porto's results are not random, and they have a history.

In 2013, the programme "Um Passo Mais" ("One step further") was initially promoted by the Porto Public Prosecutor's Office. The programme sought to establish procedures that would speed up the public response to domestic violence in Porto. The goal was to identify better high-risk situations that require immediate intervention by the police, social services and judiciary.

To the police, the response to this need was the conception of a desk and operational squad, also in 2013. The desk, the PSP-Porto Victims' Support and Information Cabinet

⁷ See www.improdova.eu

(Gabinete de Atendimento e Informação a Vítimas da PSP-Porto; GAIV), manages all the domestic violence related calls in the city. GAIV has become the domestic violence pivotal front-line responder in the city. In the backstage, PSP creates the Crime Investigation Special Teams for Domestic Violence (Equipas Especiais de Violência Doméstica; EEIV), which specialised in the criminal investigation of these crimes. This new arrangement allowed the PSP to obtain a high level of public awareness regarding domestic violence. This reputation has been leveraged by last year's visit of the President of Portugal, which had significant media coverage.

As we can see in Table 1, the total number of reported crimes increased, on average, by 0.3% per year, but the number of domestic violence crimes decreased, on average, by 4.3% per year, and the ratio of domestic violence crimes to total crimes also decreased, from 7.3% to 5.3%: domestic violence crimes decreased much more than in the country. Let us say, for now, that this 'picture' overlaps the period of activity of GAIV.

Table 1. Criminality Figures in Porto

	2013	2014	2015	2016	2017	2018	Average annual growth rate (%)
Total reported crimes	15638	15212	16056	14461	15406	15948	0,3%
domestic violence crimes	1138	1091	996	971	939	844	-4,3%
domestic violence crimes/ total crimes	7,3%	7,2%	6,2%	6,7%	6,1%	5,3%	-4,5%

Consider that the number of domestic violence crimes has been decreasing in Porto since 2011 (see Figure 2). This period was preceded by a strong, irregular growth, which dates back to the beginning of the 21st century. Therefore, the downward trend began before the procedural changes resulting from the GAIV procedures, though it may have helped consolidate that trend.

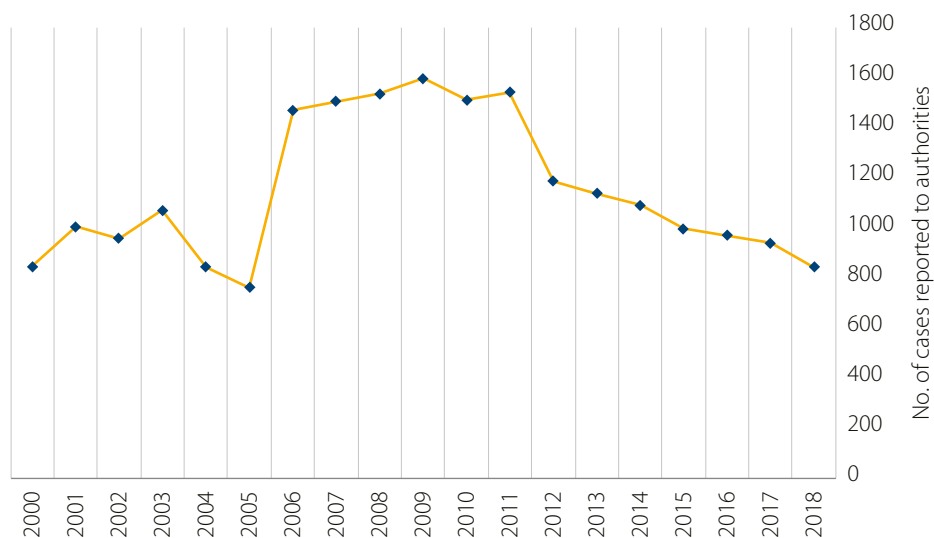
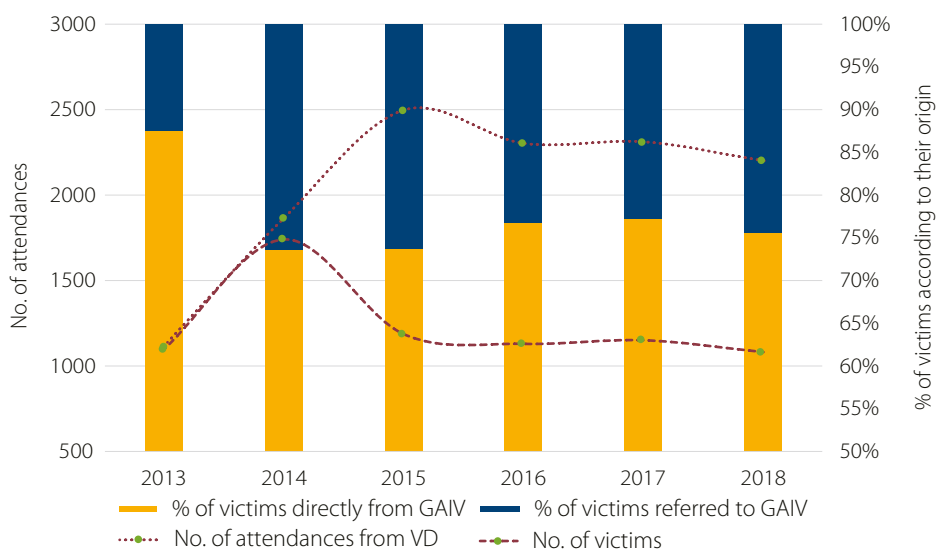
Figure 2. City of Porto domestic violence crimes (long term observation).

Figure 3 summarises the performance of GAIV over these five years of activity:

- Increase in the awareness of this PSP service (by the increase in the number of victims referred by other care structures);
- Growth and stabilisation of the number of consultations;
- Stabilisation of the number of identified victims (in a context where the total number of victims in the City of Porto allegedly decreased).

Between 2013 and 2018, 197 victims were sent to the '144' Social Emergency Helpline (Social Security), and 183 referred to Casas Abrigo (anonymous shelters) resulting from the registration and monitoring of victims by the PSP. There were also 159 teleassistance devices implemented and almost 1700 emergency responses requiring police cars (just in time policing procedures). The total number of police actions (including administrative procedures) was approximately 7,000 during the last five years.

Figure 3. GAIV performance indicators.

Equally important is the analysis of the activities carried out by The Crime Investigation Special Teams (EEIV) in the criminal investigation of domestic violence crimes. EEIV is responsible for investigating criminal cases delegated by the Public Prosecutor's Office. EEIV manages crimes related to domestic violence in a centralised manner in the Porto PSP's Division of Criminal Investigation.

Table 2 and Figure 4 summarise EEIV's activity since its creation. It may be perceived by the data that there is no accumulation of processes to solve.

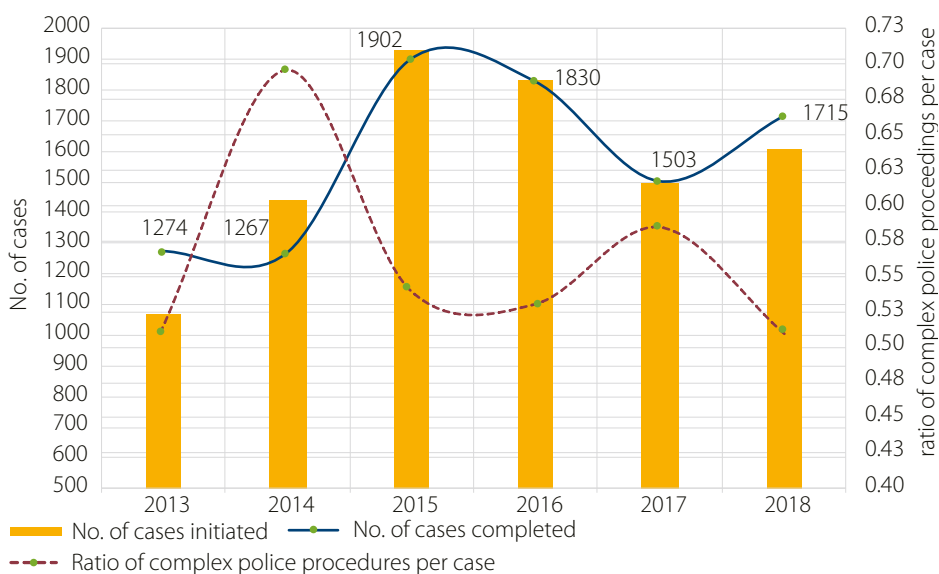
The total number of complex police procedures, visible in the last row of Table 2, is equally impressive. Strict police measures require a prior judicial decision or are particularly challenging (sophistication) to perform because they may conflict with human and constitutional rights. They differ from administrative Police measures, the application of which derives from ordinary regulations.

We create a ratio of strict police procedures for each case (see note in Table 2). The results are exciting: although with some annual variations, during the six years, in every two cases that come to the knowledge of the EEIV, one of them gave rise to at least one police procedure of strict nature, almost always requiring judicial intervention.

Table 2. Data on the Activity of Criminal Investigation Team – Porto

Indicators	column	2013	2014	2015	2016	2017	2018	total
No. of cases initiated	1	1068	1440	1927	1834	1496	1604	9369
No. of cases completed	2	1274	1267	1902	1830	1503	1715	9491
Home search warrants	3	62	45	60	43	43	62	315
Number of suspects questioned	4	458	539	761	729	613	541	3641
Arrest warrants requested from the judicial authority	5	64	147	105	100	112	137	665
Enforcement measures applied to suspects	6	8	35	17	20	19	24	123
Safety and security measures applied to victims	7	63	113	90	84	94	116	560
Ratio of strict police proceedings per case	8	0,46	0,60	0,50	0,49	0,52	0,45	0,50

Note. Ratio of strict police proceedings = (SUM columns 3+4+5+6) ÷ column 2.

Figure 4. EEIV performance indicators.

The reasons mentioned above led us to target GAIV for deeper analysis as we consider GAIV an **operational practice** worth presenting to a broader audience. Aligning with the IMPRODOVA conceptual framework, the Porto experience merges an **organisation-**

al arrangement from the part of PSP, involving intra-organisational cooperation (GAIV, EEIV, CCC⁸, and other police units), with **inter-organisational cooperation** between the police, several NGOs, health services, public prosecutor services. These arrangements aim to clarify the limits of the problem at hand, goals and stakes, resources and actors involved.

As mentioned, GAIV emerged as a focal service to attend domestic violence victims and follow-up their cases, control the use of the teleassistance devices (if triggered, police officers are deployed to attend to the victim), and react promptly in emergency cases. In principle, all domestic violence cases in Porto would be dealt with in GAIV. For that purpose, PSP chooses a new police facility – Esquadra do Bom Pastor, Bom Pastor Police Station. This squad was built considering modern technical recommendations, such as a friendly interior, among other physical and functional attributes supporting the specific work with victims (e.g. attendance rooms, learning and training rooms, spaces for children, a separation between victims and offenders when inside the station). Also, GAIV had the chance to gather specialised personnel working exclusively with domestic violence matters.

Therefore, this new response was able to remove pressure from the system and increase service quality regarding domestic violence victims.

"It started from zero. We had nothing before. There was the necessity, here, to implement certain dynamics of police work and intervention systems within the community" (603AIV);
"If I do not have an answer, I will not see the problem" (609BIV).

GAIV embraced the commitment to respond to a policy of the city of Porto oriented towards domestic violence called "One step further". In this non-written agreement, PSP takes compromise to specialise police officers in domestic violence that led to the instalment of GAIV and the EEIV.

PSP governs (so to speak) the network, mainly because of its central position within. Criminal investigation (EEIV) must be kept discreet; the Department for Criminal and Penal Action (DIAP) is not a service open to the public. Therefore, the management of the relation with the community must be performed by professionals having relevant competencies, such as the police (PSP).

Nowadays, GAIV seems to be moving even more towards intra- and inter-collaborative work, piloting the community resources towards the victims' protection and support, and performing locally led policing. For instance, GAIV is responsible for the execution/

8 CCC means *Police Control and Command Center*.

implementation of the court's orders (e.g. accompanying victims, collecting the victims' goods from its home).

PSP's top management has always supported the initiative, which seems to be the centrepiece of GAIV performance and maintenance.

"We always had the support from the command structure. Many commanders have been through here, and all of them saw this service as a quality service, having the support of whom is in charge, and we know that this makes all the difference, we are in a job that is recognised and seen as a good police service" (603AIV).

Since the mid-90s, Portugal has had such policies regarding creating specific programmes in the law enforcement authorities, new facilities adapted to the domestic violence victims' attendance, new assessment tools, and specialised teams.

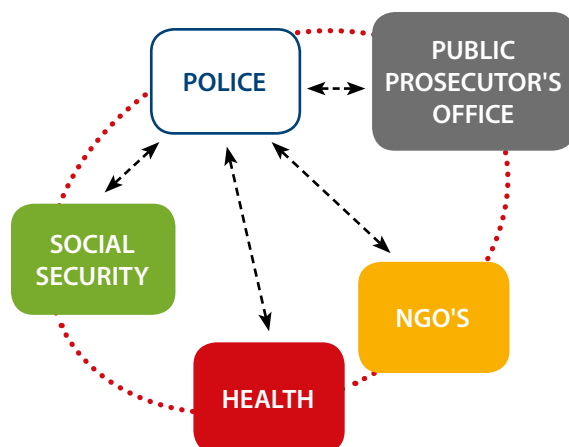
However, there is hardly a single national organisational model, and even less that, there is a specific organisational solution to address this type of crime. In this sense, GAIV and EEIV are also interesting organisational approaches because they are *atypical* in police activity to prevent and fight against domestic violence crime. This non-typicality results from the PSP's organisational model and, perhaps strongly, from the model of cooperation with other partners in the public sector (health, justice) and civil society (NGOs). This aspect has to do with what can be called inter-organisational learning and practice.

"What works are the partnerships, which was the innovative approach that the police have given to the cabinet; opening the doors to other entities, and that makes all the difference. This kind of crime compels us and the police to have these real partnerships, not those front partnerships, but the ones by which we all help each other" (601AIV).

We found in the Porto experience some evidence about collaborative dynamics, which is different from what seems to be the national reality, globally understood (which can be a dangerous generalisation, nevertheless).

"There is an acknowledgement of competencies from both parts" (609BIV).

The PSP seems to be an empowered and empowering organisation. It has a central role in the whole victim support process, but above all, with functional proximity to the Public Prosecutor's Office (see Figure 5).

Figure 5. A conceptual presentation of Porto experience.

Conceptually, all public sub-systems (health, justice, and social security) and civil society organisations establish direct functional relationships with the PSP (arrows in black). However, the PSP, especially the GAIV, still has a supplementary field of intervention, either because it is in charge of developing such powerful victim support instruments as the Individual Security Plan; or because of the specific task of monitoring (in person or by telephone) the victim for a reasonable period.

The red dotted circle (see Figure 5) represents an intervention space that responds to a ring of social cohesion led by the police. Social cohesion is understood here as a construct that identifies the objectives and actions of a community aiming at creating conditions where people have the opportunity to live together with all their differences, and, on the other hand, the way to approach unity and diversity within a framework of legality and guarantee of human rights. The police (i.e. GAIV service) is very close to the victim and act as an interpreter of their needs near the institutions. They are transducers converting victims' needs in the language understood by society.

In other words, the fact that domestic violence became a public crime was not enough to change the picture. Using a functionalist logic, one would expect that the norm would prevail. However, Porto experience shows that if there is no involvement of the different organisations at the local level, the State's guidelines do not work. The benefit of GAIV and EEIV's responses seems to result from the maximisation of the interactions between all partners.

"The most important thing is to know the faces, and that is why I think the most important thing is to know each other and what each one does. I have no reason to complain because there is openness to make some learning sessions, give speeches; we go there or come here, which serves to know each other and know what they do. Moreover, there where we can ask for clarifications and have a closer relationship" (601AIV).

Therefore, the importance of familiarity between the parties and close and open relations appears to be crucial.

The statement given by an interviewee from the Health sector illustrates the need for a naturalistic approach (Thomas, 1979):

"This network is only possible if we leave the desk" (609BIV).

The configuration of the responses and organisations in a particular area requires dedicated fieldwork, close to the inhabitants of specific neighbourhoods, outside regular working hours. If the goal is to prevent domestic violence and promote well-being rather than reacting to a particular situation, the Porto experience can be regarded as a model of good practice. Because we are dealing with a wicked problem (Rittel, 1973), it is necessary to change the paradigm. It is necessary to learn different ways of seeing to identify the problem better and resolve it.

The report from the Group of Experts on Action against Violence against Women and Domestic Violence (GREVIO, 2019) on Portugal stresses that the National Support Network for Domestic Violence Victims 'has yet to fulfil its mission of enabling truly effective cooperation between all relevant stakeholders. (...) Good examples exist where partial coordination is practised, but (...) they appear to rely on the individual initiative of the agencies concerned' (p. 37). GAIV seems to fulfil this promise.

Proximity seems to be the key to police empowerment. However, the "One step further" programme is a non-written protocol of institutional cooperation. It means that there is no disfigurement of the competencies and attributions of each entity, but merely the declaration of common interest (common objectives) and the nominal responsibility of those responsible for the different entities at each moment. Commitment is its strength in a society where the *word given* is synonymous of *an honoured word*. However, it is also its weakness when that condition, say, pre-bureaucratic, typical of societies where mechanical solidarity based on old social values (Durkheim, 1960) prevails or changes the primary social conditions. In other words, if other combinations of partners or specific persons emerge, GAIV may lose its centrality.

In this Porto experience – recalling the motivation to develop the “One step further” programme – it was about a collective (the city) notion and its social problems, implying that everyone has to help in its solution. This type of effective solutions can be found in contexts strongly influenced by the interrelationship between social individuals, in which social ties and bonds are anchored in the notion of community. In general terms, a national policy to prevent and fight against domestic violence cannot be based on these elements of social life. At a local level, such social values can perform a fundamental role.

The interrelationship is also critical for understanding the capacity of civil society's (NGO's) resource mobilisation. We have been told of cases where a phone call to someone you know personally works better than a formal request to, for example, find a place in a shelter or request support for something that is needed.

DISCUSSION AND CONCLUSION

The analysis of the case has opened new horizons for discussion. The data collected and its analytic interpretation calls for a deeper understanding of the domestic violence phenomenon. Not in the sense of rejecting the already known but instead adding some new dimensions, putting together the micro, meso and macro systems. As seen above, several significant changes took place at each system level, creating a new brand scenario for domestic violence. Preventive actions and understanding new forms of violence, for instance, psychological violence, symbolic violence, gender-based violence, should not be based on what we did in the past but what we should do in the face of the new present.

At the macro-level system, the visibility of and public exposure to domestic violence in Portugal is a highly relevant social fact and should be understood as a significant cultural transformation that has enabled a whole range of other transformations. The transformations touch legal and criminal proceedings, law enforcement and bringing the theme of violence to the central stage of public action.

“Adapting to the new challenges, we do not work as we did five years ago” (609BIV).

These slow and gradual transformations, sometimes speeded up by necessary legal reforms and driven by international conventions, have simultaneously brought new challenges. This is the field explored by Inglehart and Welzel (2005) when they describe the organisation of the relation between social structure, political culture, and political system, saying that economic development, the rise of mass communication, and other macroscopic transformations reflect on the individual values. The question is whether the influence of the political culture on the individual values change is stronger than the opposite one. The world politicians envision (high rationality and self-expression values)

is quite different from the world we live in (medium income; still linked with traditional values concerning gender inequality; in the middle of the transition from survival to self-expression values), thus creating tension. One of the challenges directly posed to law enforcement authorities is increasing operational procedures (more sophisticated administrative proceedings, victim status attribution, risk assessments, individual security plans). But not only in the law enforcement area. Here testimony from the health sector:

"I think it is training among technicians, specific, concrete cases, almost like a workshop. The situations are very complex, and we are dealing with people, and there is no medicine to give to the aggressor and the victim to make them feel good" (609BIV).

This complexity has not ended and dragged on other changes in intern police organisation and other public systems. The Porto experience is an example of changes on a macroscopic scale reflected on a local scale. Often, the problem of elites provoking social change on a superlative level, almost a meta social goal, is to forget that the adoption of new social models is not achieved by decree but through social influence and social structure transformation processes takes time. The key variable seems to be training.

Moreover, civil society responded to the new challenges by multiplying the available resources, which forced it to redesign the map of institutional actors that move around domestic violence. This change is still under consolidation, and mutual distrust is still widespread. However, the case of Porto is an excellent example that this mistrust can be overcome. At the same time, relevant to understand some weaknesses. Perhaps the most evident of the weaknesses is the thirst for protagonism, possibly considered dysfunctional in a model of collaborative work but quite natural.

Furthermore, it should be stressed that a modification suggested by the macro-level system is reflected in the changing from traditional values to secular, rational ones and the changing from survival to self-expression values (Inglehart, 2018). The tension thus created ends up showing who is who is always unfinished in the process of social change. GAIV's procedures inevitably reflect the adherence of the police (as an institution) to the macro-level system changes but also takes into account the novelties that could be recognised at the meso and micro levels systems (this means the social transformations expressed through the social relationships and the ones between individuals, their peers, and the State's organisations).

The Porto experience, from a more police point of view, has brought several shifts that can be systematised:

- new police responses;
- more specialisation;
- more public scrutiny of police work.

The public scrutiny, as well as the mechanisms of formal control (e.g., via the General Inspectorate of Internal Affairs), could be relevant to understand the general mindset:

"so that our work could be carried out with the quality that has always been the great bet of the Metropolitan Command of Porto. We want to do good, we are not interested in doing too much and too little, we want to do good and well if possible, because effectively this service cannot be evaluated quantitatively, it is inevitable because much of the service is done invisibly and is not quantified in numbers" (603AIV).

As written above, GAIV and EEIV are *atypical* organisational solutions considering the framework of police activity to prevent and fight against domestic violence. Despite the downward trend in the number of domestic violence crimes in the city of Porto since 2011, we cannot make a direct link with the emergence of GAIV for methodological reasons, although, as said before, it may have helped to consolidate that trend.

Meanwhile, we want to highlight the seemingly fruitful configuration possible to observe and be told about (resulting in the three changes mentioned above). GAIV's and EEIV's approach to domestic violence seems to be organised around five leading indicators: increased collaborative work with the Attorney's Office Public Prosecutor; immediate action protocols; more expertise; enlarged local partnerships; and mutual trust and respect. Probably the following statement would not have been possible ten years ago:

"If the victim is afraid of the report, then we resort to GAIV" (609BIV).

Those changes can be translated into the possibility of following the normative approach (i.e., by the book) in terms of the reaction to domestic violence while maintaining a sense of creativity in terms of anticipating domestic violence occurrences by using experts' intuitive and ground-based knowledge. It enables to address domestic violence occurrences immediately and simultaneously develop a particular (local) approach to some of the domestic violence roots. Let us not forget that some domestic violence situations are considered part of the "normal" repertoire of behaviours of some (more or less) vulnerable groups. So, acting and fighting domestic violence demands a continuous effort by all involved professionals; because

"usually, our end-users [victims] are here several months, sometimes one or two years, because there is a whole process of rebuilding their life project that takes some time, and most of the times for them to find some stability in their lives, it takes three years on average" (605DIV).

The Portuguese view of the domestic violence problem has changed in the last few years, increasing awareness in the public sphere. The Porto experience shows a (some-

how) different approach to the phenomenon, combining different actors from various organisations, showing the merits of a local arrangement. Since compromises, trade-offs, organisational interactions are workable and adjust to value an empowerment process, ongoing analyses are critical to assess the problem and adopt an action-driven approach.

The results of this research focused on an experience evaluated as very positive, should not make us forget two essential aspects of the social problem of domestic violence:

- The first has to do with the legal transformations that impose an increasing demand on organisations dealing with domestic violence on the ground. These changes are societal in scope and can be better interpreted in specific social contexts than in others;
- The second essential aspect is that domestic violence is a complex social phenomenon (a truly wicked social problem) with local expression, a product of violent and unbalanced social interactions that express themselves in a (somehow) unique *milieu*, and therefore require responses adapted to those contexts and for those concrete individuals. The traditional positive value that we attach to good practices should not be underestimated but should be relativised and adaptable. There is no such thing as a general social theory about domestic violence.

The experience of Porto shows that a problem-oriented approach is all the more potent as it results from the interpretation of the weaknesses and opportunities that the social contexts themselves provide.

This vision has epistemological and methodological consequences, especially at the level of intervention on domestic violence, implying a more ideographic and less nomothetic approach.

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THE CHALLENGE OF INVOLVING MEDICAL DOCTORS AS IMPORTANT FRONTLINE RESPONDERS IN FIGHTING DOMESTIC VIOLENCE

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Abstract

For victims of domestic violence, medical problems in the short-term are injuries and in the long-term health issues such as mental health problems, consequences of untreated sexual transmitted diseases or stress-related health issues evolving from the abuse they've experienced by a partner or any other family member. This inevitably makes victims seek the help of the medical profession sooner or later. The medical profession is therefore an important stakeholder in the group of frontline responders detecting and intervening domestic abuse. Unfortunately, the medical profession is often not an active partner in frontline responder networks based on interviews (n = 296) we conducted in the IMPRODOVA project¹. In this article, problems cutting medical professionals out of the networks of frontline responders and reasons why they should be integrated are presented. The paper also discusses what needs to be changed in order to better integrate the medical profession in the circle of frontline responders working against domestic violence.

Keywords: domestic violence, medical profession, domestic violence fighting networks, multi-professionalism, health problems

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The medical profession and domestic violence

Domestic violence is an immense individual tragedy and social problem that burdens society, economy, government, and individuals (DeRiviere, 2015). Not surprisingly, domestic violence, violence against women, and violence in close relationships is a topic that seems to gain increasing attention.

Although measures are taken at different levels to combat domestic violence, the victims of domestic violence are more likely to talk with friends and relatives than with members of the professional help system about the abuse (WHO, 2005). Thus, one of the most important goals in the fight against domestic violence should be to draw more victims into existing help systems/networks and to have all relevant frontline responder groups (e.g., the police, the medical profession, social work, victim protection shelters, law enforcement, and counselling centres) actively involved at all levels to comprehensively deal with a case.

Networks of various professionals detecting and intervening domestic violence consist of these different frontline responders. This circle of various professionals and agencies tackle domestic violence together, for instance, by organizing frequent meetings discussing single cases or coordinated approaches to fight domestic violence in general or in a special location. A system called Multi-Agency Risk Assessment Conferencing (MARAC) that is implemented in e.g. Scotland, Austria and Slovenia, which aims to identify victims who are at serious risk by combining information from a wide range of partners is a good example for interagency cooperation (Robbins et al., 2014; Robinson & Tregidga, 2007). This type of collaboration enhances the effectiveness of prevention, detection and intervention as the partners in the network learn from each other. Meeting and face to face communicating generates trust between the parties and improves the exchange of information that is particularly important in the assessment of cases with high risks of violence (Chatzifotiou et al., 2014; Vogt, 2020) as already set as standard by the Istanbul Convention (Council of Europe, 2011; Article 7 (2)).

Of the direct costs of domestic violence, medical costs that stem from medical diagnostics and treatment are the highest (De Sousa et al., 2015). This includes costs of treatment, mental health problems (e.g., alcohol and drug dependence, depression, anxiety), increased rate for non-communicable diseases (e.g., cancer, cardiovascular diseases, type 2 diabetes mellitus) and reproductive health problems (e.g. unintended pregnancy, HIV) and other sexually transmitted infections, low birth weight babies and spontaneous abortion (Chandan et al., 2020; De Sousa et al., 2015).

Victims have a choice whether they want to report the incident to the police or speak to a counsellor of an NGO, but when they definitely need help because of injuries or have

long-term health consequences requiring medical treatment, they have to see a physician. In addition, due to other non-domestic violence related health issues (e.g. control appointments at the dentist, diabetes management, skin cancer screening) they do have doctor's appointments more frequently and at this point their physician/dentist might detect signs of domestic violence although it was not intended by the victims. Amongst health professionals, general practitioners, emergency physicians, emergency paramedics, gynaecologists, midwives and nurses as well as dentists (Ellis, et al. 2019) are those potentially encountering victims of domestic violence the most.

Consequently, they are often the first beside friends and family, who either hear about the incident of violence or they are the first ones seeing indicators and symptoms pointing towards a potential incident of domestic violence. Victims who do not report to the police still are in touch with members of the medical profession.

The medical profession is already mentioned in the Istanbul Convention (Council of Europe, 2011; Article 18 (114); Article 20 (127); Article 22 (132); Article 25 (141)) as an important stakeholder. A higher involvement of the medical profession is furthermore highly recommended by authors of different research studies (e.g. Alsaedi et al., 2017; Jenner et al., 2016; Piterman et al., 2015).

In this paper we focus on the question to what extent the professional response to domestic violence of the medical system has been already integrated in help networks in eight European countries and what obstacles and advantages doing so have been reported.

The IMPRODOVA project and its methodology

The IMPRODOVA project² is a multidisciplinary research project with partners from eight European Countries that was funded by the European Union and started in May 2018 with a duration of 36 months. In this project, researchers work together with practitioners from different fields aiming to mitigate domestic violence focussing on the work of frontline responders including the police, the medical profession and social services.

Standards are promoted (e.g. Istanbul Convention; Council of Europe, 2011) by international organisations on how to address domestic violence including standards regarding the interorganisational cooperation whilst only little research is done on how good these are integrated in frontline responders' everyday practice. IMPRODOVA therefore used a three-tiered approach addressing this gap: As a first step, existent national and

² www.improdova.eu

international guidelines, risk assessment tools, training formats and further information were gathered in the different IMPRODOVA countries by robust desk research as an orientation to identify the present regulatory frameworks that shape the response to domestic violence including the status quo of the medical profession. Secondly, 296 standardised interviews with frontline responders from the police, the medical profession and social services were conducted in the eight IMPRODOVA countries Germany, Austria, Hungary, France, Finland, Scotland, Slovenia and Portugal, examining the extent to which standards are converted into practice regarding different aspects including inter-agency cooperation, which actors are involved and how successful multi-professional approaches are. It was decided that two locations per respective country should be examined in addition to a good practice location with a good way of interdisciplinary working. Structured interview themes including cooperation were agreed beforehand. This enabled us to identify the status quo regarding existing help networks. As a final step, we will develop new, implementable solutions for practitioners and policy makers meeting the needs on the ground. See Vogt (2020; in press) for further information about the IMPRODOVA project.

Results

The results reflect the overall situation in all IMPRODOVA countries. The medical profession was in none of the case locations examined a regular partner of a networked response to domestic violence. It was frequently mentioned by other stakeholders that they are not as active as they could be. Their attitude has been described in the interviews as being rather passive and it was frequently mentioned that they only take an active role in reporting domestic violence if they cannot avoid it. General practitioners are seen as not being trained sufficiently in domestic violence. Our research indicates that knowledge about symptoms and signals of domestic violence is limited in the medical sector. In addition, many are also not aware of the network and their important role within the network.

Based on the information conducted from interviews with medical professionals, they often did not feel being sufficiently informed and knowledgeable about services and support available to the victim when they were the first point of contact for victims of domestic violence.

Another major finding after analyses of interviews with various frontline responder groups as part of IMPRODOVA fieldwork was reports of frustration on both sides: non-medical frontline responders in existing help networks and physicians, respectively. One reason which was mentioned was mistrust resulting non-communication on both sides. In interviews conducted, we were also told by non-medical frontline responders that it is very difficult to integrate the medical profession, because they do not participate in trainings

and do not seem to be too interested in domestic violence topics. Therefore, physicians are not invited to be partners in networks by other frontline responders anymore, because they feel that physicians are not coming anyways and that they do not want to be integrated. On the other hand, physicians reported that they are frustrated that victims of domestic violence have the “revolving door syndrome” - coming back repeatedly after new incidents of domestic violence without changing their situation. This may also be related to too little knowledge about the dynamics of domestic violence.

Reasons why they often are not part of help networks

Even though there would be a mutual benefit for the medical profession as well as for members of the network of frontline responders if working closely together, reality often looks quite different. Numerous reasons have been brought forward in the interviews, ranging from diverging professional and organisational interests to conflicting professional and organisational cultures as well as simply a lack of time.

The reasons named in the interviews and issues to be addressed to increase the number of physicians and their level of activity in domestic violence support and service networks can be summarised as follows:

1. Knowledge about domestic violence, symptoms and red flags are often not part of the mandatory curriculum for physicians or at medical school for medical students in most European countries. The topic is not prioritised in the education of midwives, nurses or physiotherapists and psychotherapists.
2. Each profession wants to preserve its autonomy and refuses to be used as a mere “instrument” by another profession. The police and the medical profession, for example, are relatively closed systems that have rather strict internal structures and processes. Both can work and achieve their primary goals without much interaction with other professions. Linking both professions would mean that both have to give up some of their autonomy and self-determination. Collaboration and building trust and reciprocity is often difficult. A better understanding of the other cooperation partners’ working methods, prioritisation of tasks and ways of communication is needed. Professional groups also need to understand their own role in the totality of professionals working against domestic violence and helping the victims.
3. Another important aspect is that the victim is, first and foremost, a patient to the physician. The medical profession gives priority to their most valued goal: to restore the health of their patients. Thus, to reach this goal it is not necessary to investigate how the patient was injured, or to interpret the legal implications of the injuries. Physicians do not need to deal with the problem domestic violence behind the physical injuries in order to reach their goal. When they for example need to fix a broken arm, the treatment chosen is not dependent on the cause (car accident or domestic violence). If a patient needs also psychiatric or psychological treatment and care, the

question of domestic violence and abusive relationship could have a more direct bearing on physician's work.

4. Because of the tight schedule of physicians and the shortage of human resources, physicians frequently have second guesses to take further steps like speaking with the victim about domestic violence or even being a part of a broader network of frontline responders helping the victim. Every step in this direction requires more time and attention, which are already in short supply for physicians.
5. Another significant issue concerns the professional confidentiality: The physician can only talk about information regarding a domestic violence incident if the patient gives his/her consent. Otherwise, all information is concealed by the doctor-patient confidentiality and any violation in this area is considered a violation of professional secrecy, which can be sanctioned based on the criminal code. The victim decides whether a physician can share important medical or other information, which can be an important add-on to the information already acquired by other network partners. If the physician cannot talk about the patient, then meeting with other frontline responders could be frustrating for the partners representing the medical profession. They want to help, they know how to help and know who exactly needs that help, but they are not allowed to do so. On the other hand, they have the compulsory duty to inform the police or the youth welfare system when the victim is in self-endangerment or a third party, like a child, is at serious risk. Therefore, they are often in a conflict between secrecy and the need to share information.
6. The work of physicians in the field of domestic violence is not regulated by any kind of specific legal regulation in the locations we examined. Therefore, as a first step, it would be most helpful to draft guidelines and to develop the necessary working processes to facilitate the integration of the medical sector into frontline responder networks. Setting up guidelines and working processes can be time-consuming, which is always an issue for all partners in the network.

Why it would be important to have them involved

Unfortunately, even though many victims of domestic violence consult a physician, domestic violence is seldomly addressed at practice visits to the physician. Physicians too rarely consider themselves as frontline responders to domestic violence based on our findings.

In addition to the opportunity to attract more victims into the help system in general, a number of other points were raised in the interviews:

1. Physicians have an opportunity to identify victims of domestic violence relatively early and establish a contact between the victim and other frontline responders in their network. This would increase the likelihood that victims receive the individual support they need much faster. Although their first duty and most important goal

are to treat injuries resulting from domestic violence, medical staff would have the opportunity to stay in contact with victims afterwards and follow-up their situation. Having medical knowledge and expertise, they could intervene long before victims would make the decision to leave the perpetrator or report the incident to the police.

2. The medical professions' general knowledge about domestic violence-related injuries and long-term adverse effects on health could be included in the training of other frontline responders to domestic violence to raise awareness about health-related topics.
3. In addition, medical professionals could function as contact persons who are experts in health- and domestic violence-specific topics for victims.
4. Being actively part of first line responder networks would train and sensitise physicians about other important non-health related aspects associated with domestic violence. This would improve the awareness of domestic violence in medical and health care settings and no doubt would increase detection rates by physicians and other health care staff.
5. Ensuring that securing of evidence by a physician would be done in such way that it can be used as evidence in court. When other non-medical professionals were the first point of contact, they would be fully aware that they could refer the victim to the physician being part of their network to secure the evidence in a court-proved manner. They would also know that these physicians have a deeper understanding of medical problems associated with domestic violence and could act accordingly.
6. In cases the domestic violence-combating network has enough funding, it could pay a physician being part of their network for the securing of evidence or for treating of injuries and the victim's health insurance would not be informed. Thus, the incident could remain anonymous until the victim is ready to take it forward to court etc. This would also facilitate the anonymous securing of evidence: evidence would be secured and stored for a few years regardless whether the victim feels ready to report the case to the police or not. Evidence could be used later at the court when the case is prosecuted. This possibility is also stipulated by the Istanbul Convention (Council of Europe, 2011; Article 25 (141)). Anonymous securing of evidence is also possible when the victim comes to a general practitioner that offers anonymous securing of evidence and is not part of a network, but it can only stay anonymous if the general practitioner is willing to report a diagnosis and related treatment in such a way that the health insurer does not know that this is related to domestic violence. And the question still remains, who covers the costs for securing and storing of evidence.
7. Last, but not least, involving more physicians in those networks would give domestic violence a new and higher priority in the medical practice, which would certainly benefit victims.

Possible approaches to involve the medical community in interdisciplinary networks

Our recommendations are as follows: it should be mandatory to teach at medical schools major aspects related to domestic violence with a focus on health and how to deal with the cases of domestic violence. Currently this is not included in the mandatory curriculum. Therefore, medical schools and other institutions that train students and medical professionals such as physicians, nurses, etc., need to make domestic violence a high priority topic from the start of their education. First studies show good results regarding the identification of domestic abuse following trainings (e.g. Edwardsen et al. 2011).

Moreover, since different projects and umbrella organisation do provide templates of how to deal with cases of domestic violence, these have to be spread more widely and specifically targeted at the medical profession. The absence of a systematic response to domestic violence in health care services continues to be a serious problem. An early study conducted by McLeer & Anwar (1989) already indicated that protocols enhance the identification of female victims of domestic violence.

There are a number of good pilot projects and best practice examples, which could be tailored and adapted to local needs. For instance, in some countries (e.g. Germany) programmes exist that promote the involvement of the medical profession in domestic violence fighting networks (e.g. ProBeweis e.V.³ in the HAIP network⁴ in Hannover) and it was shown that the network brings about good results. The problem with these projects, however, is that they are regionally, financially and temporally limited so that they cannot be extended easily. Therefore, governments and local authorities need to increase financial support for programs that foster the cooperation between the medical profession and other frontline responders to combat domestic violence.

Physicians and other health care staff could gain a new perspective on the victim's situation and talk in a team about their own frustration, which may help them to re-gain their motivation because of mutual understanding. For example, when talking to police officers from the domestic violence-combating network, medical professionals could learn that police officers share their anger about the revolving door syndrome, too.

3 www.probeweis.de/

4 Information in German: <https://www.hannover.de/Leben-in-der-Region-Hannover/Verwaltungen-Kommunen/Die-Verwaltung-der-Landeshauptstadt-Hannover/Gleichstellungs-beauf%C2%ADtragte-der-Landeshauptstadt-Hannover/Wir-f%C3%BCr-die-B%C3%BCrgerinnen-und-B%C3%BCrger/Hannoversches-Interventionsprogramm/%C3%9Cber-HAIP>

Conclusions

International guidelines (e.g. Istanbul Convention; Council of Europe, 2011) strongly recommend that frontline response should be implemented in such a way that it includes coordination and cooperation among all relevant agencies, institutions and organisations which are responsible for detecting and preventing domestic violence and providing services to victims including the medical profession. As there are different access points for victims to contact physicians, it is crucial to train more physicians in domestic violence-related topics mandatory from early on and invite them as partners in support networks. All frontline responder groups would profit from their integration because of numerous reasons as explained above. Based on our research results in the IMPRODOVA project including almost 300 interviews with frontline responders, this has not been successfully implemented so far. Tensions between the various professions were mentioned more often than successful cooperation. Different approaches to improve the current situation were suggested in this paper e.g. such as to raise awareness that many more victims could get help and how much money could be saved by an effective intervention to domestic violence. The political motivation to finance corresponding programmes with a focus on interagency cooperation in a sustainable way needs to be increased. Additionally, further research needs to be carried out: even so research can be found regarding the role of the medical profession in domestic violence and health consequences in general and is cited in this paper, only few research is done and published on the interagency cooperation between the different frontline responder groups.

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Detlef Schröder

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