

UDK 37

ISSN 2545 – 4439 (printed)

ISSN 1857 - 923X (e-version)

INTERNATIONAL JOURNAL

Institute of Knowledge Management

KNOWLEDGE



Scientific Papers

Vol. 19.2

Education and Social Sciences



KIJ

Vol. 19

No. 2

pp. 457 - 996

Skopje 2017

KNOWLEDGE



KNOWLEDGE - INTERNATIONAL JOURNAL
SCIENTIFIC PAPERS
VOL 19.2

Promoted in Agia Triada, Greece

29.9-1.10.2017

INSTITUTE OF KNOWLEDGE MANAGEMENT

SKOPJE, MACEDONIA



KNOWLEDGE

International Journal Scientific papers Vol. 19.2

EDITORIAL BOARD

Vlado Kambovski PhD, Robert Dimitrovski PhD, Siniša Zarić PhD, Maria Kavdanska PhD, Venelin Terziev PhD, Mirjana Borota – Popovska PhD, Cezar Birzea PhD, Ljubomir Kekenovski PhD, Aleksandar Nikolovski PhD, Ivo Zupanovic, PhD, Savo Ashtalkoski PhD, Svetlana Trajković PhD, Zivota Radosavljević PhD, Lasto Spasovski PhD, Mersad Mujevic PhD, Margarita Koleva PhD, Nonka Mateva PhD, Rositsa Chobanova PhD, Predrag Trajković PhD, Dzulijana Tomovska PhD, Nedzat Korajlić PhD, Nebojsa Pavlović PhD, Nikolina Ognenska PhD, Lisen Bashkurti PhD, Trajce Dojcinovski PhD, Jana Merdzanova PhD, Zoran Srzentić PhD, Nikolai Sashkov Cankov PhD, Marija Kostic PhD

Print: GRAFOPROM – Bitola

Editor: IKM – Skopje

For editor

Robert Dimitrovski, PhD

KNOWLEDGE

International Journal Scientific Papers Vol. 19.2

ISSN 1857-923X for e- version

ISSN 2545-4439 for printed version

SCIENTIFIC COMMITTEE

President: Academic, Prof. Vlado Kambovski PhD

Vice president: Prof. Robert Dimitrovski PhD, Dean, Faculty of Management, MIT University, Skopje (Macedonia)

Members:

- Prof. Aleksandar Nikolovski PhD, FON University, Skopje (Macedonia)
- Prof. Aleksandar Korablev PhD, Dean, Faculty for economy and management, Saint Petersburg State Forest Technical University, Saint Petersburg (Russian Federation)
- Prof. Azra Adjajlic – Dedovic PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Prof. Antoanela Hristova PhD, European Polytechnic University, Pernik (Bulgaria)
- Prof. Anita Trajkovska PhD, Rochester University (USA)
- Prof. Anka Trajkovska-Petkoska PhD, UKLO, Faculty of technology and technical sciences, Bitola (Macedonia)
- Prof. Alisabri Sabani PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Prof. Ahmad Zakeri PhD, University of Wolver Hampton, (United Kingdom)
- Prof. Ana Dzumalieva PhD, South-West University “Neofit Rilski”, Blagoevgrad (Bulgaria)
- Prof. Branko Sotirov PhD, University of Rousse, Rousse (Bulgaria)
- Prof. Branko Boshkovic, PhD, College of Sports and Health, Belgrade (Serbia)
- Prof. Branimir Kampl PhD, Institute SANO, Zagreb (Croatia)
- Prof. Baki Koleci PhD, University Hadzi Zeka, Peja (Kosovo)
- Prof. Branislav Simonovic PhD, Faculty of Law, Kragujevac (Serbia)
- Prof. Bistra Angelovska, Faculty of Medicine, University “Goce Delcev”, Shtip (Macedonia)
- Prof. Cezar Birzea, PhD, National School for Political and Administrative Studies, Bucharest (Romania)
- Prof. Cvetko Andreevski, Dean, Faculty of Tourism, UKLO, Bitola (Macedonia)
- Prof. Drago Cvijanovic, PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjacka Banja (Serbia)
- Prof. Dusan Ristic, PhD Emeritus, College of professional studies in Management and Business Communication, Novi Sad (Serbia)
- Prof. Dimitar Radev, PhD, Rector, University of Telecommunications and Post, Sofia (Bulgaria)
- Prof. Daniela Todorova PhD, Rector of “Todor Kableshev” University of Transport, Sofia (Bulgaria)
- Prof. Dragan Kokovic PhD, University of Novi Sad, Novi Sad (Serbia)
- Prof. Dragan Marinkovic PhD, High health – sanitary school for professional studies, Belgrade (Serbia)
- Prof. Daniela Ivanova Popova PhD, Faculty of Public Health and Sport, SWU Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Dzulijana Tomovska, PhD, Dean, Faculty of Biotechnical sciences, Bitola (Macedonia)
- Prof. Evgenia Penkova-Pantaleeva PhD, UNWE -Sofia (Bulgaria)
- Prof. Erzika Antic PhD, High medicine school for professional studies “Hipokrat”, Bujanovac (Serbia)
- Prof. Georgi Georgiev PhD, National Military University “Vasil Levski”, Veliko Trnovo (Bulgaria)
- Prof. Helmut Shramke PhD, former Head of the University of Vienna Reform Group

- (Austria)
- Prof. Hristina Georgieva Yancheva, PhD, Rector, Agricultural University, Plovdiv (Bulgaria)
 - Prof. Hristo Beloev PhD, Bulgarian Academy of Science, Rector of the University of Rousse (Bulgaria)
 - Prof. Izet Zeqiri, PhD, Academic, SEEU, Tetovo (Macedonia)
 - Prof. Ivan Marchevski, PhD, Rector, D.A. Tsenov Academy of Economics, Svishtov (Bulgaria)
 - Doc. Igor Stubelj, PhD, PhD, Faculty of Management, Primorska University, Koper (Slovenia)
 - Prof. Ivan Petkov PhD, Rector, European Polytechnic University, Pernik (Bulgaria)
 - Prof. Isa Spahiu PhD, AAB University, Prishtina (Kosovo)
 - Prof. Ivana Jelik PhD, University of Podgorica, Faculty of Law, Podgorica (Montenegro)
 - Prof. Islam Hasani PhD, Kingston University (Bahrein)
 - Prof. Jova Ateljevic PhD, Faculty of Economy, University of Banja Luka, (Bosnia & Herzegovina)
 - Prof. Jove Kekenovski PhD, Faculty of Tourism, UKLO , Bitola (Macedonia)
 - Prof. Jonko Kunchev PhD, University „Cernorizec Hrabar“ - Varna (Bulgaria)
 - Prof. Jelena Stojanovic PhD, High medicine school for professional studies “Hipokrat”, Bujanovac (Serbia)
 - Prof Karl Schopf, PhD, Akademie fur wissenschaftliche forchung und studium, Wien (Austria)
 - Prof. Katerina Belichovska, PhD, Faculty of Agricultural Sciences, UKIM, Skopje (Macedonia)
 - Prof. Krasimir Petkov, PhD, National Sports Academy “Vassil Levski”, Sofia (Bulgaria)
 - Prof. Kamal Al-Nakib PhD, College of Business Administration Department, Kingdom University (Bahrain)
 - Prof. Lidija Tozi PhD, Faculty of Pharmacy, Ss. Cyril and Methodius University, Skopje (Macedonia)
 - Prof. Laste Spasovski PhD, Vocational and educational centre, Skopje (Macedonia)
 - Prof. Lujza Grueva, PhD, Faculty of Medical Sciences, UKIM, Skopje (Macedonia)
 - Prof. Lisen Bashkurti PhD, Global Vice President of Sun Moon University (Albania)
 - Prof. Lence Mircevska PhD, High Medicine School, Bitola, (Macedonia)
 - Prof. Ljubomir Kekenovski PhD, Faculty of Economisc, UKIM, Skope (Macedonia)
 - Prof. Ljupce Kocovski PhD, Faculty of Biotechnical sciences, Bitola (Macedonia)
 - Prof. Marusya Lyubcheva PhD, University “Prof. Asen Zlatarov”, Member of the European Parliament, Burgas (Bulgaria)
 - Prof. Maria Kavdanska PhD, Faculty of Pedagogy, South-West University Neofit Rilski, Blagoevgrad (Bulgaria)
 - Prof. Maja Lubenova Cholakova PhD, Faculty of Public Health and Sport, SWU Neofit Rilski, Blagoevgrad (Bulgaria)
 - Prof. Mirjana Borota-Popovska, PhD, Centre for Management and Human Resource Development, Institute for Sociological, Political and Juridical Research, Skopje (Macedonia)
 - Prof. Mihail Garevski, PhD, Institute of Earthquake Engineering and Engineering Seismology, Skopje (Macedonia)
 - Prof. Misho Hristovski PhD, Faculty of Veterinary Medicine, Ss. Cyril and Methodius University, Skopje (Macedonia)
 - Prof. Mitko Kotovchevski, PhD, Faculty of Philosophy, UKIM, Skopje (Macedonia)
 - Prof. Milan Radosavljevic PhD, Dean, Faculty of strategic and operational management, Union University, Belgrade (Serbia)

- Prof. Marija Topuzovska-Latkovikj, PhD, Centre for Management and Human Resource Development, Institute for Sociological, Political and Juridical Research, Skopje (Macedonia)
- Prof. Marija Knezevic PhD, Academic, Banja Luka, (Bosnia and Herzegovina)
- Prof. Margarita Koleva, PhD, Faculty of Pedagogy, University Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Margarita Bogdanova PhD, D.A.Tsenov Academy of Economics, Svishtov (Bulgaria)
- Prof. Mahmut Chelik PhD, Faculty of Philology, University “Goce Delchev”, Shtip (Macedonia)
- Prof. Marija Mandaric PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjacka Banja (Serbia)
- Prof. Mustafa Kacar PhD, Euro College, Istanbul (Turkey)
- Prof. Marina Simin PhD, College of professional studies in Management and Business Communication, Sremski Karlovci (Serbia)
- Prof. Miladin Kalinic, College of professional studies in Management and Business Communication, Sremski Karlovci (Serbia)
- Prof. Mitre Stojanovski PhD, Faculty of Biotechnical sciences, Bitola (Macedonia)
- Prof. Miodrag Smelcerovic PhD, High Technological and Artistic Vocational School, Leskovac (Serbia)
- Prof. Nenad Taneski PhD, Military Academy “Mihailo Apostolski”, Skopje (Macedonia)
- Prof. Nevenka Tatkovic PhD, Juraj Dobrila University of Pula, Pula (Croatia)
- Prof. Natalija Kirejenko PhD, Faculty For economic and Business, Institute of Entrepreneurial Activity, Minsk (Belarus)
- Prof. Nikolay Georgiev PhD, “Todor Kableshkov” University of Transport, Sofia (Bulgaria)
- Prof. Nikolina Ognenska PhD, Faculty of Music, SEU - Blagoevgrad (Bulgaria)
- Prof. Nedzat Korajlic PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Prof. Nishad M. Navaz PhD, Kingdom University (India)
- Prof. Oliver Iliev PhD, Faculty of Communication and IT, FON University, Skopje (Macedonia)
- Prof. Oliver Dimitrijevic PhD, High medicine school for professional studies “Hipokrat”, Bujanovac (Serbia)
- Prof. Paul Sergius Koku, PhD, Florida State University, Florida (USA)
- Prof. Primoz Dolenc, PhD, Faculty of Management, Primorska University, Koper (Slovenia)
- Prof. Predrag Trajkovic PhD, JMPNT, Vranje (Serbia)
- Prof. Petar Kolev PhD, “Todor Kableshkov” University of Transport, Sofia (Bulgaria)
- Prof. Pere Tumbas PhD, Faculty of Economics, University of Novi Sad, Subotica (Serbia)
- Prof. Rade Ratkovic PhD, Faculty of Business and Tourism, Budva (Montenegro)
- Prof. Rositsa Chobanova PhD, University of Telecommunications and Posts, Sofia (Bulgaria)
- Prof. Rumen Valcovski PhD, Imunolab Sofia (Bulgaria)
- Prof. Rumen Stefanov PhD, Dean, Faculty of public health, Medical University of Plovdiv (Bulgaria)
- Prof. Sinisa Zaric, PhD, Faculty of Economics, University of Belgrade, Belgrade (Serbia)
- Prof. Sasho Korunoski, Rector, UKLO, Bitola (Macedonia)
- Prof. Sashko Plachkov PhD, Faculty of Pedagogy, University Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Sofronija Miladinoski, PhD, University Hadzi Zeka, Peja (Kosovo)
- Prof. Sreten Miladinoski, PhD, Dean, Faculty of Law, MIT University (Skopje)
- Prof. Snezhana Lazarevic, PhD, College of Sports and Health, Belgrade (Serbia)
- Prof. Stojan Ivanov Ivanov PhD, Faculty of Public Health and Sport, SWU Neofit Rilski,

- Blagoevgrad (Bulgaria)
- Prof. Svetlana Trajkovic PhD, High School of applied professional studies, Vranje (Serbia)
Prof. Snezana Stoilova, PhD, High Medicine School, Bitola, (Macedonia)
 - Prof. Stojna Ristevska PhD, High Medicine School, Bitola, (Macedonia)
 - Prof. Suzana Pavlovic PhD, High health – sanitary school for professional studies, Belgrade (Serbia)
 - Prof. Saad Motahir PhD, High School of Technology, Fez (Morocco)
 - Prof. Sandra Zivanovic, PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjacka Banja (Serbia)
 - Prof. Trayan Popkochev PhD, Dean, Faculty of Pedagogy, South-West University Neofit Rilski, Blagoevgrad (Bulgaria)
 - Prof. Todor Krystevich, Vice Rector, D.A. Tsenov Academy of Economics, Svishtov (Bulgaria)
 - Doc. Tatyana Sobolieva PhD, State Higher Education Establishment Vadiym Getman Kiyev National Economic University, Kiyev (Ukraine)
 - Prof. Tzako Pantaleev PhD, NBUniversity , Sofia (Bulgaria)
 - Prof. Tosko Krstev PhD, European Polytechnic University, Pernik (Bulgaria)
 - Prof. Tihomir Domazet PhD, President of the Croatian Institute for Finance and Accounting, Zagreb (Croatia)
 - Prof. Venelin Terziev PhD, University of Rousse, Rousse (Bulgaria)
 - Prof. Violeta Dimova PhD, Faculty of Philology, University “Goce Delchev”, Shtip (Macedonia)
 - Prof. Volodymyr Denysyuk, PhD, Dobrov Center for Scientific and Technological Potential and History studies at the National Academy of Sciences of Ukraine (Ukraine)
 - Prof. Valentina Staneva PhD, “Todor Kableshkov” University of Transport, Sofia (Bulgaria)
 - Prof. Vladimir Lazarov PhD, European Polytechnic University, Pernik (Bulgaria)
 - Prof. Vasil Zecev PhD, College of tourism, Blagoevgrad (Bulgaria)
 - Prof. Venus Del Rosario PhD, Arab Open University (Philippines)
 - Prof. Yuri Doroshenko PhD, Dean, Faculty of Economics and Management, Belgorod (Russian Federation)
 - Prof. Zlatko Pejkov, PhD, Faculty of Agricultural Sciences, UKIM, Skopje (Macedonia)
 - Prof. Zivota Radosavljevik PhD, Dean, Faculty FORCUP, Union University, Belgrade (Serbia)
 - Prof. Zoja Katru PhD, Prorector, Euro College, Istanbul (Turkey)
 - Prof. Zorka Jugovic PhD, High health – sanitary school for professional studies, Belgrade (Serbia)

ORGANIZING COMMITTEE

- Robert Dimitrovski PhD, Faculty of Management, MIT University, Skopje (Macedonia)
- Venelin Terziev PhD, University of Rousse (Bulgaria)
- Maria Kavdanska PhD, Faculty of Pedagogy, South West University Neofit Rilski, Blagoevgrad (Bulgaria)
- Sinisa Zanic, PhD, Faculty of Economics, University of Belgrade (Serbia)
- Snežana Milićević PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjačka Banja (Serbia)
- Evdokia Petkova, South West University “Neofit Rilski”, Blagoevgrad (Bulgaria)
- Marios Miltiadou, PhD, Aristotle University of Thessaloniki (Greece)
- Azra Adjajlic – Dedovic PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Misho Hristovski PhD, Faculty of Veterinary Medicine, Ss. Cyril and Methodius University, Skopje (Macedonia)
- Branko Boskovic PhD, College of Sports and Health, Belgrade (Bulgaria)
- Ana Dzumalieva PhD, South-West University “Neofit Rilski”, Blagoevgrad (Bulgaria)
- Georgi Georgiev PhD, National Military University “Vasil Levski”, Veliko Trnovo (Bulgaria)
- Isa Spahiu PhD, International Balkan University (Macedonia)
- Violeta Dimova, PhD, University “Goce Delcev”, Stip (Macedonia)
- Mirjana Borota – Popovska, Centre for Management and Human Resource Development, Institute for Sociological, Political and Juridical Research, Skopje (Macedonia)
- Izet Zeqiri, PhD, South East European University, Tetovo (Skopje)
- Ekaterina Arabska, PhD, Vasil Levski National Military University, Veliko Tarnovo (Bulgaria)
- Nebojsa Cvetanovski, PhD, MIT University, Skopje (Macedonia)
- Rumen Valcovski PhD, Imunolab Sofia (Bulgaria)
- Miladin Kalinic, College of professional studies in Management and Business Communication, Sremski Karlovci (Serbia)

Stevcho Mecheski	839
TECHNOLOGY AND INNOVATION- HOTEL LOYALTY PROGRAMS	845
Olta Nexhipi.....	845
Arian Dedej.....	845
THE PRODUCT CHILDREN'S ANIMATION - A CONDITION FOR SATISFYING THE NEEDS OF THE MODERN TOURIST.....	849
Hristina Mihaleva.....	849
IMPACT OF THE GLOBAL CRISIS ON THE INVESTMENTS IN TOURISM IN EUROPE AND THE WORLD.....	857
Husnija Bibuljica,	857
STUDY OF THE POSSIBILITIES FOR RECOVERY AND DEVELOPMENT OF THE CRAFTS AND THE ACTIVITIES OF THE COMPANIES IN THE CULTURAL AND CREATIVE SECTOR IN THE MUNICIPALITIES OF SLIVNITSA, DRAGOMAN AND GODECH	863
Plamen Stoyanov	863
THE 2008 WORLD ECONOMIC CRISIS - SOURCE OF SOCIAL ANOMIE AND MANIPULATIVE BASIS FOR THE NEW POLITICIAN SAVIOR BIRTH	869
Martina Pavlova.....	869
CRIMINALISTIC RECONSTRUCTION AS PROCEDURAL ACTION	875
Vladimir Pivovarov.....	875
MANDATORY AUTOMATIC EXCHANGE OF INFORMATION ON TAX - POLITICAL AGREEMENT IN EUROPEAN UNION	881
Lyubka Tzenova.....	881
CASE STUDY: EUROPEAN UNION'S COOPERATION IN EXCHANGING AND PROCESSING E- EVIDENCE.....	887
Ivica Josifovic	887
Zlatko Keskoski	887
MEASURES FOR PREVENTING AND MINIMIZING DISCIPLINARY RESPONSIBILITY ACTIONS OF CIVIL SERVANTS IN THE LOCAL SELF-GOVERNMENT OF THE REPUBLIC OF MACEDONIA	895
Aleksandra Srbinovska – Donchevski	895
Tatijana Ashtalkoska – Baloska.....	895
METHODOLOGICAL FOUNDATIONS OF REGIONALISM	899
Kliment Naydenov	899
КРИВИЧНА ДЕЛА ТЕРОРИЗМА У НОВОМ КРИВИЧНОМ ЗАКОНОДАВСТВУ РЕПУБЛИКЕ СРПСКЕ И ЕВРОПСКИ СТАНДАРДИ.....	903
Miodrag N. Simović.....	903
Dragan Jovašević	903

**CASE STUDY: EUROPEAN UNION'S COOPERATION IN EXCHANGING AND
PROCESSING E-EVIDENCE**

Ivica Josifovic

Faculty of Law, University of Goce Delcev – Stip, ivica.josifovik@ugd.edu.mk

Zlatko Keskoski

Faculty for Security and Detectives, FON University – Skopje, z.kesko@gmail.com

Abstract: We live in an online world. Everything we do is connected with the use internet. The Information and Communication Technology has developed so much and contributed towards economic and social benefit. But, on the other side, terrorists and cybercriminals are using cyberspace for criminal actions. Such problem is not local and for single country; it is global and therefore needs a global approach to tackle such criminal actions. Since 2015, the terrorist attacks in France and Belgium have become synonymous with an increased security threat, influencing the public debate and leading EU and member state's authorities to propose several measures aimed at tackling the issue of increased protection. Among these, the priority given to the fight against terrorism has stressed some specific issues. With criminal activities increasingly moving across borders, the problem of retrieval and use of data on an international basis for crime prevention and investigation of criminal actors has come to the fore. As a starting point, the paper takes into consideration relevant national case studies such as France, Germany and Italy to deepen the understanding of online privacy and the fight against terrorist and criminal activities in each country. The issues of e-evidence and of access to and use of digital information by judicial and police forces for trials are among key points. The first important problem to arise is that of cross border data requests for e-evidence. This apparently simple technical issue triggers a series of problems directly related to sovereignty and the rule of law in the digital age. The Council of Ministers of the EU in June 2016, stressed out the significance of improving the effectiveness of criminal justice in cyberspace. In its conclusions, the Council provides a starting point and the paper seeks to answer several questions: What are the main challenges that EU and member states face today when they collect e-evidence? How are they tackling these issues (explained through case studies)? Can an EU common framework provide solutions to solve these problems? Therefore, law enforcement authorities should be able and supported to effectively conduct investigations against terrorist acts and terrorist groups using the information and communication technology. But, there is an issue of territorial jurisdiction, because of the internet and its no-border nature. Questions arise regarding the data that could be used as evidence in courts and the judicial cooperation, as well as the privacy protection of citizens. The paper concludes that EU should adopt a common framework defining "e-evidence," what is a "service provider" and what it means to be "offering services in the EU." To make judicial cooperation more efficient, the EU should make clear the application of the principle of mutual recognition. Once clear guidelines are established, every single actor in the game must do his part and play according to the same rules. Trust between law enforcement agencies, judicial authorities, users, civil society, service providers, and EU member-states must exist.

Keywords: European Union, cyber-crime, electronic evidence, exchange, process

1. INTRODUCTION

The collection of e-evidence – defined as data that is created, manipulated, stored or communicated by any device, computer or computer system or transmitted over a communication system that is relevant to the judicial process – is becoming more and more relevant in criminal justice to successfully prosecute not only cybercrime but all criminal offences. The EU Council in June 2016 emphasized the need of e-evidence collection and their use in criminal procedures concluding that such an improvement should occur through enhanced cooperation with service providers, reorganization of mutual legal assistance proceedings, and review of the rules to enforce jurisdiction in cyberspace.²⁴³ The mutual recognition principle became a key element in Europe's cooperation in criminal matters and the introduction of the European Investigation Order (EIO) is a significant step forward.²⁴⁴ Basic documents for securing e-evidence throughout member-states are the Council of Europe's Convention on Mutual Assistance in criminal matters,²⁴⁵ The Schengen Convention,²⁴⁶ European Convention on mutual assistance in criminal matters and its protocols.²⁴⁷

²⁴³ Council of the EU, Council Conclusions on Improving Criminal Justice in Cyberspace, Luxembourg, 9 June 2016.

²⁴⁴ Directive 2014/41/EU of 3 April 2014 regarding the European Investigation Order in criminal matters, OJ L 130/1, May 1, 2014.

²⁴⁵ Council of Europe, The European Convention on Mutual Assistance in Criminal Matters, Strasbourg, 20 April 1959.

The paper considers several issues. First, it explains the legislative framework of e-evidence at EU level. Second, it elaborates the digital relations EU develops with its partners, especially relations with the USA regarding e-evidence. Finally, the paper explains three case studies from national authorities of France, Germany and Italy regarding their legislative framework on e-evidence. The three cases studies look into member-state's legislations, law enforcement agencies investigation techniques and tools, relations with service providers and cross border data requests with other EU member states and the USA.

First, in the context of the fight against crime, law enforcement authorities should be fully equipped to effectively conduct investigations to prevent, detect and prosecute using information and communication technologies. In April 2015, the European Agenda on Security set three main security priorities: terrorism, organized crime and cybercrime.²⁴⁸ To investigate crime, competent judicial authorities should be able to enforce jurisdiction in cyberspace and obtain the evidence and information they require. Second, judicial cooperation should also be consolidated to allow national authorities to obtain data when it is found or moves across jurisdictions and stronger cooperation with service providers by concluding agreements or informal arrangements to exchange e-evidence in the context of crime investigations. However, the current international framework is not proving to be working effectively. Mutual legal assistance should be the most common solution for law enforcement authorities to gather cross border e-evidence, but it is turning out to be increasingly problematic. Procedures could take months due to bureaucracy, dual criminality and the absence of arrangements for expeditious actions. Therefore, carefully designed international frameworks might therefore be the best path to follow, instead of adopting domestic measures. Third, privacy should continue to be protected and citizens should not fear that their online data are accessed by authorities regardless of proper legal safeguards. An international framework might be upheld only if all the players involved respect and play according to the same rules. In this context, activities brought by Snowden affair have influenced ongoing discussions on the importance of ensuring privacy in cyberspace. Access to data should occur only in the context of crime investigations and under the safeguards and legal requirements of criminal procedure laws.

2. EUROPEAN JUDICIAL COOPERATION AND E-EVIDENCE IN THE EU

The existing legal framework in European judicial cooperation moves towards the mutual recognition principle in criminal matters, according which every judicial decision shall automatically be accepted in all other member-states and shall have the same or at least similar effect.²⁴⁹ The principle aims at replacing the traditional forms of international cooperation, which are considered to be slow, complicated and insecure. EU was concrete in applying the principle by accepting the European Arrest Warrant in 2002, oriented towards replacement of the multilateral extradition system with enhanced and simplified procedure.²⁵⁰

The judicial cooperation in the EU developed in 1985 through the Schengen Area. With the removal of checks on their internal borders, EU became aware of the need of effective pursue of criminals acting through member-states and anticipated series of court procedures for facilitation and enhancement of investigation in criminal matters. The Schengen acquis established the Schengen Information System for improvement of the efficiency in the fight against serious and organized crime. Interestingly, the Schengen Convention emphasized the importance of pre-trial measures, stressing out that the “data on objects sought for the purposes of seizure or use as evidence in criminal proceedings shall be entered in the Schengen Information System.”²⁵¹

The European Convention for Mutual Assistance in Criminal Matters from May 2000 represents a first major step in judicial cooperation, including the collection of evidence. The Convention regulates relevant points, reaching from wide use of new technologies, including the interception of communications which may be intercepted or directly transmitted to the requesting state or recorded for further transmission. Additionally, it emphasizes the “spontaneous exchange of information”, according which, without a mutual assistance request, national authorities are authorized to exchange information regarding criminal offences.

²⁴⁶ Council of the EU, Council Decision Concerning the Definition of the Schengen Acquis, 20 May 1999, OJ L 176, July 10, 1999.

²⁴⁷ Council of the EU, Council Act establishing the Convention on Mutual Assistance in Criminal Matters between the Member states of the European Union, OJ C 197, July 12, 2000.

²⁴⁸ European Commission, The European Agenda on Security, COM(2015) 185 final, Strasbourg, April 28, 2015.

²⁴⁹ European Commission, Mutual Recognition of Final Decisions in Criminal Matters (COM/2000/495), 26 July 2000.

²⁵⁰ Council of the EU, Council Framework Decision 2002/584/JHA on the European Arrest Warrant, Brussels, 13 June 2002, OJ L 190, July 18, 2002.

²⁵¹ Council of the EU, The Schengen Acquis Integrated in the European Union, OJ L 239/1, September 22, 2000.

The Council's Framework Decision from 2003 on the execution of orders freezing property or evidence²⁵² and the Council's Framework Decision from 2008 on European Evidence Warrant (EEW)²⁵³ are included in the EU's legal frame for guiding the sensitive area of cross-border collection and use of evidence in criminal proceedings. However, e-evidence does not fall neither under the EEW, neither under the Framework Decision on the execution of orders freezing property or evidence.

The Council of Europe is the first to address the potential challenge regarding e-evidence for police and judicial cooperation by adopting the Budapest Convention in 2001.²⁵⁴ The Convention attempts to address the criminal procedure issues regarding information technologies, thereby securing legal frame for providing e-evidence collection. In urgent cases, "expedited means of communication, including fax or e-mail" are understood as accelerators of the evidence collection process, according to Article 25, paragraph 3. More importantly, specific provisions, especially Article 29, authorize "expedited preservation of stored computer data" before formal request on mutual assistance is being made. Further, the Convention in Article 31, paragraph 1, deals with cases of mutual assistance regarding the access to stored computer data "located within the territory of the requested Party", thus enabling, according to Article 32 "trans-border access to stored computer data with consent or where publicly available". In order to speed up the judicial cooperation in criminal matters, the Convention in Article 35, paragraph 1, provides a 24/7 network, in order to ensure the provision of immediate assistance for the purpose of investigations or proceedings. Further, the "production order", from Article 18, also, presents important measure as it covers the applicability of domestic orders outside the territory, such as "to submit specified computer data ... stored in a computer system". However, the Budapest Convention, ratified by 49 states, including 25 EU member-states, remains limited in its extent as it applies only on cybercrime.

In order to secure collection and exchange of e-evidence, it is necessary for the communications and internet providers to make such data available to authorities. After 2004 Madrid attacks, EU sought the importance of controlling this area.²⁵⁵ Seeking harmonization of data retention provision, in March 2006 the EU adopted the Directive on data retention.²⁵⁶ As stipulated in Article 3, it applies on "providers of publicly available electronic communications services or of a public communications network" and, as stipulated in Article 5, only for subscriber and traffic data. Article 6 provides that data retention is left on member-states for a period not shorter than six months and no longer than two years. Finally, as the Preamble states, data should be used exclusively for the purposes of "prevention, investigation, detection and prosecution of criminal offences". Despite the importance of data retention, in April 2014, the Court of Justice annulled the Directive regarding the right to private life and right on protection of personal data.²⁵⁷ According to the Court, the non-discriminate data retention of legal and private persons may constitute a permanent surveillance, directly in opposition of the right on privacy.

While the criminal justice strengthens, EU acknowledged the importance of human rights and rule of law in cyberspace. Considering the need of adaptation of EU legislation for data protection in cyberspace, the EU undertook comprehensive package of reforms in order to secure protection of personal data. Three significant reforms on rules for protection of data are highlighted.

The General Data Protection Regulation, which entered in force in May 2016 and shall start to apply from May 2018, secures a high level of personal data protection and regulates the transfer of personal data for commercial purposes.²⁵⁸ This regulation is complemented by Criminal Law Enforcement Data Protection Directive, which specifically applies on processing personal data in the police and judicial sector.²⁵⁹ This, so-called "Police Directive" shall secure personal data protection transferred for the purposes of e-evidence in criminal investigations. It establishes specific rules for data exchange in the area of prevention, investigation, detection and prosecution of

²⁵² Council of the EU, Council Framework Decision 2003/577/JHA on the Execution in the European Union of Orders Freezing Property or Evidence, 22 July 2003, OJ L 196/45, August 2, 2003.

²⁵³ Council of the EU, Council Framework Decision 2008/978/JHA on the European Evidence Warrant, 18 December 2008, OJ L 350/72, December 30, 2008.

²⁵⁴ Council of Europe, Convention on Cybercrime, Budapest, November 23, 2001.

²⁵⁵ Council of the EU, Declaration on Combating Terrorism, Brussels, 25 March 2004.

²⁵⁶ Directive 2006/24/EC of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks, OJ L 105/54, April 13, 2006.

²⁵⁷ Court of Justice of the EU, Judgement of the Court in Joined Cases C-293/12 and C-594/12.

²⁵⁸ Regulation 2016/679 of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data and repealing Directive 95/46/EC, OJ L 119/1, May 4, 2016.

²⁵⁹ Directive 2016/680 of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and on the Free Movement of Such Data, and repealing Council Framework Decision 2008/977/JHA, OJ L 119/1, May 4, 2016.

crime offences, as well as the execution of crime sentences. When relevant authorities face with different tasks then these mentioned, data transfer falls under the frame of the Regulation. The Directive does not consider the police and judicial cooperation with third states, as it applies only on transferred data available among member-states. In this case, member-states remain capable to conclude bilateral agreements for data transfer in criminal proceedings. For other activities, such as national security, data transfer does not follow the General Data Protection Regulation or the Police Directive. In these cases, member-states apply domestic rules.

With the General Data Protection Regulation and the Police Directive in place, EU turns its attention on reformation of the Directive on Privacy and Electronic Communications (e-Privacy Directive).²⁶⁰ This Directive establishes a strong prohibition for interception and record of electronic communications and retention of combined metadata for those communications. Also, Article 15 of the e-Privacy Directive establishes the limitations in EU member-states discretion to derogate from those commitments for law enforcement purposes. The e-Privacy Directive, aligned with the General Data Protection Regulation, shall be a central part of the EU thinking for acceptable mixing with the online privacy in the name of providing the law and public safety.

Existing EU instruments show fragmented legal framework in the area of judicial cooperation in criminal matters. Besides this background, the EIO, as a new instrument, is expected to be transferred in member-state's legal frame during 2017 in order to facilitate the judicial cooperation in criminal matters. Finally, the purpose of the EIO is to replace most of the existing instruments in this area, thus moving from mutual legal assistance to the mutual recognition principle. However, it needs to be stressed out that the territorial range of the Directive remains limited; not all member-states agreed upon the implementation.

Two major parts of the EIO Directive could be identified. The first section, Chapters from I to III, is facing general rules for support of the mutual recognition principle in the area of collection and exchange of e-evidence. The second section, Chapters from IV to VI, contains specific provisions for certain investigation measures, such as temporary transfer of evidence, videoconference hearing information on banking and other financial operations, undercover investigations and interceptions. According Article 1, paragraph 1 of the EIO, a state may issue such order regarding one or several specific investigation measures, which need to be executed in another state including, if possible, exchange of evidence. EIO in Chapter V includes collection or transfer of e-evidence, exclusively understood as electronic data received by interception of communications. As the EIO does not consider the collection or exchange of e-evidence which are not acquired through interception, call on data retention has not been made. Also, mandatory periods for recognition or execution are included; the decision for recognition or execution of the EIO, according Article 12, paragraph 3, must be taken no later than "30 days after the receipt of the EIO", while investigations, according paragraph 4, need to be undertaken by the executing state "not later than 90 days". Finally, grounds for refusal are clearly stipulated in Article 11 where, in addition to traditional restrictions concerns have been made on "national security interests".

3. CASE STUDIES ON E-EVIDENCE: FRANCE, GERMANY AND ITALY

Terrorist attacks in Europe influenced the change of thinking regarding cybercrime, especially in Germany, France and Italy. These states started empowering their national security and law enforcement authorities with tools for effective investigations of organized crime and terrorism in cyberspace.

The terrorist attacks changed the security and legislative landscape in France, where the emergency state is still in force. The new Antiterrorism law is adopted in July 2016 and anticipates new simplified conditions from computer seizure to the level of considering the balance between security and civil rights. Although, mainly considered as prevention of terrorism, the computer seizure is allowed for targeting individuals that represent threat for national security. In Germany, new version of Remote Communication Interception Software was approved by the Ministry of Interior in 2016 and new antiterrorism law is adopted in August 2016, expanding the competences of law enforcement and intelligence agencies. The software takes the surveillance of communications one step further and enables monitoring computer communications and other electronic devices before communications and data are encrypted. The software is legally limited to the interception of real-time communication, messaging software, as well as email conversations. Moreover, the Ministry of Interior is planning to establish a new agency focused on the decryption of communications. In Italy, the encryption and the introduction of Trojan horses for interception of communications in the Criminal Procedure Code animated parliamentary discussions and public debates on the possibility of exploiting these new instruments to prosecute criminals in cyberspace.

France, Germany and Italy have similar legislative framework which determines how the investigations are conducted in cyberspace. These are privacy data protection laws, criminal laws, data retention policies and

²⁶⁰ Directive 2002/58/EC of 12 July 2002 Concerning the Processing of Personal Data and the Protection of Privacy in the Electronic Communications Sector, OJ L 201/37, July 31, 2002.

electronic communication laws. Also, these states have privacy protection laws and data control and limitations how private data and other information are transferred to public or private organizations. The level of data protection in France is considered to be highly enough; in Germany privacy is protected by the Constitution and the Federal Data Protection Act; the Italian Privacy Law is an important legislation that intervenes in order to assess the effects of new potential harmful provisions on citizen's privacy.

Regulations and procedures that govern how e-evidences are collected and used in trials are evident in different criminal and criminal procedure laws. Still, some elements need to be indicated: these states lack of proper definition on e-evidence; while the German and French law puts in details the use of malwares in criminal investigations, the Italian criminal procedure law makes no such reference; there are some commonalities across legislations regarding the fight against cybercrime and references on integrity and data originality, emerging from the Budapest Convention.

These states also have data retention policies whose conditions vary more or less significantly. In France, data retention is predicted for a period of one year. In Germany, a new data retention law entered in force in October 2015 and forced providers to return traffic data in period up to 10 weeks. In Italy, a new law obligates providers to return all telephone and electronic communications traffic data until June 2017.

What it needs to be noticed from such designated legislation is the existence of uncertainties regarding who should be subject to it and whether legislation is being effectively enforced. Although the French law forces domestic internet service providers to return data in order to confront with criminal investigations, the French justice allowed national authorities to send formal requests to international service providers. In Germany, domestic and international service providers must cooperate with national authorities; if the provider refuses, it may be fined up to 100.000 euro. It is important to stress out that the data retention policies are provisions in the electronic communication laws of France and Germany, therefore the insecurity created by the absence of proper definition also reflects on data retention policies. In Italy, according the Electronic Communication Law, those authorized to secure connection or electronic communication services are bound to cooperate with national authorities and to secure compulsory services, including interception of communications.

4. CONCLUSION

EU put forward a series of instruments for strengthening the judicial cooperation in criminal matters. In this sense, the mutual recognition principle is a basic instigator of judicial cooperation and advantages rely on mutual trust of legal systems for speedily enforcement of judicial decisions. For purposes of securing and acquiring e-evidence, the EIO is a significant step in two fronts; first, it creates a harmonized instrument regulating the collection and exchange of evidence, including data from interceptions; second, it represents a significant guide for development of the mutual recognition principle, although not in every cross-border scenario in which interception could be necessary.

EU's attempt to systematize collection of evidence may not deliver the complete harmonization of collection and exchange of e-evidence in crime investigations. Investigative powers and rules of criminal procedure, even among states with similar legal systems, may differ from state to state. Therefore, it may happen that the e-evidence, acquired according the rules of one legal system not to be appropriate to create reliable ground for decision-making in other legal system. With no comprehensive legal frame, defying specific standards for procedures and modalities for collection and exchange of e-evidence, member-states tend to act differently, mostly on case by case. Thus, acquiring electronic evidence remains governed by national law and national criminal procedure.

In such complex image, the 2001 Convention on Cybercrime remains leading international and legal frame for prosecuting cybercrime. With its provisions which enable expeditiously actions, the Convention in some cases may offer rapid and efficient regime or international criminal justice, thus responding to the collection of e-evidence issue. Undoubtedly, the Budapest Convention, which enables authorities to secure computer data in specific criminal investigations, contributed for strengthening the cooperation in the fight against cybercrime. However, the Convention remains limited in its extent, as it applies only on evidence leading towards conviction of computer related crime. Further, relying mostly on mutual legal assistance, instead on mutual recognition or direct trans-border access, it is criticized for general non-efficiency and especially obtaining e-evidence. Therefore, e-evidence collection in cyberspace is still dependant on voluntary cooperation among authorities or on complicated procedures for mutual legal assistance.

EU member-states – France, Germany and Italy – share significant legislation which is vital for judicial cooperation in criminal matters. Further, the Budapest Convention, which is not EU legislation, but is ratified by 25 member-states adds additional layer of commonality. A joint Franco-German declaration from August 2016 offers some other insights of possible ways for strengthening the judicial cooperation and eventual EU level

harmonization. Besides the identification of solutions for pursuing suspicious terrorists who communicate by encrypted means, Ministers of interior of France and Germany call on the European Commission to propose new legislation that would force communication and internet providers to cooperate with judicial authorities of the state where they offer its services.

There is a large part of common characteristics among EU member-states and there is a solid ground for common approach but it is far from being definite. Rules regarding collection and exchange of e-evidence in EU and between member-states and third states still rely on complicated mutual legal assistance agreements. In this regard, authorities in France, Germany and Italy agree on the need of processes at EU level for enabling effective cyberspace investigations. This could be preferred by the member-state's attempts to empower their investigation powers with extraterritorial effect, potentially putting overseas and multination providers in difficult jurisdictional situation. Harmonized, multinational agreement on the scope of powers and minimal protection, shall secure clear and transparent action area.

Once guidelines are clearly set, every single actor must do its share and play according the same rules. The trust among law enforcement agencies, judicial authorities, users, civil society, service providers and EU institutions must complete the process. All parties must acknowledge that this kind of trust is heavy to build, but easy for destruction. Rejecting the needs of different interested parties may only increase the conflict and instead of antagonizing the "private vs. security", all actors must dedicate on clear frameworks and to work together on their application.

REFERENCES

- [1] Agreement between the United States of America and the European Union on the Protection of Personal Information relating to the Prevention, Investigation, Detection, and Prosecution of Criminal Offences, 2 June 2016.
- [2] Agreement on Mutual Legal Assistance between the European Union and the United States of America, Washington, 25 June 2003.
- [3] Council Decision 2009/820/CFSP of 23 October 2009 on the conclusion on behalf of the European Union of the Agreement on extradition between the European Union and the United States of America and the Agreement on mutual legal assistance between the European Union and the United States of America OJ L 291, November 7, 2009.
- [4] Council of Europe, Convention on Cybercrime, Budapest, November 23, 2001.
- [5] Council of Europe, The European Convention on Mutual Assistance in Criminal Matters, Strasbourg, 20 April 1959.
- [6] Council of the EU, Council Act establishing the Convention on Mutual Assistance in Criminal Matters between the Member states of the European Union, OJ C 197, July 12, 2000.
- [7] Council of the EU, Council Conclusions on Improving Criminal Justice in Cyberspace, Luxembourg, 9 June 2016.
- [8] Council of the EU, Council Decision Concerning the Definition of the Schengen Acquis, 20 May 1999, OJ L 176, July 10, 1999.
- [9] Council of the EU, Council Framework Decision 2002/584/JHA on the European Arrest Warrant, Brussels, 13 June 2002, OJ L 190, July 18, 2002.
- [10] Council of the EU, Council Framework Decision 2003/577/JHA on the Execution in the European Union of Orders Freezing Property or Evidence, 22 July 2003, OJ L 196/45, August 2, 2003.
- [11] Council of the EU, Council Framework Decision 2008/978/JHA on the European Evidence Warrant, 18 December 2008, OJ L 350/72, December 30, 2008.
- [12] Council of the EU, Declaration on Combating Terrorism, Brussels, 25 March 2004.
- [13] Council of the EU, The Schengen Acquis Integrated in the European Union, OJ L 239/1, September 22, 2000.
- [14] Court of Justice of the EU, Judgement of the Court in Joined Cases C-293/12 and C-594/12.
- [15] Directive 2016/680 of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and on the Free Movement of Such Data, and repealing Council Framework Decision 2008/977/JHA, OJ L 119/1, May 4, 2016.
- [16] Directive 2002/58/EC of 12 July 2002 Concerning the Processing of Personal Data and the Protection of Privacy in the Electronic Communications Sector, OJ L 201/37, July 31, 2002.

- [17] Directive 2006/24/EC of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks, OJ L 105/54, April 13, 2006.
- [18] Directive 2014/41/EU of 3 April 2014 regarding the European Investigation Order in criminal matters, OJ L 130/1, May 1, 2014.
- [19] European Commission, European Commission Launches EU-U.S. Privacy Shield: Stronger Protection for Transatlantic Data Flows, Brussels, 12 July 2016.
- [20] European Commission, Mutual Recognition of Final Decisions in Criminal Matters (COM/2000/495), 26 July 2000.
- [21] European Commission, The European Agenda on Security, COM(2015) 185 final, Strasbourg, April 28, 2015.
- [22] Regulation 2016/679 of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data and repealing Directive 95/46/EC, OJ L 119/1, May 4, 2016.