



ITU, History and Development Actions for Africa: focus on Regional Initiatives

FFGI-2017

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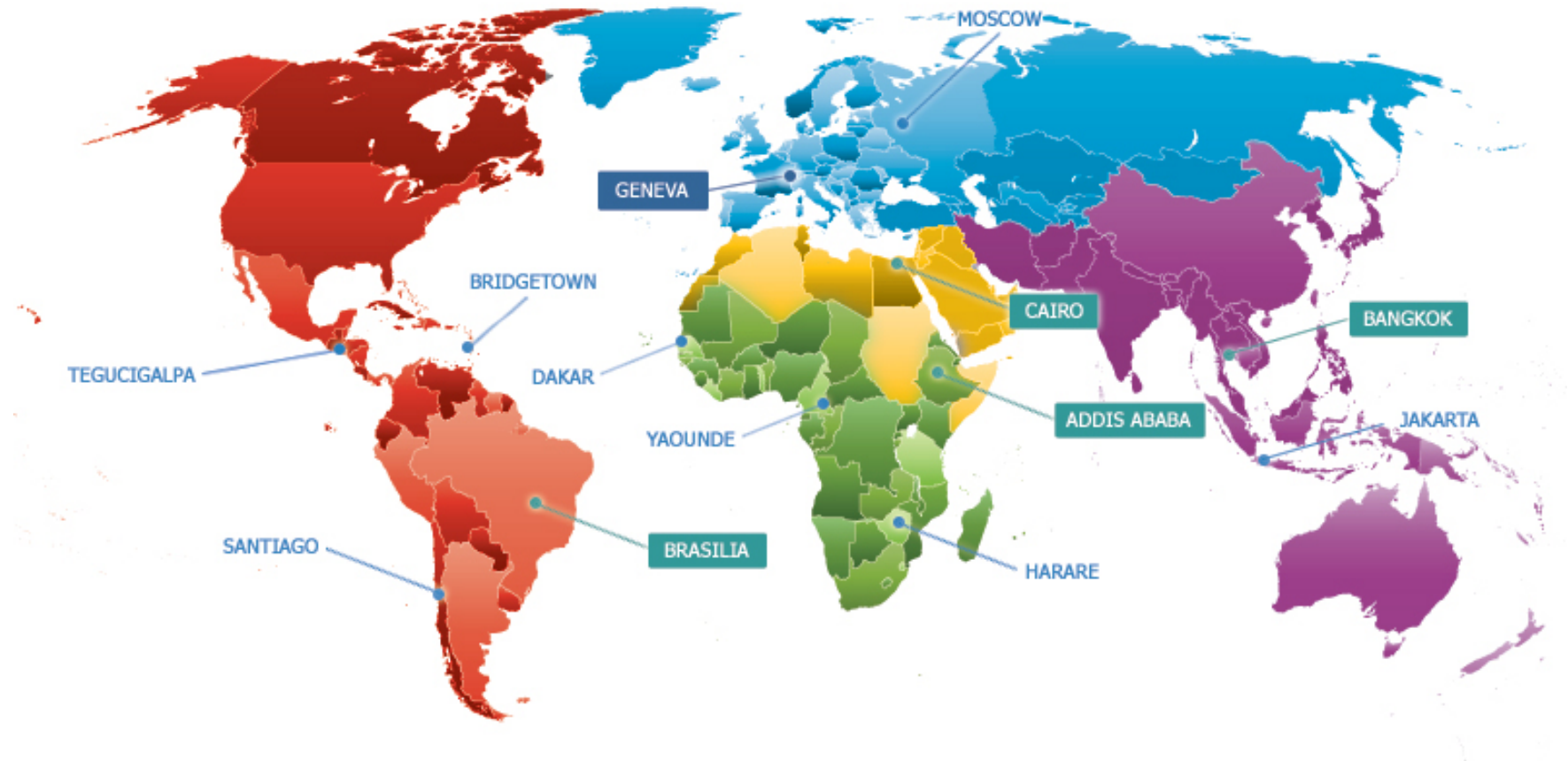


ITU in brief

- ❑ Leading UN Agency for Telecoms/ICTs
- ❑ Founded in 1865
- ❑ 192 Member States, 700+ Sector Members
- ❑ Three sectors:
  - Radiocommunication
  - Standardization
  - Development
- ❑ ITU TELECOM Events

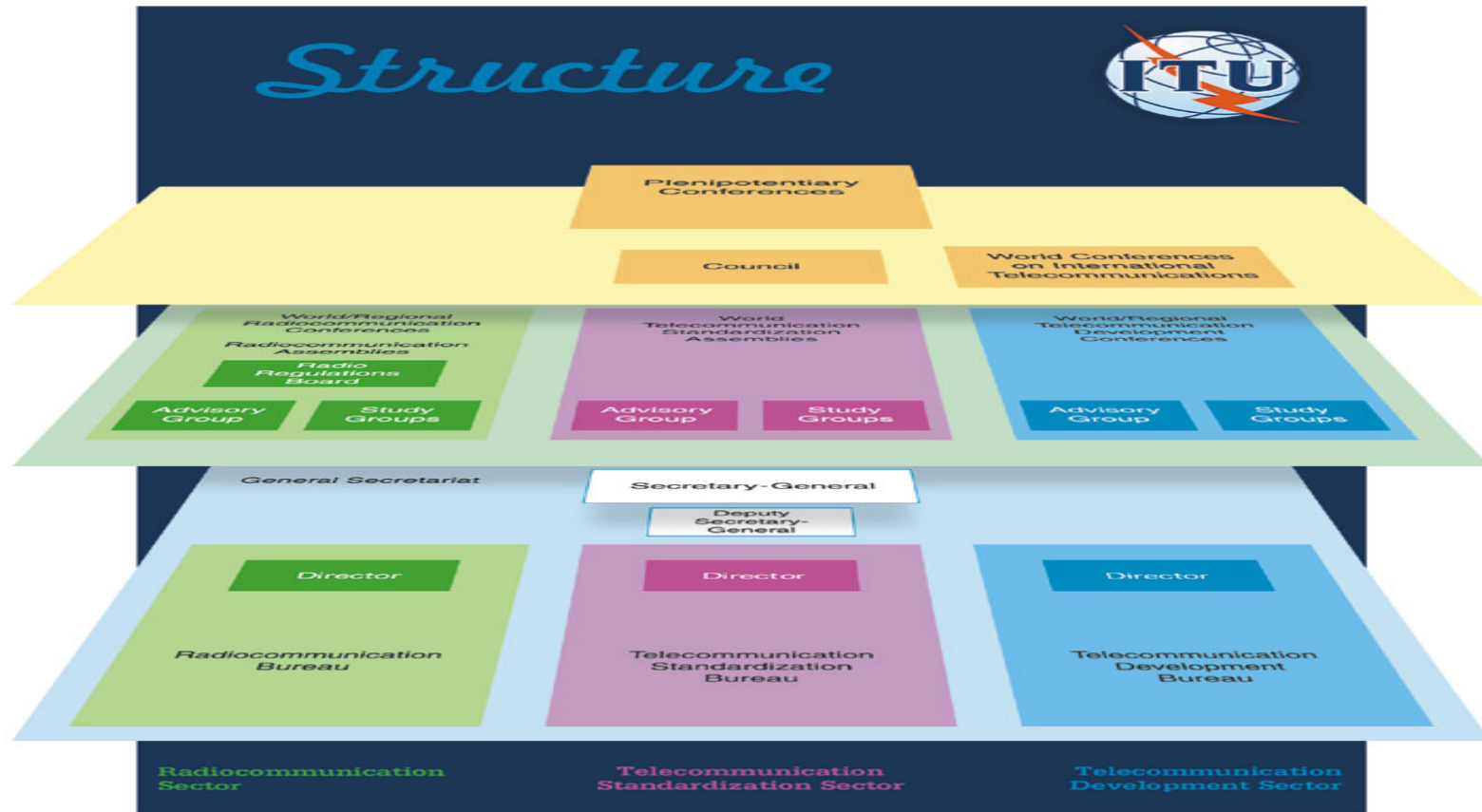


Worldwide Presence



- ❑ 5 Regional Offices, 8 Area Offices
- ❑ HQs in Geneva, Switzerland

ITU's Structure



Missions & Activities (1)

❑ Standardization (ITU-T)

- ❑ **Standardization activities contribute to build a worldwide interconnected telecommunication network and to promote new technologies such as:**
  - ✓ Mobile telephony
  - ✓ And the Internet
- ❑ **These standardization activities allow among others to:**
  - ✓ Define **building blocks** for the new Global Information Infrastructure (GII)
  - ✓ Conceive **advanced multimedia systems** that deal with heterogeneous signals such as voice, data, audio, and video

❑ Radiocommunications (ITU-R)

- ❑ **The Radiocommunication sector deal with:**
  - ✓ **Spectrum management** in order to ensure that **radio systems** such as mobile phones, pagers, aircraft and marine navigation systems, scientific research stations, satellite communication systems, radio and television broadcasting **operate smoothly**
  - ✓ The provision of **reliable wireless services** for all inhabitants of the Earth

Missions & Activities (2)

❑ Development (ITU-D)

- ❑ Development Sector activities can be summarized as follows:
  - ✓ To play an important role as a catalyst for partnership development between government and the private sector
  - ✓ To assist in the rapid modernization of telecommunication / ICT infrastructure and services, particularly in the developing world economies
  - ✓ More details at: <http://www.itu.int/en/ITU-D/Pages/default.aspx>

Overview of the ITU-D Activities

Enabling Environment

Emergency Telecommunications

Infrastructure/Access

Regional Initiatives

Capacity Building

Special Initiatives

Cybersecurity & E-Applications

Statistics & Market Information

The ITU-D Sector

☐ The World Telecommunications Development Conference (WTDC):

- ☐ Held every over 4 years

- ☐ Defines Actions Plans of the Development Sector for the next 4 years:

- ☐ Regional Initiatives
- ☐ Programs
- ☐ Study Groups
- ☐ Etc.

- ☐ WTDC last editions:

- ☐ WTDC-06: Doha, Qatar
- ☐ WTDC-10: Hyderabad, India
- ☐ WTDC-14: Dubai, UAE

- ☐ WTDC Next Edition:

- ☐ WTDC-17: Buenos Aires, Argentina (9-20 October)

WTDC 14

Dubai, UAE 30 March – 10 April 2014

DECLARATIONS
RESOLUTIONS

ITU-D STRATEGIC
PLAN 2016-2019

Dubai Action
Plan (DuAP)

PROGRAMS

Study Groups

Regional
Initiatives



Input to the strategic plan for 2016-2019

Objectives

1

Foster international cooperation on telecommunication/ICT development issues

2

Foster an enabling environment for ICT development and foster the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap

3

Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services

4

Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need

5

Enhance environmental protection, climate-change adaptation and mitigation, and disaster-management efforts through telecommunications/ICTs

1.1

World Telecommunication Development Conference (WTDC)

2.1

Policy and regulatory frameworks

3.1

Building confidence and security in the use of ICTs

4.1

Capacity building

5.1

ICTs and climate-change adaptation and Mitigation

1.2

Regional preparatory meetings (RPMs)

2.2

Telecommunication/ICT networks, including conformance and interoperability and bridging the standardization gap

3.2

ICT applications and services

4.2

Telecommunication/ICT statistics

5.2

Emergency telecommunications

1.3

Telecommunication Development Advisory Group (TDAG)

2.3

Innovation and partnership

4.3

Digital inclusion of people with specific needs

1.4

Study groups

4.4

Concentrated assistance to LDCs, SIDS and LLDC

Outputs



AFRICA REGIONAL INITIATIVES



AFR1: Strengthening human and institutional capacity building

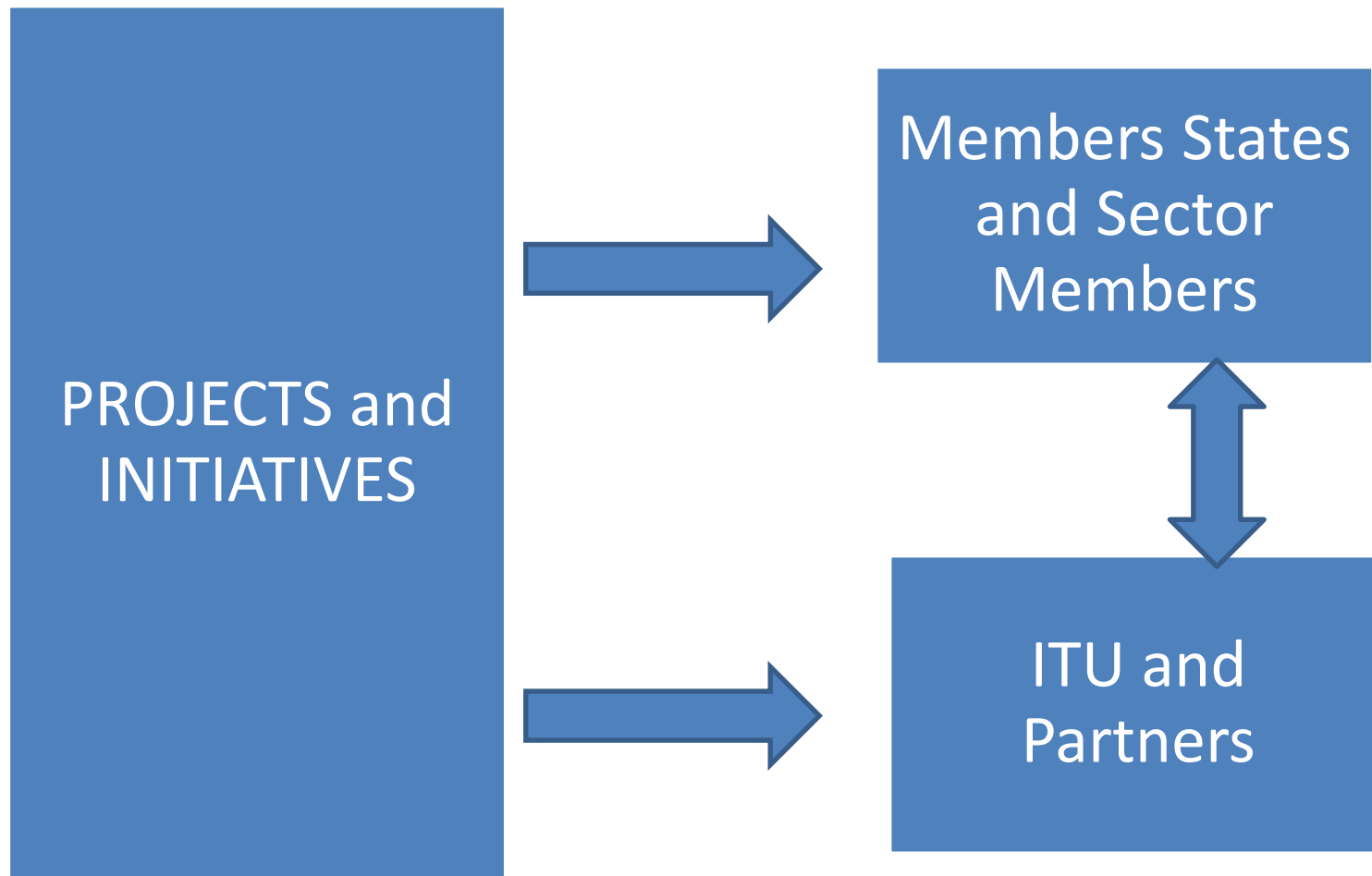
AFR2: Strengthening and harmonizing policy and regulatory frameworks for the integration of African telecommunication/ICT markets

AFR3: Development of broadband access and adoption of broadband

AFR4: Spectrum management and transition to digital broadcasting

AFR5: Building confidence and security in the use of telecommunications/ICTs

AFR RI IMPLEMENTATION



A man in a dark suit and tie is sitting at a desk, smiling while working on a laptop. The background is a blurred office setting.

Regional initiative 1
**Strengthening human and
institutional capacity building**

OBJECTIVE

To provide stakeholders in Africa, on a sustainable basis, with **human resources and skills** needed for harmonious development of the telecommunication/ICT sector.



Expected results (10)

- 1) Enhanced **skills and human capacity** in the design and development of telecommunication/ICT strategies, including conformity and interoperability
- 2) Increased **local expertise** through cooperation between countries
- 3) Increased access to **training resources**, including training manuals, for all stakeholders in the African telecommunication/ICT sector

Expected results (HICB)

- 4) Promotion of **technical cooperation** between telecommunication/ICT training institutions in regard to capacity and resources
- 5) Increased availability of **public access to knowledge**, in particular by raising public and consumer awareness
- 6) Forums for **exchanging and sharing information** between the various groups having a stake in the telecommunication/ICT sector in Africa, in particular young people, women and persons with disabilities and specific needs
- 7) Enhanced human **capacity building on legal aspects** in order to address security and trust in the use of telecommunications/ICTs, particularly where cyberthreats are concerned

Expected results (HICB)

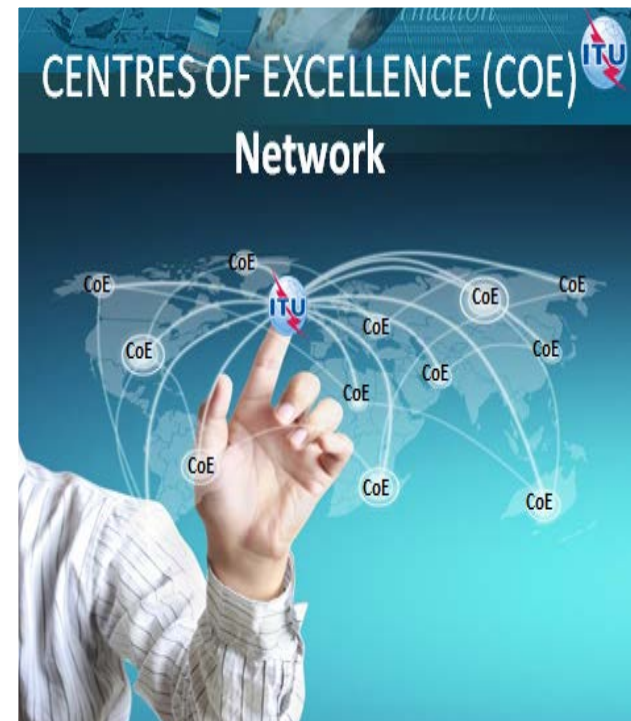
- 8) Greater availability, **development and usage of local content and languages**, and corresponding webpage development
- 9) Improved specialized skills development to meet the **ICT needs of persons with disabilities** and specific needs in order to promote ICT usage, particularly in regard to Internet applications
- 10) Promotion of **research and development (R&D)** in African countries.

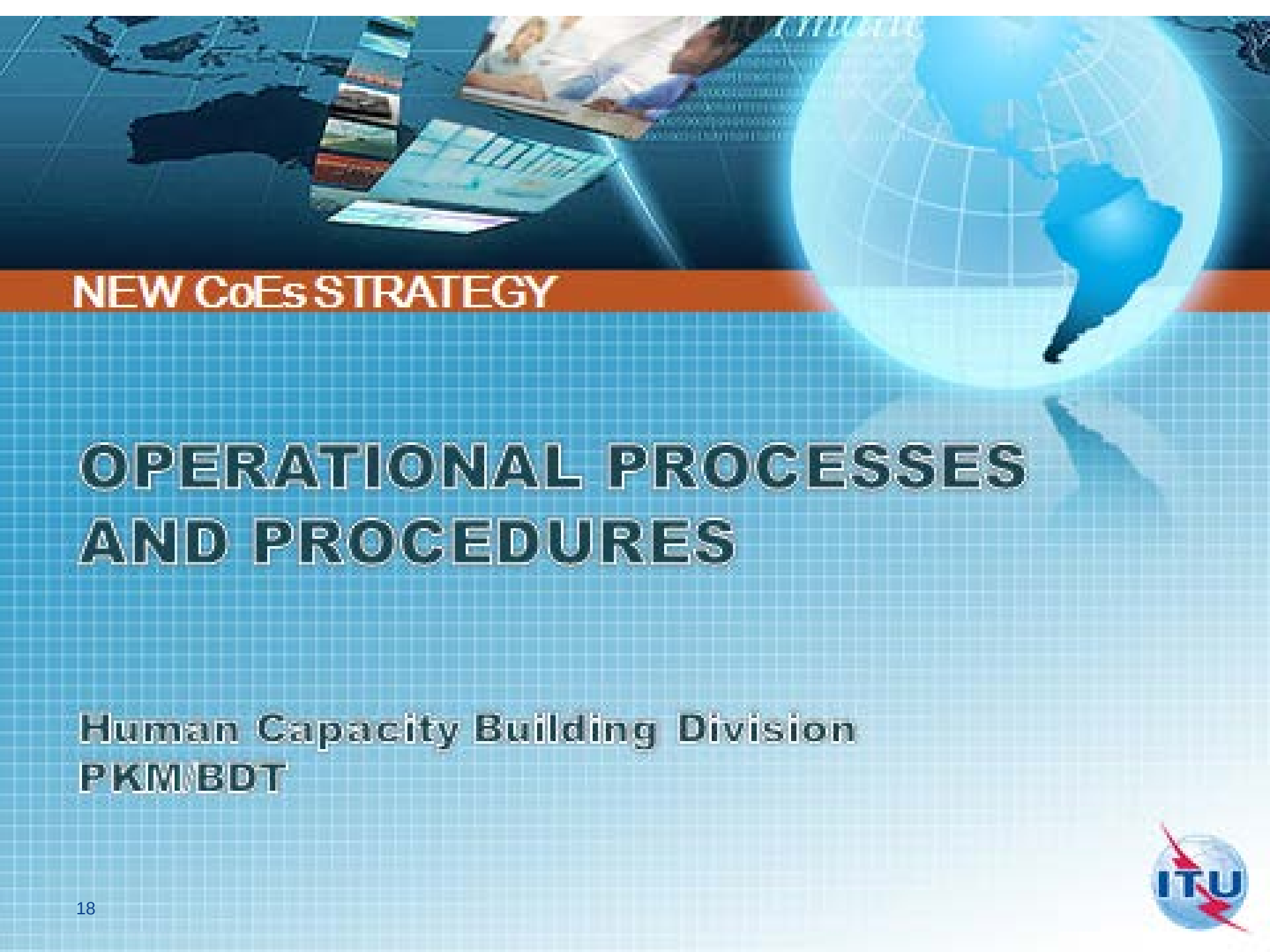
IMPLEMENTATION/ACHIEVEMENTS

Workshops Global
RIs
Specialties

ITU Academy
CoE Network

National/Regional
Educations and Training
Institutions





NEW CoEs STRATEGY

OPERATIONAL PROCESSES AND PROCEDURES

**Human Capacity Building Division
PKM/BDT**



Centers of Excellence
Selected for AFRICA Region for 2015-2016 according to
WTDC-14 –Resolution 73

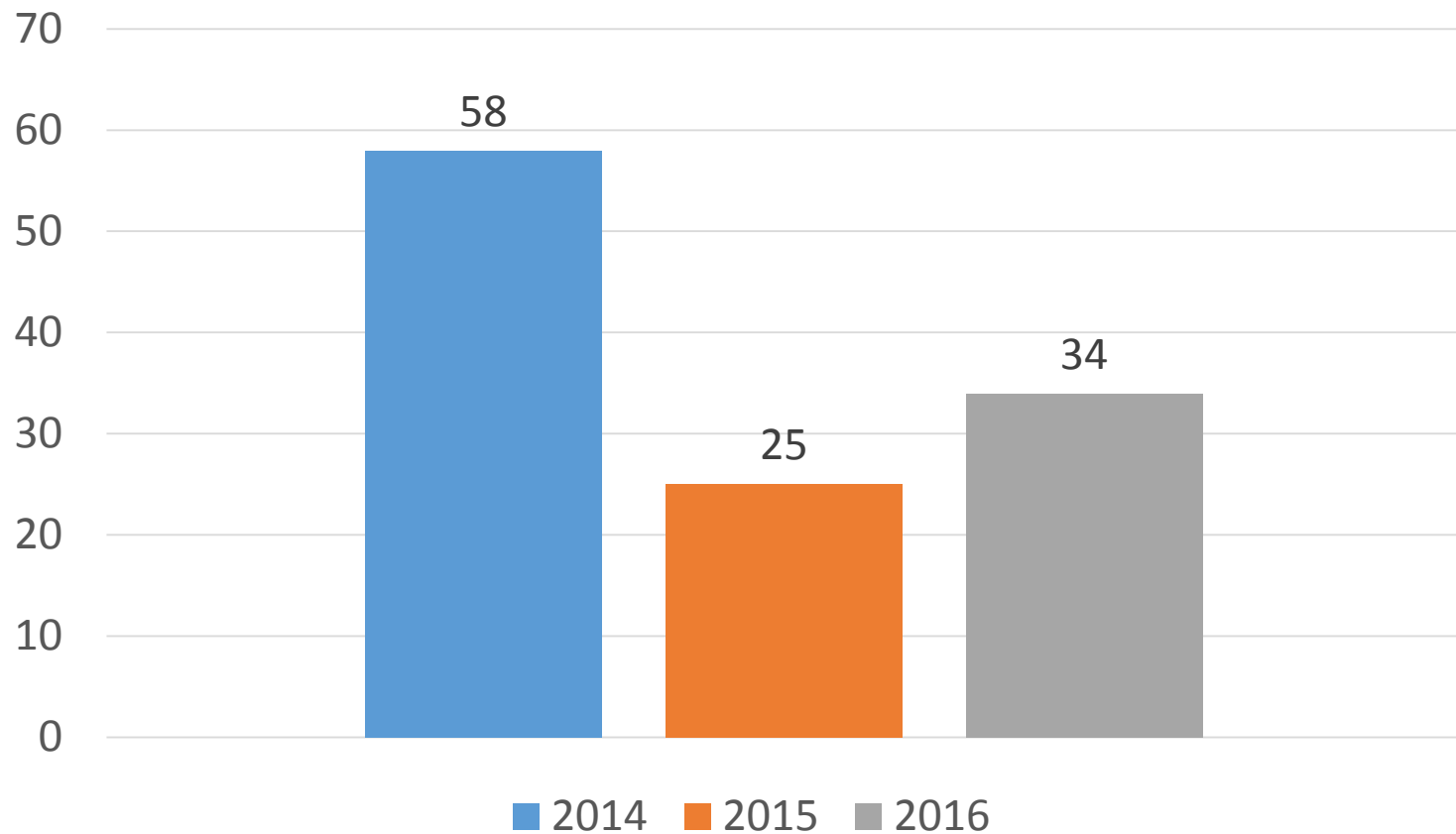
#	Priority Areas Recommended	Recommended Institutions	Country
1	Policy and Regulation	Digital Bridge Institute(DBI)	Nigeria
2	Broadband Access & Digital Broadcasting	Ecole Supérieure Multinationale des Télécommunications (E.S.M.T)	Senegal
3	Cyber security	ESATIC	Ivory Coast
4	Cyber security	University of Rwanda, College of Science and Technology	Rwanda
5	ICT Applications and Services	Centre for Learning, Telkom SA	South Africa
6	Broadband Access & Spectrum Management	AFRALTI	Kenya

CoE Strategy Implementation – CoE's Training Activities: 2014-2016



20

Number of Training Activities Per Year



Training Delivery Through Partnerships



21

Some of our Partners



UNITED KINGDOM
TELECOMMUNICATIONS
ACADEMY

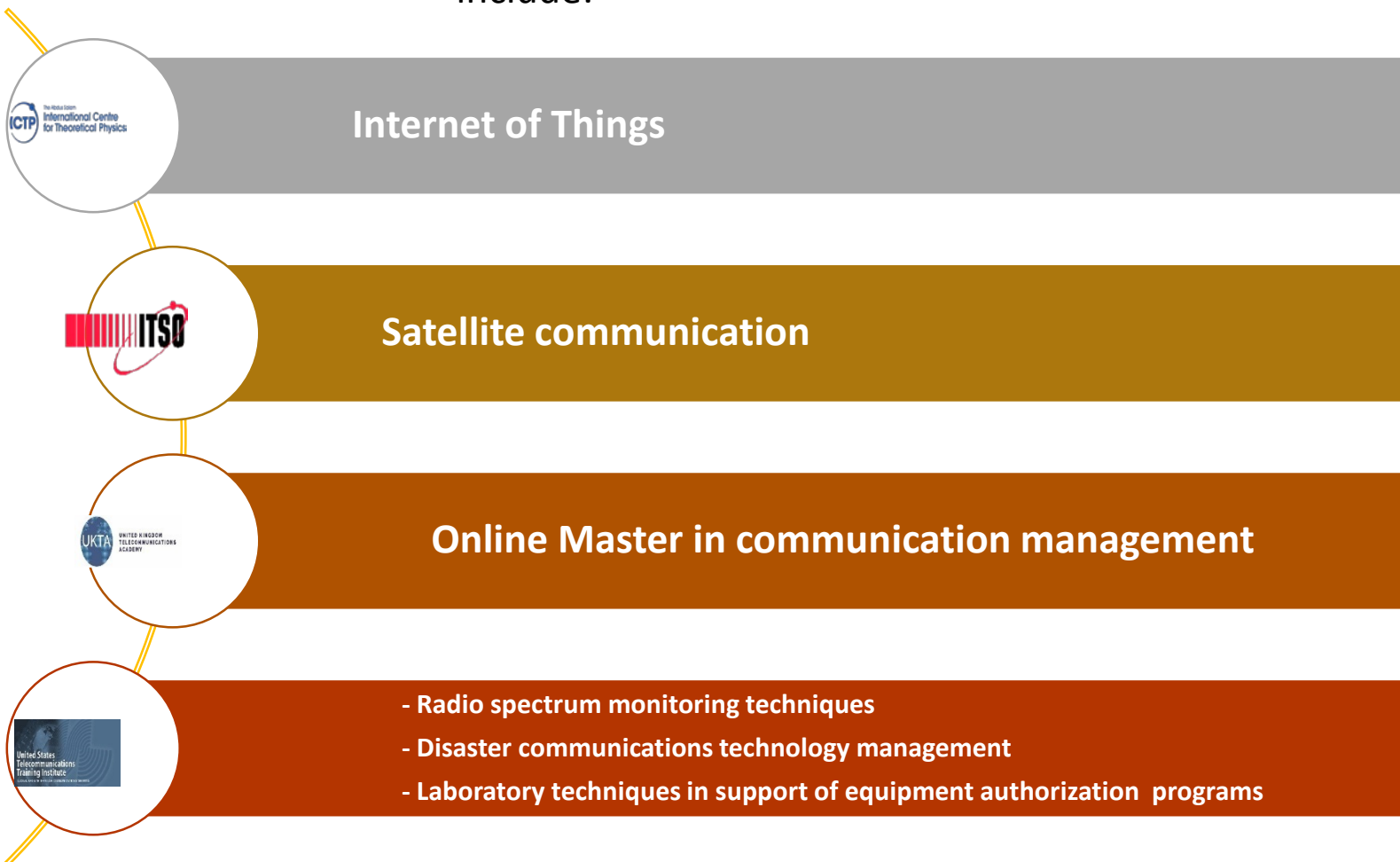


The Abdus Salam
International Centre
for Theoretical Physics



Training Delivery Through Partnerships

Training conducted in 2016
include:





New Partnerships



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ITU and AFRALTI

- Spectrum Management

ITU and ARCTEL

- Management for regulators in ICT

ITU and DIPLO

- Internet Governance

ITU and Cisco (Extension)

- IoT

A man with dark skin, wearing a white dress shirt and a blue tie, is seated in the driver's seat of a car. He is looking down at a tablet computer he is holding with both hands. The car's interior, including the steering wheel and dashboard, is visible. Through the car window, a red brick building and some greenery are seen outside. A text overlay is present in the lower-left quadrant of the image.

Regional initiative 2

**Strengthening and harmonizing
policy and regulatory
frameworks for the integration
of African telecommunication/
ICT markets**

OBJECTIVE

To facilitate and **promote the reform** of Africa's national telecommunication/ICT sectors and the implementation of telecommunication/ICT strategies in order to achieve subregional and regional integration of telecommunication/ICT infrastructure, services and markets.

Expected results (10)

- 1) Implementation of the **reference framework** for harmonization of telecommunication/ICT regulatory policies in Africa
- 2) Development of **competitive** African telecommunication/ICT **markets**
- 3) Harmonized **technical standards** to provide increased connectivity of networks and services

Expected results(HPRF)

- 4) Establishment of a **harmonized policy** to reduce the level of **intra-continental traffic** routed by **extra-continental transit centres**
- 5) Development of a **harmonized strategy for universal access**, taking into account the needs of young people, women, persons with disabilities and specific needs, and indigenous peoples
- 6) Development of **high-quality and affordable** telecommunication/ICT services
- 7) Establishment of a **regional framework for cooperation** (training, internships, mutual assistance) on **e-waste**

Expected results (HPRF)

- 8) Development and **harmonization of national and regional regulations on cybersecurity and ICT applications**
- 9) Harmonization of the **quality-of-service** regulatory framework at regional level to ensure consumer satisfaction
- 10) Development of a **set of tools and mechanisms** for measurement of a **consumer satisfaction index**.

Some Achievements

□ Training workshops:

- For AFR countries
- Customized trainings for countries

□ Continental events: e.g. FTTRA

- Last edition: Abidjan, Cote d'Ivoire, March 2016
- Next edition: South Africa, September 2017

□ Global events: e.g. GSR

- Last edition: Nassau, Bahamas, July 2017

A woman with dark hair, wearing a vibrant red dress with yellow circular patterns, is sitting on a concrete ledge. She is holding a light-colored tablet computer with both hands and looking towards the camera. The background shows a building with wooden shutters and a wall with some graffiti.

Regional initiative 3

Development of broadband access and adoption of broadband

OBJECTIVE

To assist Member States in the **development of broadband infrastructure** and access thereto in urban and rural areas, with particular emphasis on subregional and continental interconnection

Expected results (10)

- 1) National **telecommunication/ICT master plans** to meet the requirements of developing countries
- 2) Improved **broadband backbone infrastructure** and access to **affordable** telecommunication/ICT services in urban and rural areas
- 3) **Guidelines on rural connectivity**, including policy, appropriate technologies and power supply issues, and best practices

Expected results (BB)

- 4) Enhanced **human capacities** in the area of broadband communication networks
- 5) Interconnection of countries by means of **high-capacity links**, including **access to undersea cables for landlocked countries**, as part of the follow-up to the **Connect Africa summit**
- 6) Development of mechanisms and tools to facilitate the **use of ICTs** by persons with **disabilities and specific needs**
- 7) Ease of **access to submarine cables** for all countries, and especially landlocked countries, on fair terms

Expected results (BB)

- 8) Promoting the establishment of **national and regional** Internet exchange points (**IXPs**)
- 9) Promoting the **development of local content** and localized access
- 10) Promoting **IPv4 to IPv6 migration**.

Some Achievements

□ Since Connect Africa (Kigali, October 2007):

- Development of national OF backbones
- Development of submarine cables
- Promotion of broadband: e.g. 3G/4G networks, FTTx

□ Broadband access master plans elaboration for countries:

- e.g. ITU/Korea Project for National broadband master plans elaboration

□ Broadband access networks development:

- e.g. ITU/McCaw broadband wireless network project: Burkina Faso, Burundi, Djibouti, Lesotho, Mali, Rwanda

□ IPv6 migration

- Assistance to sub regional test bed implementation: Cote d'Ivoire, Uganda, Zimbabwe (underway), Cameroon (underway)

Regional initiative 4
Spectrum management and
transition to digital broadcasting

OBJECTIVE

To assist Member States in the transition to digital broadcasting and spectrum management.

Expected results (6)

- 1) Support for the **elaboration of spectrum-management plans** at the national, regional and global levels, including the transition to digital broadcasting
- 2) Assistance in using the **tools** to support the **developing countries** in improving the **international coordination** of terrestrial services in **border areas**
- 3) **Capacity** building in **spectrum management** and digital broadcasting **technologies**

Expected results (DMSM)

- 4) Elaboration of **studies, benchmarks** and **guidelines** on the **economic** and **policy aspects** of the assignment and use of the radio-frequency spectrum, taking into account Resolution 9 (Rev. Hyderabad 2010) of the World Telecommunication Development Conference
- 5) Assistance to countries in **fostering people-inclusive strategies** in digital broadcasting, to include the availability of universal broadcasting receivers for commercial use at affordable prices
- 6) Assistance to Member States in **meeting the deadline** for the analogue-to-digital switchover.

Some Achievements

□ Since GE06 (Geneva, 2006):

- Workshops and conferences on analogue to digital migration (ITU/ATU)
- Assistance to countries on their national strategies elaboration
- Progress assessment by the deadline (17 June 2015)
  - Less than 10 countries succeeded their migration in AFR

Regional initiative 5
**Building confidence and
security in the use of
telecommunications/ICTs**

OBJECTIVE

To assist Member States in **defining and implementing appropriate strategies** for the protection of ICT infrastructure and building confidence in the use of ICTs and applications.

Expected results (7)

- 1) Enhanced **coordination** and sustained **national and regional approaches** to cybersecurity
- 2) Support for **institutional and organizational mechanisms** at **national and regional** levels to effectively implement cybersecurity strategies
- 3) Development of **appropriate measures** to **protect consumers, children** and other **vulnerable persons** in the use of ICTs

Expected results (BCS)

- 4) Creating **awareness** of cyberthreats, cybersecurity measures and quality of service in the use of ICTs
- 5) Adoption of **measures for privacy** and personal **data protection**
- 6) Promoting the development of national and regional **computer incident response teams** (CIRTs)
- 7) Development of a **harmonized strategy** to strengthen **information security** and combat spam and cyberthreats.

GCA: From Strategy to Action

1. Legal Measures



- ITU Cybercrime Legislation Resources
- Publication on Understanding Cybercrime: A Guide for Developing Countries (**new edition: November 2014**)
- HIPSSA, HIPCAR, ICB4PAC Projects (executed with EU)
- MoU with UNODC for assistance to Member States

2. Technical and Procedural Measures



- ITU Standardization Work: ITU-T SG 17
- ITU-R recommendations on security
- ICT Security Standards Roadmap
- ITU-T JCA on COP

3. Organizational Structures



- National CIRT deployment and cooperation
- Regional Cybersecurity Centres (RCCs)
- Regional and International Cyber Drills

Global Cybersecurity Agenda (GCA)

5. International Cooperation



- ITU's Child Online Protection (COP) Initiative
- Collaboration with other IGOs and Private Sector
- UN-wide Coordination Mechanisms

4. Capacity Building



- ITU National Cybersecurity Strategy Guide
- Global Cybersecurity Index (GCI)
- Cyberwellness Profiles
- Technical assistance and projects in LDCs
- Elaboration of Best Practices at ITU-D SG 2 Q3/2
- Regional Cybersecurity Workshops
- Training for high-level Member State officials



New edition 2014: ITU Publication on UNDERSTANDING CYBERCRIME: Phenomena, Challenges and Legal Response

The Guide serves to help developing countries **better understand the implications related to the growing cyber-threats** and assist in the assessment of the current legal framework and in the establishment of a sound legal foundation.



COMBATTING CYBERCRIME: TOOLS AND CAPACITY BUILDING FOR EMERGING ECONOMIES

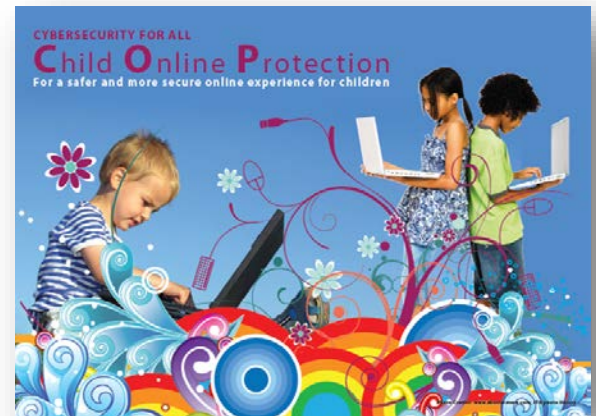
Joint project **among several partners under the coordination of the World Bank to build capacity** in developing countries in the policy, legal and criminal justice aspects of the combat against “cybercrime

National Strategies



- Developing **comprehensive and efficient National Cybersecurity Strategies** is fundamental for building a secure ICT ecosystem.
- A new reference tool being planned

- ITU together with its partners helps countries organize **Child Online Protection Strategy Framework workshops** to assist national stakeholders in planning and deploying an effective and practical approach to COP at a national level.





Achievements: CIRT & COP Programmes in Africa



- CIRT:
  - Assessments conducted for about **28** African countries
  - Implementation for about **10** African countries (2 underway)
  - Implementation in progress for Burundi
  - First Cyber drill conducted in Zambia end of September 2014 with participation of over **16** countries and AFRICACERT Team
  - Second Cyber drill conducted in Rwanda in May 2015 with participation of more than **150** participants from **18** countries
  - Third Cyber drill conducted in Mauritius in April 2016 with participation of more than **150** participants from **17** countries
- COP: ITU COP Guidelines
  - Development of an **operational framework for COS** national policies/strategies and formulation of national priority projects
  - Support to Member States for the **elaboration of COS national policies** and for formulation of national priority projects.

Challenges

- Awareness raising: e.g. decisions makers, users, technical actors, children
- Funding issues: need to put in place funding mechanisms for cybersecurity
- Capacity building: need to create a critical mass of actors able to address cybersecurity/COP related issues
- Putting in place national cybercrime/COP legislations
- Putting in place a harmonized regional cybercrime/COP legislation
- International cooperation: create a synergy of actions among actors: ITU, FIRST, AfricaCERT,...
- Follow-up: strong mechanisms to be put in place