

Cybersecurity @ ITU including Europe region actions

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ITU Overview



Founded in 1865

193 Member States

567 Sector Members

159 Associates

104 Academia

A specialized agency of the UN with focus on Telecommunication / ICTs



ITU-R: ITU's Radio-communication Sector globally manages radio-frequency spectrum and satellite orbits that ensure safety of life on land, at sea and in the skies.



ITU-T: ITU's Telecommunication Standardization Sector enables global communications by ensuring that countries' ICT networks and devices are speaking the same language.





Cybersecurity - Global Policy



Sustainable Development Goals – SDGs 1, 4, 5, 7, 8, 9, 11, 16, 17

SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

WSIS Action Line C5: Building confidence and security in the use of ICTs

Global Cybersecurity Agenda - GCA

A multi-stakeholder platform to address cybersecurity challenges from 5 perspectives: Legal, Technical, Organisational, Capacity Building, Cooperation





































3 Pillars of Sustainable Development

- **Economic development**
- Social inclusion
- Environmental protection

Study Groups & Cybersecurity @ITU



A platform for information exchange between ITU Member States and Sector Members (industry & academia

ITU-D Study Group2 Question3

 Securing information and communication networks: Best practices for developing a culture of cybersecurity

ITU-T Study Group 17: Security

Develop recommendations for future standards including in Cybersecurity

ITU-R Study Groups

Securing radiocommunications

ITU-T Study Group 17: Security



Over 170 standards (ITU-T Recommendations and Supplements) published Topics currently being addressed include

- cybersecurity, security management, security architectures and frameworks
- countering spam, identity management, the protection of personally identifiable information
- applications and services security for the Internet of Things (IoT), smart grid, smartphones
- software defined networking (SDN), web services, big data analytics, social networks
- cloud computing, mobile financial systems, IPTV and tele-biometrics

Outcomes include

- Recommendation ITU-T X.509: for electronic authentication over public networks used in designing applications relating to public key infrastructure (PKI)
- ITU-T X.1500 CYBEX: collection of best-of-breed standards from government agencies and industry —a standardized means to exchange the cybersecurity information demanded by CIRTS
- ITU-T X.805: used by telecom network operators and enterprises to provide an end-to-end architecture description from a security perspective & thus pinpoint all vulnerable points in a network and mitigate them
- Recommendation ITU-T X.1254, Entity authentication assurance framework provides secure data exchange across parties and reduces fraud, identity theft

Security related activities in ITU-R



- Recommendations ITU-R M.1078, ITU-R M.1223, ITU-R M.1457, ITU-R M.1645, ITU-R
 M.2012: Security principles for IMT (3G and 4G) networks
- Recommendation ITU-R S.1250: security issues in network management architecture for digital satellite systems
- Recommendation ITU-R S.1711: security issues in performance enhancements of transmission control protocol over satellite networks
- work in radiocommunication standardization continues, matching the constant evolution in modern telecommunication networks

ITU-D Services to Member States in Cybersecurity



Engagement and awareness

- Global Cybersecurity Index
- Global, Regional and National events
- High-Level Cybersecurity Simulations
- Information Dissemination

National Cybersecurity Assistance

- National Cybersecurity Assessment
- National Cybersecurity Strategy support
- Critical Infrastructure Protection Support
- · Technical Assistance

Computer Incident Response Team (CIRT) Program

- CIRT Assessment
- CIRT Design
- CIRT Establishmemt
- · CIRT Improvement

Information sharing

- · Best Practices Sharing
- Information Exchange Tools and Techniques

Cyber Drills

- Regional drills
- National drills

Human Capacity Building

- Curricula and Training Programs
- Bespoke Training



Global Cybersecurity index - GCI

Objective

The Global Cybersecurity Index (GCI) measures and ranks each nation state's level of cybersecurity commitment in five main areas:

- Legal Measures
- Technical Measures
- Organizational Measures
- Capacity Building
- National and International Cooperation

Goals

- help countries identify areas for improvement
- motivate them to take action to improve their GCI ranking
- help harmonise practices
- foster a global culture of cybersecurity

Final Global and Regional Results 2017 are on ITU Website

Join us for the GCI 2018 iteration – we are looking for partners

http://www.itu.int/en/ITU-D/Cybersecurity/Pages/GCI.aspx

National Cybersecurity Toolkit

ITU

a co-authored and co-owned multi-stakeholder initiative

A nation-neutral toolkit that can be applied globally:

Europe, CIS, Africa, Americas, Asia Pacific, ...

Measuring improvements:

provide best practice
indicators to assess
improvements over time

Reference to other

Reference to other

Nation
neutral toolkit

NCS
Toolkit's
Unique Value
Addition

Reference to other

easily identify key

Pragmatic reference guide can be used by all countries, including microcountries: developed strategies, new strategies under development, ...

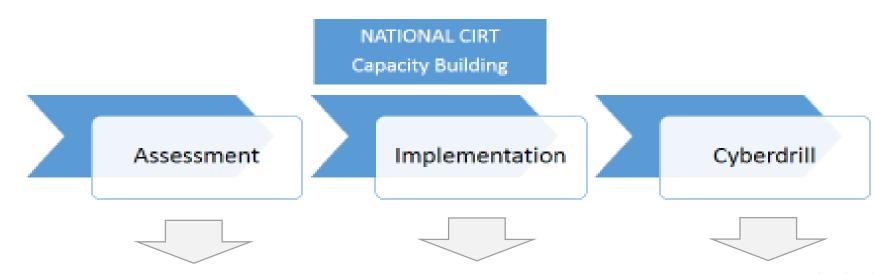
guidelines/references:
link to existing models and evaluation tools

Accompanying evaluation tool: easily identify key areas for improvement and how they can be addressed





National CIRT Programme



- Assess existing capability of/need for national cybersecurity mechanisms
- On-site assessment through meetings, training, interview sessions and site visits
- Form recommendations for plan of action (institutional, organizational and technical requirements)

- Implement based on the identified needs and organizational structures of the country
- Assist with planning, implementation, and operation of the CIRT.
- Continued collaboration with the newly established CIRT for additional support
- Capacity Building and trainings on the operational and technical details

- Exercises organized at both regional and international levels
- Help enhance the communication and response capabilities of the participating CIRTs
- Improve overall cybersecurity readiness in the region
- Provide opportunities for public-private cooperation



ITU Office for Europe

43 Countries: Albania, Andorra, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, The Former Yugoslav Republic of Macedonia, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Vatican, United Kingdom

WTDC-14: 4 Regional Initiatives for 2014 to 2017

EUR1: Spectrum management and transition to digital broadcasting

EUR2: Development of broadband access and adoption of broadband

EUR3: Ensuring access to telecommunications/ICTs in particular for persons with disabilities

EUR4: Building confidence and security in the use of telecommunications/ICTs

WTDC-17: 5 Regional Initiatives for 2018 to 2021



ITU Regional Initiative 4 in Europe 2014-2018



Objective: To build trust and confidence in the use of ICTs among children and young people in Europe

Expected Result: Assistance to the countries in need in the following:

- 1. Utilizing the existing knowledge on risk and vulnerabilities to which children are exposed in cyberspace and providing best practices
- 2. Providing a platform to raise awareness on child online protection (COP) and safety issues
- Developing and implementing roadmaps for national or regional COP initiatives.





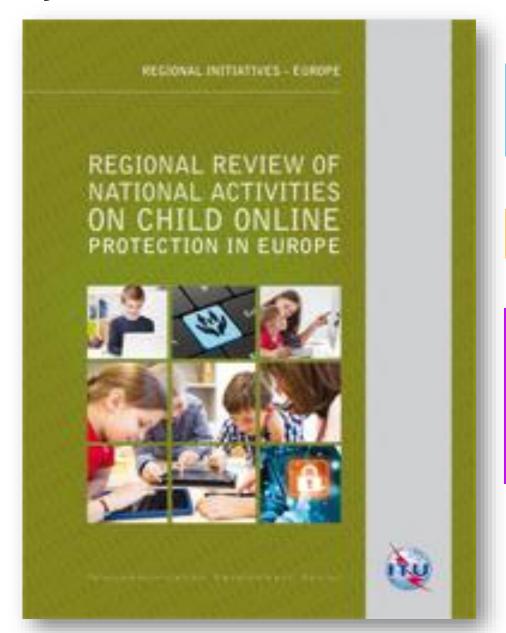
ITU Regional Initiative 4 in Europe

Objective: To build confidence and security in the use of telecommunications /ICTs Some Actions 2016-2017

- ITU Council of Europe: High Level Round Table on COP, 10 October 2016
- ITU-ENISA Regional Cybersecurity Forum for Europe, 29-30 November 2016, Bulgaria
- Benchmark of national initiatives on COP in the Central and Eastern European Countries
- Central European Cybersecurity public-private dialogue platform, Romania [co-organized annual]
- National CIRT Implementation, Cyprus [2017-2018]
- CIRT Assessment, Bosnia & Herzegovina, November-December 2017
- International Conference "Keeping Children and Young People Safe Online", Poland [co-organized annual]
- ITU ALERT International Cyber Drill Exercise for the Europe & CIS Regions, Moldova, 21-23 November 2017
- Western European Cybersecurity public-private dialogue platform, Switzerland, 7-8 December 2017
- Webinar on Global Cybersecurity Index (GCI) for the Europe Region report 2017, 18 December 2017

Survey: Review of National Activities April 2017





Launched at the Regional Preparatory Forum, Vilnius, April 2017

18 countries surveyed

Practices collected from 6 countries:
Albania, Bosnia & Herzegovina,
Romania, Serbia, Slovak Republic,
Turkey





Perceptions of online child safety issues

Availability of advice or guidance

Availability of awareness raising and related programmes

Legal framework and law enforcement resources

National focal points

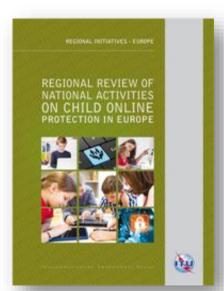
Perceptions of the level of co-operation with industry

Perceived assistance needed by each country

Regional Review Conclusions



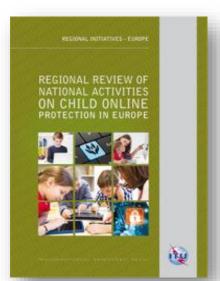
- Every country in the region acknowledge its responsibility to act to ensure that the internet and its associated technologies are safe for children and young people.
- Countries increasingly are integrating awareness of online risks into a broader child protection and parenting agenda.
- National focal points are a key element in effective online protection. All countries should have a well-resourced national focal point that is connected with regional and international initiatives.



Regional Review Conclusions



- In many countries, the legislative frameworks are broadly in line with international and regional legal instruments. However, it is extremely important for every country to ensure its legal measures and legislative framework stay in step with technological developments and changes in behaviour.
- Advice and guidance on safety online is being provided through several media that target or are used by children.
 Unified messaging will facilitate and reinforce understanding and reduce potential confusion.



National CIRT Implementation for Cyprus



CSIRT CY

- Support provided to OCECPR Cyprus telecom regulatory agency
- Started in March 2017
- Focus on Critical Infrastructure Incidents
- Current Status
 - Equipment and Infrastructure in place
 - Staffing and training done
 - Soft launch
- Phase 1 of CIRT with Basic services operational: by July 2018

Digital Youth Forum Warsaw, May 2017



- The Digital Youth Forum held in Warsaw, Poland on 25 May 2017
 - 500+ youth (14–17 years old)
 - More than 30 schools connected remotely
 - Exposition focusing on digital skills and digital opportunities
- Operation Uncool Launched
 - 200+ respondents to the query supporting open consultation for the purposes of the ITU Council Working Group on Child Online Protection





5th Central European Cybersecurity Public-Private Dialogue Platform, September 2017







basis

CYBERSECURITY ROMANIA - CONGRESS -

Awareness day for Children 13 September – Pre Congress stakeholders on a voluntary

400+ CHILDREN ATTENDING

The 11th International Conference "Keeping Children and Young People Safe Online", 19-20 September 2017



- Held in Warsaw, Poland
- 500 Participants
- Countries represented : Belgium, Bulgaria, Finland, France, Germany, Greece, Ireland, Lithuania, Luxembourg, the Netherlands, Spain, Switzerland, Turkey, United Kingdom, Ukraine.
- Highlights: Fake news, Cyberbullying, Pornography, Privacy issues



1st Western European Cybersecurity Public-Private Dialogue Platform December 2017

- Held in Porrentruy, Switzerland
- 100+ Participants
- Countries represented :Finland, France, Italy, Romania,
 Switzerland, USA





Awareness day for Children

07 November

ITU Regional Initiative 4 in Europe 2018-2021





EUR 4 - Enhancing trust and confidence in the use of information and communication technologies

Objective: To support the deployment of resilient infrastructure and secure services allowing all citizens, especially children, to use ICTs in their daily lives with Confidence

Expected Result: Assistance to the countries in need in the following: strategies

- 1. Providing regional platforms and tools for building human capacities (awareness and expert training) to enhance trust and confidence in the use of ICTs
- 2. Sharing country and regional best practices and case studies and conducting surveys on enhancing confidence and trust in the use of ICTs
- 3. Elaborating or review national cybersecurity strategies
- 4. Setting up or improving the capabilities of national computer security incident response teams (CSIRTs) and the corresponding networks to support these CSIRTs in cooperating with each other
- 5. Conducting simulation exercises such as cyber-drills at national and regional level in cooperation with international and regional organizations and assisting countries in developing tools through synergies and resource optimization.





- Today's event propose future actions in outcome report
- CIRT Assessment Albania, May
- Regional Development Forum: Cybersecurity projects for countries- Prague,
 June
- International Conference "Keeping Children and Young People Safe Online –
 Warsaw, September
- Central European Cybersecurity Public-Private Dialogue Platform Sibiu,
 September
- Regional Cyberdrill Nicosia, October
- New Global Challenges in Cybersecurity: CERT-RO annual conference Bucharest, November
- Western European Cybersecurity Public-Private Dialogue Platform –
 December



Thank you

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