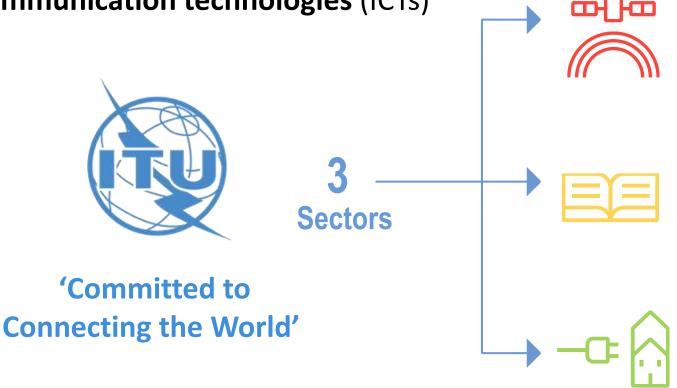


# **Cybersecurity Actions @ITU**

Rosheen Awotar-Mauree [Mrs]
Programme Officer, ITU Office for Europe



ITU is the United Nations specialized agency for information and communication technologies (ICTs)



**ITU Radiocommunication** 

**Coordinating** radio-frequency spectrum and **assigning** orbital slots for satellites

**ITU Standardization** 

**Establishing** global standards

**ITU Development** 

**Bridging** the digital divide

193 Member States | +700 Private Sector Organisations | +150 Academia Members



## **ITU Offices**





# EURregion@itu.int

**45 Countries**: Albania, Andorra, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, 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, Ukraine, United Kingdom

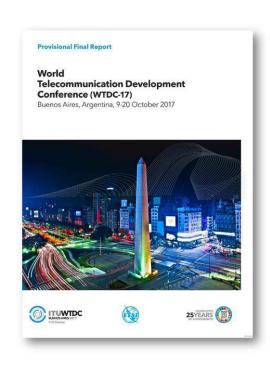








# **REGIONAL INITIATIVES FOR EUROPE 2018-2021**



EUR1: Broadband infrastructure, broadcasting and spectrum management

EUR2: A citizen-centric approach to building services for national administrations

EUR3: Accessibility, affordability and skills development for all to ensure digital inclusion and sustainable development

EUR4: Enhancing trust and confidence in the use of information and communication technologies

EUR5: ICT-centric innovation ecosystems



# **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



# **BDT Cybersecurity Program**

#### 6 Service areas - 18 Services

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

Establishment

**CIRT** 

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



# REGIONAL INITIATIVES on CYBERSECURITY FOR EUROPE 2018-2021



EUR4: Enhancing trust and confidence in the use of information and communication technologies



# Global Cybersecurity Index [GCI]

GCI is a composite index combining 25 indicators into one benchmark measure to monitor and compare the level of ITU Member States cybersecurity commitment with regard to the five pillars identified by the High-Level Experts and endorsed by the GCA.

"GCI is a capacity building tool, to support countries to improve their national cybersecurity posture"

GClv1: 2013-2014 period

GClv2: 2016-2017 period

with **105** country responses

with **134** country responses

GCIv3: 2018 planned completion





























Cybercriminal Legislation, Substantive law, Procedural cybercriminal law. Cybersecurity Regulation.

#### **TECHNICAL**

National CIRT, Government CIRT, Sectoral CIRT, Standards for organisations, Standardisation body.

#### **ORGANIZATIONAL**

Strategy, Responsible agency, Cybersecurity metrics.

#### CAPACITY BUILDING

Public awareness, Professional training, National education programmes, R&D programmes, Incentive mechanisms, Home-grown industry.

#### COOPERATION

Intra-state cooperation, Multilateral agreements, International fora, Public-Private partnerships, Inter-agency partnerships.















INTERPOL



# Global Cybersecurity Index [GCI] Europe in Figures

	Legal in figures
43	Countries with Cybercriminal Legislation
43	Countries with Cybersecurity Regulation
22	Countries with Cybersecurity Training

	Technical in figures
35	Countries with National CIRT
35	Countries with Government CIRT
30	Countries with Sectoral CIRT

	Organizational in figures
35	Countries with Strategy
39	Countries with Responsible Agency
20	Countries with Cybersecurity Matrics

	Capacity Building in figures
34	Countries with Standardization Bodies
18	Countries with Good practices
27	Countries with R & D programmes
32	Countries with Public awareness campaigns
33	Countries with National education programmes and academic curricula
24	Countries with Incentive mechanisms
27	Countries with Homegrown cybersecurity Industry

	Cooperation in figures
27	Countries with Intrastate Cooperation
28	Countries with Multilateral agreements
41	Countries with International Fora participation
25	Countries with Public-Private Partnerships
24	Countries with Inter-Agency partners

Source: GCI 2017 with 43 countries in Europe region



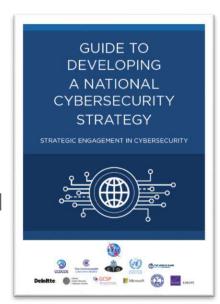
# **National Cybersecurity Strategy (NCS)**

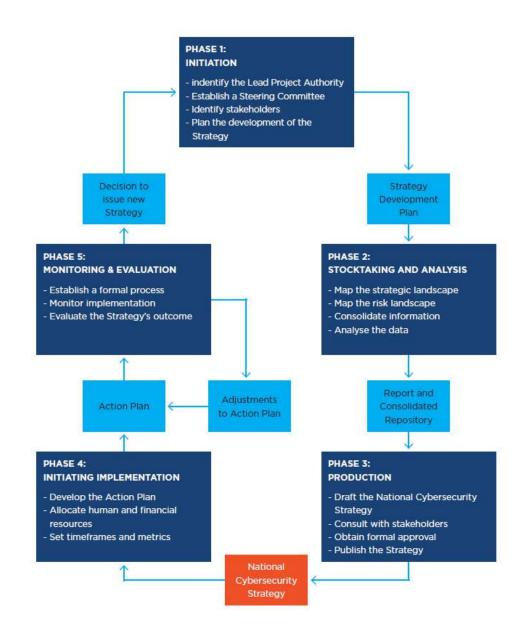
This Guide has primarily been structured as a resource to help government stakeholders in preparing, drafting and managing their National Cybersecurity Strategy.

A joint effort by 12 partners

Released in September 2018@ITU Telecom World

Available at <a href="https://www.itu.int/dms">https://www.itu.int/dms</a> pub/itu-d/opb/str/D-STR-CYB GUIDE.01-2018-PDF-E.pdf







# **CIRT Framework**

#### 71 National CIRT ASSESSMENTS

Africa: Angola, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo (Dem Rep), Congo (Republic), Côte d'Ivoire, Gabonese Republic, Gambia, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, ESwatini, Tanzania, Togolese Republic, Uganda, Zambia, Zimbabwe

Americas: Anguilla, Antigua, Barbados, Bolivia, Dominica, Dominican Republic, Ecuador, Grenada, Honduras, Jamaica, St Kitts & Nevis, St Lucia, St Vincent&TheGrenadines, Suriname, Trinidad and Tobago

**Arab region:** Comoros, Djibouti, Jordan, Lebanon, Mauritania, Palestine, Sudan

Asia & Pacific: Afghanistan, Bangladesh, Bhutan, Cambodia, Fiji, Laos, Maldives, Myanmar, Nepal, Samoa, Vanuatu, Vietnam

**Europe & CIS:** Armenia, Bosnia and Herzegovina, Cyprus, Macedonia, Monaco, Montenegro, Serbia



1. Barbados

2. Burkina Faso

3. Cote d'Ivoire

4. Cyprus (Governmental CIRT)

5. Cyprus (National CIRT)

6. Ghana

7. Jamaica

8. Kenya

9. Montenegro

10.Tanzania

11. Trinidad and Tobago

12.Uganda

13.Zambia

### In the Pipeline

**CIRT Assessments** 

**103** National CIRTs

1. Albania

Kyrgyztan

Tonga

**CIRT Implementation** 

1. Mozambique

2. Burundi

3. Honduras

4. State of Palestine

5. Mauritania

6. Guyana



## **Regional CyberDrills**

- Enhance awareness and the capability of countries to participate and to contribute to the development and deployment of a strategy to defeat a cyber threat
- Strengthen International Cooperation between Member States to ensure continued collective efforts against cyber threats





Day 1 & Day 2: Focused capacity building sessions for specialists [CIRT Management, Child Online Protection]

**Day 3**: Open conference day with presentations and panel discussions on current trends in cybersecurity threats.

Day 4 & Day 5 : Structured around 5-6 scenarios of incidents based on common types of attacks



# **Child Online Protection [COP] Initiative**



The COP Initiative aims at bringing together partners from all sectors of the global community to ensure a safe and secure online experience for children everywhere.

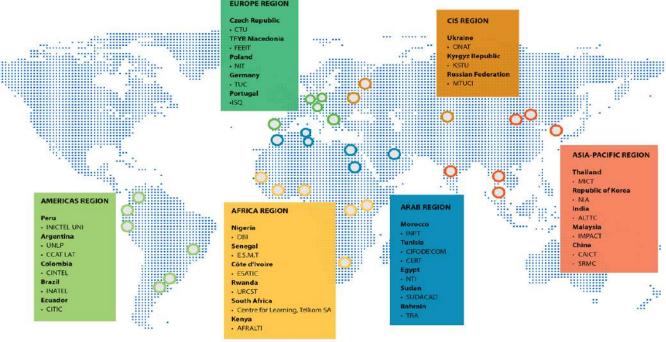
## Key Objectives:

- Identify risks and vulnerabilities to children in cyberspace
- Create awareness
- Develop practical tools to help minimize risk
- Share knowledge and experience



## **BDT Centres of Excellence [CoE] Programme**

- Launched in 2001 to strengthen capacity building in the field of telecoms/ICTs
- Operates under the umbrella of the <u>ITU</u>
   <u>Academy</u> and is a key training delivery mechanism
- CoEs deliver face to face and e-learning training to ICT professionals and executives in the public and private spheres
- CoE global network shares expertise, resources and capacity-building know-how in ICT training/education



## CoE priority areas for the 2019-2022 cycle

Spectrum management - Smart cities and communities
Bridging the standardization gap - Artificial intelligence
Digital broadcasting - Digital financial services
Conformance and interoperability - Internet governance
Internet of Things - Innovation and entrepreneurship
Cybersecurity - ICTs and the environment - Digital inclusion
Digital transformation - Emergency telecommunication
Digital economy - ICT applications - Big data and statistics
Wireless and fixed broadband



# **Cybersecurity Cooperation actions @ ITU**

## **ITU STUDY GROUPS – Membership driven**

## 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



# **Cybersecurity Cooperation actions @ ITU**

## **PARTNERSHIPS** for initiatives

## Global Cybersecurity Index – call for new partners

 Australia Strategic Policy Institute, FIRST, Indiana University, INTERPOL, ITU-Arab Regional Cybersecurity Centre, Korea Internet & Security Agency, NTRA Egypt, Potomac Institute of Policy Studies, Red Team Cyber, UNICRI, University of Technology Jamaica, UNODC, World Bank

## National Cybersecurity Strategy Reference Guide

 CCI, CTO, ENISA, GCSP, GCSCC University of Oxford, Intellium, Microsoft, NATO CCDCOE, OECD, OAS, Potomac Institute, RAND Europe, UNCTAD and World Bank

Child Online Protection – a whole community



- Participate in workshops in various regions
- Partner /Collaborate on specific cybersecurity initiatives [GCI..NCS.. Cyberdrill host]
- Request In country assistance
  - National CIRT
  - National Cybersecurity Strategy
  - Child Online Protection Assessment
- Join Study Groups [ITU Membership]
- Partner/Take ITU Academy/ CoE courses
- Participate in Global ITU Events







https://www.itu.int/en/ITU-D/Regional-Presence/Europe/Pages/Events/2018/CERT-ROForum/default.aspx

Register at https://www.cert.ro/certcon8/



Target Technical Staff of CSIRTs [National]

2 Days training by FIRST on Malware Analysis

1 Day Conference

2 Days Cyber attacks simulation team exercises

A joint RCC-ITU-DECAF side meeting for Western Balkan experts

**ITUEvents** 

Europe Region

Cyberdrill

26-30 November 2018 Limassol, Cyprus

Organised within the framework of the ITU Regional Initiative for Europe on Enhancing Trust and Confidence in the use of ICTs



Registration and Agenda at https://www.itu.int/en/ITU-D/Regional-Presence/Europe/Pages/Events/2018/CYBDRILL/ITU-ALERT-Cyber-drill.aspx



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https://www.itu.int/en/ITU-D/Regional-Presence/Europe/Pages/default.aspx