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REGIONAL TRAINING ON CYBERCRIME AND DIGITAL EVIDENCE

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Setting the scene: cyberspace, criminal justice and electronic evidence

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PLAN

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2) INTERNATIONAL DIMENSION OF CYBERCRIME

3) INTERNATIONAL AND EUROPEAN LEGAL FRAMEWORK - COOPERATION

4) ELECTRONIC EVIDENCE

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1. INTRODUCTION CONTEXT

- **Exponential growth internet: 47% global population (3.8 billion)**

- **5 years of one's life on social media**

- **Cost of cybercrime:$2.1 trillion USD globally by 2019**

- **80% cybercrime acts: origin in some form of organised crime (online black markets, computer infection, harvesting of personal and financial data**

- **Terrorist: propaganda, raise funds, recruit, plan attacks, share information.**

- **Electronic evidence, important info on suspects, associates and what they communicate**

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Cyber technology creates a totally different world

Cyber space / activity is borderless - justice is territorial

1. ***Criminal justice practitioners must adapt – reset their mind***

2. ***Judicial authorities should posses the IT, knowledge and procedures to function and counter crime in cyberspace***

3. ***Governance must reform the criminal justice system, law and procedures***

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Cybercrime causes important damages, endangers and affects:

- **The right to private life and the protection of personal data**
- **Property of citizens and industry,**
- **Dignity and integrity of individuals and in particular children**
- **Freedom of expression, media, civil society organisations and individuals**
- **Democracy - governments, parliaments and other democratic institutions as well as public infrastructure**
- **Information and communication technologies are misused for xenophobic and racist purposes and contribute to radicalisation and terrorism,**
- **Threatens international peace and stability**

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Definition of cybercrime

(EuroMed Justice Legal and Gap ana Analysis on Cybercrime)

Cybercrime, or computer related crime, is a crime that involves a computer and a network (1).
A computer may have been used in the commission of a crime, or it may be the target (2).
The network will consist of more than two computer systems and can be a local network or a wider area network.

(1) R. Moore (2005) Cyber crime: Investigating High-Technology Computer Crime
(2)Warren G. Kruse, Jay G. Heiser (2002) Computer forensics: incident response essentials

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A dangerous path

TENSIONS
between the cross-border internet and territorial national jurisdictions

UNCERTAINTY
about applicable law(s) and norms in cyberspace, and their enforceability

LEGAL CODIFICATION RACE
uncoordinated actions producing negative unintended consequences

HIGH COSTS
for the digital economy, cyber-security and human rights

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Three competing objectives

- **FIGHT ABUSES AND CRIME**
- **PROTECT / PROMOTE HUMAN RIGHTS AND RESPECT DUE PROCESS**
- **ENABLE THE DIGITAL / CLOUD, IoT, Blockchain, ECONOMY**

Reconciling them is a major challenge …
but necessary

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2. INTERNATIONAL DIMENSION OF CYBERCRIME.

SOME FACTS

- **More than 1/2 of all criminal investigations today include a cross-border request to obtain electronic evidence**

- **Electronic evidence in any form is relevant in around 85% of total (criminal) investigations**

- **Almost 2/3 of crimes where electronic evidence is held in another country cannot be properly investigated or prosecuted, mainly due to the time it takes to gather such evidence or due to fragmentation of the legal framework**

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2. INTERNATIONAL DIMENSION OF CYBERCRIME

KEY ISSUE

Due to the global use of internet, electronic communication tools and applications, criminal investigations have to strongly rely on electronic data, digital intelligence or evidence which is often cross-jurisdictional.

the criminal activity could be located in one single country but data are stored outside or the SPs are located outside the investigating country

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2. INTERNATIONAL DIMENSION OF CYBERCRIME

COOPERATION BETWEEN STATES

- **Effective investigation and prosecution of cybercrime: close cooperation between States**
- **Present system of MLA: complex, burocratic, length delays**
- **Not resonates with quick nature cybercrime, where internet has no borders**
- **Jurisdictional issues ref cloud computing: where to transmit MLAR**
- **Vital: to set up procedures for quick responses to emergency incidents, preservation of evidence and MLAR**

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3) INTERNATIONAL AND EUROPEAN LEGAL FRAMEWORK - COOPERATION

- **UN Conventions and SC Resolutions (2322 (2016), 2331 (2016) and 2341 (2017)**
- **The 2001 Convention on Cybercrime (known as the Budapest Convention) and its *Additional Protocol, concerning the criminalisation of acts of a racist and xenophobic nature committed through computer*.**
- **Arab Treaty on Combating Information Technology Offences 2010**
- **African Union Convention on Cyber Security and Personal Data Protection 2014**
- **European Union**
- **USA Cloud Act**

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3) INTERNATIONAL AND EUROPEAN LEGAL FRAMEWORK - COOPERATION

Budapest Convention

- **First international criminal justice treaty on crimes committed via the internet and other computer networks**
- **Any country can join. 71 (parties, signatories or invited to accede)**
- **Criminalising conduct: gives definitions of cybercrime offences (illegal access and interception, system and data interference, misuse of devices, child pornography, …)**
- **Procedural tools: set standard procedures for investigation and prosecution on national level; puts obligations**
- **International cooperation: procedural provision for international cooperation, police-to-police and judicial. 24/7 points of contact.**

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3) INTERNATIONAL AND EUROPEAN LEGAL FRAMEWORK - COOPERATION

European Union

New legal framework in progress (since April 2017):

- **expands the scope of offences, including transactions through virtual currencies;**
- **introduces new online criminal offences;**
- **clarifies the scope of jurisdiction; ensure the rights of cybercrime victims**
- **improves EU-wide criminal justice cooperation**
- **Obliges SPs to designate a representative in the EU**
- **protection of personal data: safeguards for SPs and persons whose data is being sought will benefit from various safeguards and be entitled to legal remedies;**

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3) INTERNATIONAL AND EUROPEAN LEGAL FRAMEWORK - COOPERATION

European Union

European Preservation Order **- a judicial authority may request to a Service Provider (SP) or its legal representative in another EUMS to preserve specific data in view of a subsequent request to produce this data via mutual legal assistance, a European Investigation Order or a European Production Order**

European Production Order **- a judicial authority may obtain electronic evidence (such as emails, text or messages in apps, information to identify a perpetrator) directly from a SP or its legal representative in another EU MS, which will be obliged to respond within 10 days, and within 6 hours in cases of emergency (note: 120 days EIO or 10 months MLA)**

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3) INTERNATIONAL AND EUROPEAN LEGAL FRAMEWORK - COOPERATION

USA CLOUD ACT

- **CLOUD Act March 2018: Clarifying Lawful Overseas Use of Data Act**
- **US service providers are obliged to comply with US orders to disclose *content data* regardless of where such data are stored**
- **Possibility of bilateral agreements on data sharing with a limited number of countries, to avoid conflicts and to enable them to ask Internet and Cloud Service Providers to provide (limited categories of) data stored in the United States.**
- **One of the conditions: respect by the contracting countries of human rights requirements set in U.S. law.**

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4) ELECTRONIC OR DIGITAL EVIDENCE

DEFINITION

Electronic Evidence **is any data resulting from the output of an analogue device and/or a digital device of potential probative value that are generated by, processed by, stored on or transmitted by any electronic device.**

Digital Evidence **is that electronic evidence which is generated or converted to a numerical format.**

Summary**: electronic or digital evidence is electronic or digital data that can be used to help establish (or refute) whether a crime has been committed**

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4) ELECTRONIC OR DIGITAL EVIDENCE

CAPTURING DATA FROM INTERNET: CHALLENGES

- ***Main challenge: [extra]Territoriality.***
- **Borderless nature of internet & communication technologies**
  - **Where is the information?**
  - **Who has custody of the information?**
  - **Anonymity of the authors.**
  - **Identification of the perpetrators – voice and face recognition**
- **Fast developments in technologies**
- **Encryption and difficulty of extraction of evidence**
- **Evidence are volatile**

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4) ELECTRONIC OR DIGITAL EVIDENCE

CAPTURING DATA FROM INTERNET: CHALLENGES (2)

- **How to balance between the necessity to investigate and the right to privacy, freedom of expression, protection of witnesses or victims**
- **Involvement of organized crime and the increasing professionalism of criminals**
- **Preservation of the integrity of evidence to assure admissibility in court. What can be done to preserve the evidence?**
- **Obtaining the data from third parties**
- **Volume of data**
- **Shortcomings of national legislation - gaps in international cooperation**

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4) ELECTRONIC OR DIGITAL EVIDENCE

BASIC CATEGORIES OF E-EVIDENCE REQUESTED

1) STORED ELECTRONIC EVIDENCE: Information that is already stored on the servers of the Internet Services Providers (ISP), before the request (MLA or exchange of information) :

- **Basic Subscriber Information (BSI) – contains the name of the subscriber/user and may include how long the subscriber has used that specific service and the IP address of the first login**
- **Traffic Data (or transactional information/data) showS when users logged into their account, who they sent a message to, when they sent it and where they sent it from**
- **Content Data - the body or text of an email, message,…**

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4) ELECTRONIC OR DIGITAL EVIDENCE

BASIC CATEGORIES OF E-EVIDENCE REQUESTED

2) REAL TIME COMMUNICATION

Information that is no yet stored on the servers, but that investigators and prosecutors hope to obtain in real time, for instance the time (when) and the location (from where) a terrorist logs in to his/her account.

- **Traffic Data - Interception of who a subject is contacting and where from (IP address)**
- **Content Data - Interception of the body or text of an email message, blog or post**

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4) ELECTRONIC OR DIGITAL EVIDENCE

4 WAYS OF CROSS-BORDER ACCESS TO E-EVIDENCE

1. **Through formal cooperation channels between the relevant authorities, usually through *mutual legal assistance* (*European Investigation Order within EU*), or *police-to-police cooperation*;**

2. **Through *direct cooperation* between law enforcement authorities of one country and service providers whose headquarters are in another country, either on a *voluntary or mandatory basis*; notably service providers established in the United States (U.S.) and Ireland reply directly to requests from foreign law enforcement authorities on a voluntary basis, as far as the requests concern *non-content data;***

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4) ELECTRONIC OR DIGITAL EVIDENCE

4 WAYS OF CROSS-BORDER ACCESS TO E-EVIDENCE

3. Through *direct access* (on a computer, smartphone or other device) as allowed by a number of national laws.

4. Capturing evidence from the Internet (web) - **social media and online video and image sharing**

All four channels raise issues:

- **time: national request takes a few days versus request to USA takes 10 months on average, requires significant ressources, and evidence is often outdated or too late.**
- **Amount of requests received by US SPs: 100.000 requests**

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THANK YOU!!

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