

NEW CHALLENGES FOR BORDER SECURITY IN THE CYBERSPACE

PRESENTATION FOCUS:

- CYBER AND SECURITY SYSTEM (INFRASTRUCTURE)
- NEW TRENDS OF CYBERCRIME
- CYBER AND BORDER SECURITY
- THE IMPORTANCE OF EFFECTIVE TOOLS





WHAT IS CYBERSECURITY



Cyber Security Law, Law No. (16) of 2019 (Hashemite Kingdom of Jordan)

- <u>Cyber Security</u>: The measures taken to protect information systems and networks and critical infrastructures from Cyber Security incidents and the ability to return them to their running order and continuation; notwithstanding whether those were accessed without authorization, by misuse or as a result of failing to follow security measurers or being subject to deception leading thereto.
- Cyber Security Incident: The act or attack that represents a risk to data, information, Information Systems, Internet, or infrastructure related thereto and requires a response to suspend or to minimize the consequences or effects thereof.
- <u>Cyber Security Operations</u>: A set of procedures related to the management, monitoring and discovery of Cyber Security incidents and the threats within Cyberspace and place response plans thereto and the application thereof.

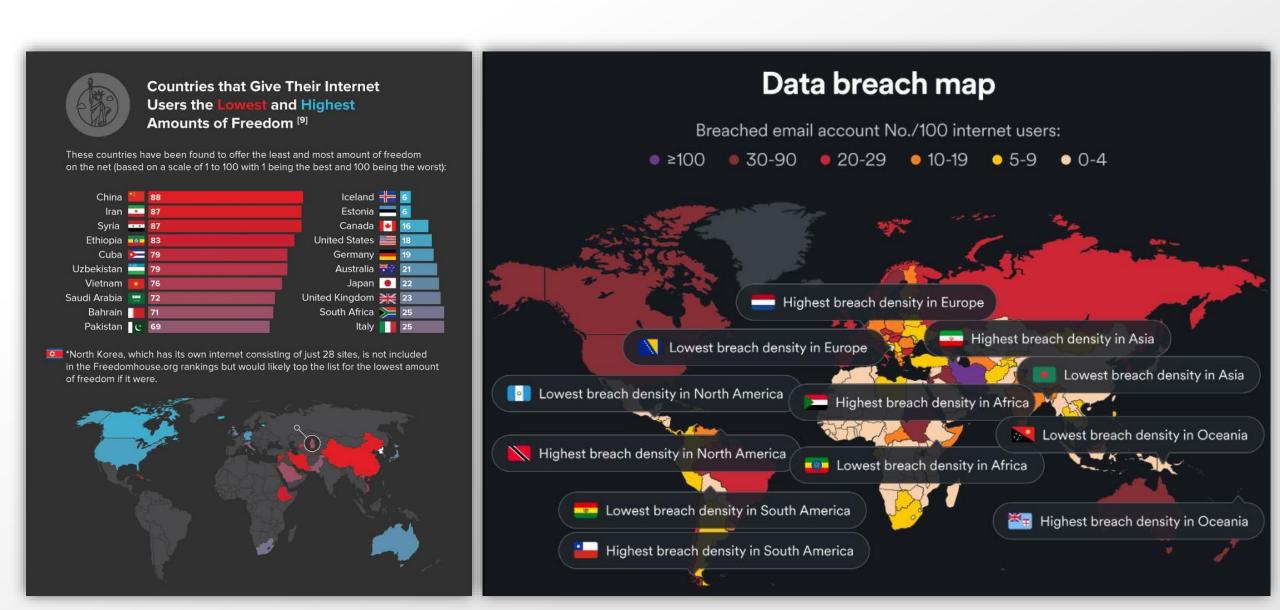


WHAT IS CYBERCRIME

- Cyber-dependent crime is any criminal activity that can only be committed using computers, computer networks or other forms of information communication technology (ICT). Such crimes are typically directed at computers, networks or other ICT resources. It includes the creation and spread of malware, hacking to steal sensitive personal or industry data, denial of service attacks to cause financial and/or reputational damage and other criminal-activities.
- Cyber-dependent crime causes significant financial loss to businesses, private citizens and the public sector each year through payments for ransomware, incident recovery costs and costs for enhanced cyber-security measures. Attacks to critical infrastructure have a significant impact and can potentially entail severe consequences, including loss of life.

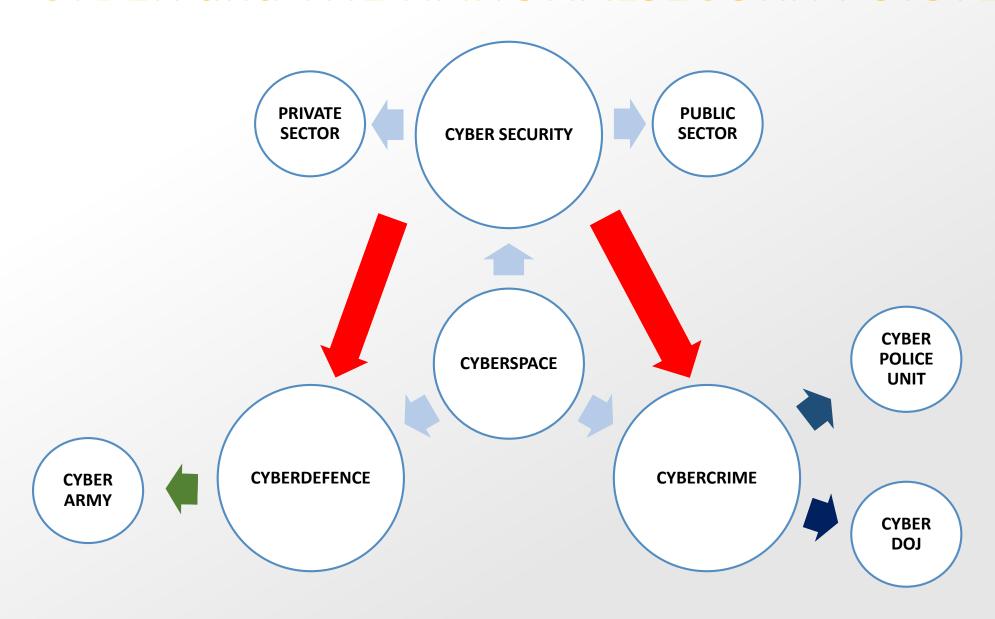


CYBERCRIME IS GROWING





CYBER and THE NATIONALSECURITY SYSTEM





CYBERCRIME TRENDS 2020 - 2021

- RANSOMWARE ATTACKS
- CYBERCRIME AS A SERVICE
- THE IMPORTANCE OF EFFECTIVE TOOLS
- CYBER AND BORDER SECURITY
- TRACING VIRTUAL CURRENCY









RANSOMWARE ATTACKS

- CRITICAL INFRASTRUCTURE and IMPORTANT INFORMATION SYSTEMS
- PUBLIC SECTOR, HEALTH CARE, TRANSPORT ...
- PRIVATE SECTOR
- HYBRED THREAT and IRREGULAR WARFARE
- NATIONAL and INTERNATIONAL TERRORISM
- BORDER SECURITY SYSTEMS



CYBERSPACE and CYBERCRIME AS A SERVICE

- POLITICAL INSTRUMENT ACTION OF FOREIGN POWER CYBER ARMY
- ORGANIZED CRIME INVOLVED IN CYBERSPACE FRAUDS
- DEZINFORMATION CAMPAIGNS
- PROMOTION OF MIGRATION
- HATE CRIME and HATE SPEACH





EFFECTIVE TOOLS AGAINST CYBER THREATS

- COMPUTER EMERGENCY RESPONSE TEAMS GOV CERT
- STRONG CRISES MANAGEMENT SYSTEM
- INTELLIGENCE, LAW ENFORCEMENT and JUSTICE (COOPERATION)
- INTERNATIONAL COOPERATION
- STRATEGIC COMMUNICATION
- CREATE EFFECTIV LAW



67+16 MEMBER STATES — BUDAPEST CONVENTION

Benin

Brazil

Burkina Faso

Côte d'Ivoire

Ecuador .

MEMBERS



OBSERVERS Fiji Guatemala South Africa

Timor-Leste

Tunisia

Vanuatu

Trinidad and Tobago

Ireland

Mexico

New Zealand



G7 24/7 HTC NETWORK

- the other Contact Points Network but without any international convention
- voluntary membership
- member state has to comply with basic conditions -24/7 service, English language, technical and legal knowledges
- primarily for exchanging of information
- request for data preservation is possible but not with the same legal force as according to the international convention (Budapest)
- some of countries are only members of the $G7\ 24/7$ but not members of "the Budapest Convention"

84 MEMBERS OF THE G7 24/7 HTC NETWORK

- Albania
- Argentina
- Armenia
- Australia
- Austria
- Azerbaijan
- Bangladesh
- Republic of Belarus
- Belgium
- Bosnia and Herzegovina
- Brazil
- Bulgaria
- Canada
- Chile
- Colombia
- Republic of Congo
- Costa Rica
- Croatia
- Czech Republic
- Denmark
- Dominican Republic
- Republic of El Salvador

- Estonia
- Fiji
- Finland
- France
- Germany
- Ghana
- Guatemala
- Hong Kong
- Hungary
- India
- Indonesia
- Israel
- Italy
- Ivory Coast
- Jamaica
- Japan
- Kazakhstan
- Kenya
- Republic of Korea
- Liechtenstein
- Lithuania
- Luxembourg

- Macedonia
- Malaysia
- Malta
- Mauritius
- México
- Republic of Moldova
- Morocco
- Myanmar
- Namibia
- The Netherlands
- New 7ealand
- Nigeria
- Norway
- Pakistan
- Panamá
- Papua-New Guinea
- Paraguay
- Peru
- The Philippines
- Portugal
- Romania
- Russia

- Senegal
- · Republic of Serbia
- Singapore
- South Africa
- Spain
- Surinam
- Sweden
- Taiwan
- Thailand
- Kingdom of Tonga
- Trinidad and Tobago
- Tunisia
- Turkey
- Ukraine
- United Kingdom
- United States
- Vietnam
- Zambia

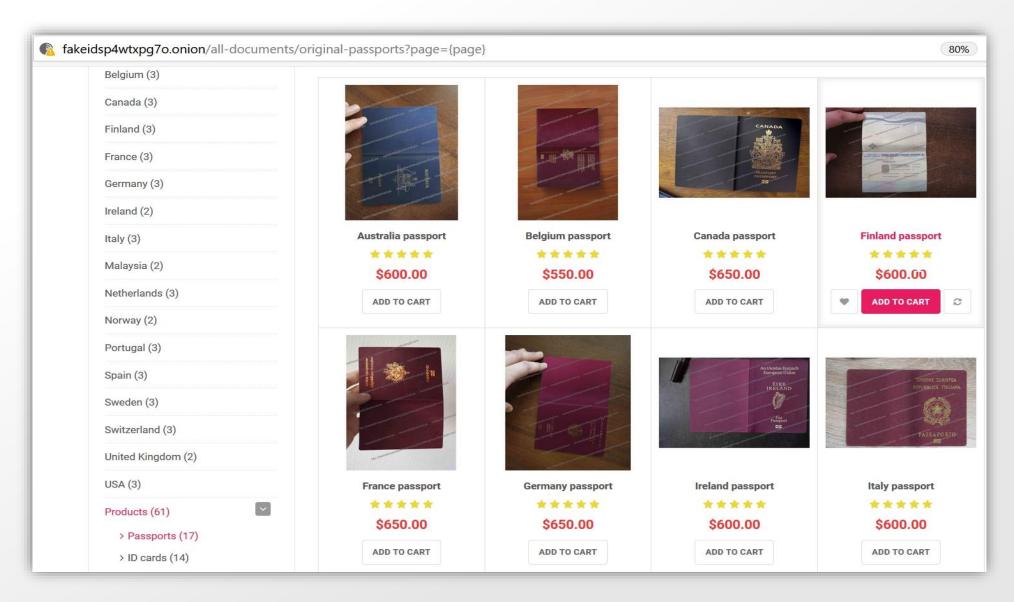


CYBERCRIME - BORDER SECURITY

- THE USE OF CYBER AS A TOOL FOR ILLEGAL ACTIVITIES:
 - > COMMUNICATION (P2P, PGP, PRIVATE NETWORKS, SOCIAL NETWORKS,)
 - > THE USE O CRYPTOCURRENCIES TO TRANSFER HUGE AMOUNTS OF MONEY ACROSS THE COUNTRIES
 - > USING DARKWEB TO GET ILLEGAL GOODS (FAKE PASSPORTS, CREDIT CARDS, DRUGS, GUNS ...)

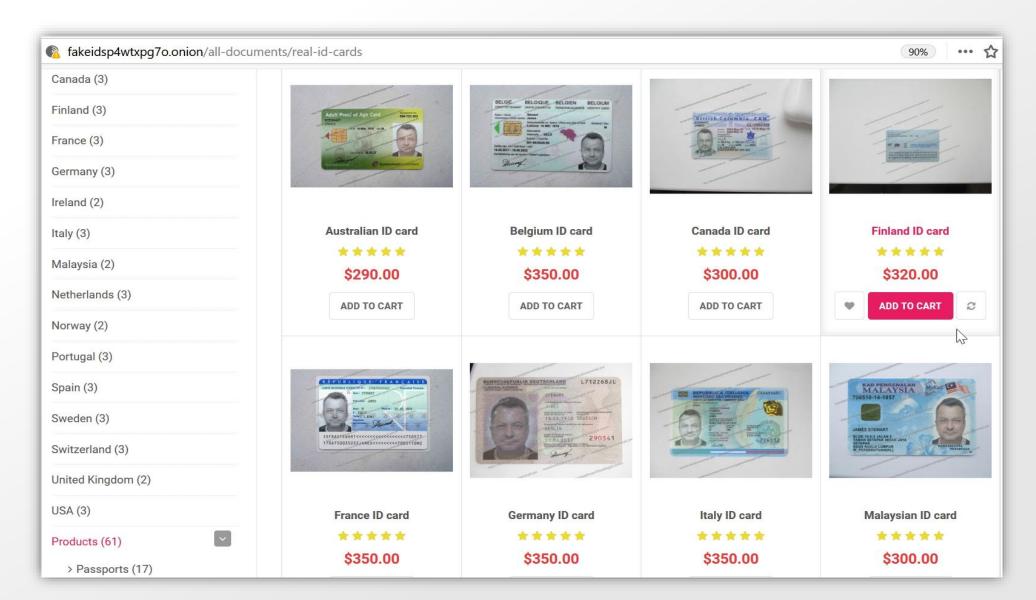


DARKWEB - PASSPORTS



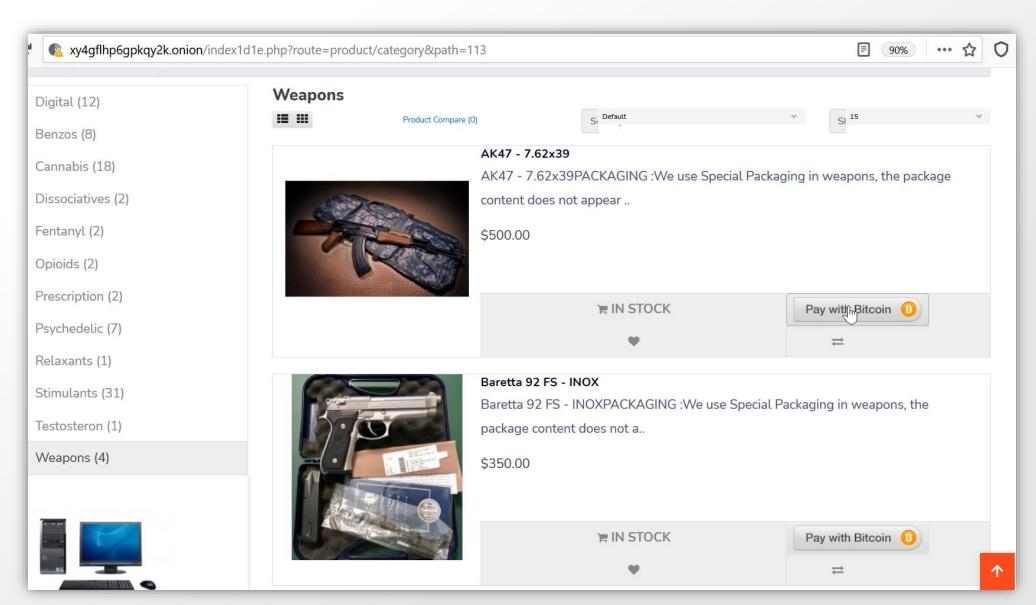


DARKWEB - ID CARDS





DARKWEB – GUNS



SUPPORT OF TERRORIST GROUPS





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CYBERCRIME and MIGRATION

PEOPLE AS A COMMODITY:

- > MIGRANT SMUGGLING MAY ENTAIL LAND, SEA OR AIR TRANSPORTATION AND OFTEN INVOLVES THE USE OF FRAUDULENT DOCUMENTS, INCLUDING IDENTITY DOCUMENTS OR FRAUDULENT VISAS.
- > SOPHISTICATED DIGITAL TECHNOLOGIES AND THE WIDESPREAD USE OF SOCIAL MEDIA AND ENCRYPTED COMMUNICATIONS WILL CREATE OPPORTUNITIES FOR MIGRANT SMUGGLERS TO PROPAGATE THEIR SERVICES, TO COORDINATE AMONG EACH OTHER AND RECRUIT VICTIMS, ELUDING LAWENFORCEMENT DETECTION.
- > THE USE OF CRYPTOCURRENCIES BY SMUGGLING NETWORKS HAS BEEN RECENTLY REPORTED AND MAY INCREASE IN THE FORESEEABLE FUTURE.



LESSONS LEARNED

HOW TO COMBAT CYBERCRIME:

- > HAVE A NATIONAL STRATEGY WITH A CONCEPTION THAT IS A PART OF THE NATIONAL SECURITY
 SYSTEM AND CRISIS MANAGEMENT
- > STRONG COOPERATION BETWEEN THE HOMELAND SECURITY AND PRIVATE SECTOR BUILD TRUST
- > STRATEGIC COMMUNICATION AND INFORMATION SHARING BETWEEN THE AUTHORITIES IN CHARGE OF CYBERSECURITY, CYBERCRIME AND CYBERDEFENCE
- > NATIONAL AND INTERNATIONAL COMMUNICATION



TRACE solutions enable Law Enforcement Agencies to detect and combat money-laundering operations and financing of *organised crime* and *terrorism* by increasing the efficiency of information sharing.

TRACE project addresses this issue by delivering a modular open-source framework for money-laundering investigations which can be tailored to meet law enforcement agencies' needs.

It will enable investigators to scrape data in any given language, analyse it and visualise the results.

Conclusion



THANK YOU FOR YOUR ATTENTION

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QUESTIONS?

