ITU ACTIVITIES IN CAPACITY BUILDING

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Presentation outline

New CoE Strategy Implementation

- **Update on CoE Strategy Implementation**
- **Development of Training Materials**
- **Capacity Building Through Partnerships**
- **New Partnerships**
- **Challenges Experienced**
- **SC Roles**
- **ITU Arab CoEs Network Proposed OP-16**
- **Capacity Development Symposium**

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CoE Strategy Implementation 2015

CoE Strategy Implementation- CoEs CA:

32 centers selected

26 signed a Corporation Agreement with ITU, remaining 6 are:

      1 – Arab Region
      3 – Asia Pacific Region
      2 – Africa

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CoE Strategy Implementation – Selected CoE's

Americas region - No of Centres 6

Focus topics:
Broadband Access;
Cybersecurity; Digital Broadcasting; ICT
Applications and Services; ICTand Climate
Change Mitigation and Adaptation; Spectrum
Management

Europe region - Number of Centres: 5

Focus topics:
Broadband Access; Capacity Building in
Internet Governance; Conformance and
Interoperability; Cybersecurity; e-Waste

Commonwealth of Independent States (CIS) region

Number of Centres: 3

Focus topics:
Broadband Access; Cybersecurity; Digital
Broadcasting; e-Waste;
ICT Applications and Services; Policy and
Regulation

Africa region - Number of Centres: 6

Focus topics:
Broadband Access; Cybersecurity; Digital Broadcasting;
ICT Applications and Services; Policy and Regulation;
Spectrum Management

Arab region - Number of Centres: 6

Focus topics:
Broadband Access; Capacity Building in
Internet Governance; Conformance and
Interoperability; ICT Applications and Services;
 Policy and Regulation; Spectrum Management

Asia-Pacific region - Number of Centres: 6

Focus topics:
Broadband Access; Cybersecurity;
Conformance and Interoperability; Policy
and Regulation; SpectrumManagement

COE STRATEGY IMPLEMENTATION – ITU ARAB SELECTED COES

SPECTRUM MANAGEMENT

BROADBAND ACCESS

CONFORMANCE AND INTEROPERABILITY

ICT APPLICATIONS AND SERVICES

POLICY AND REGULATION

CAPACITY BUILDING IN INTERNET GOVERNANCE

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CoE Strategy Implementation – CoE's Steering Committee Meetings

Region	Venue	Date	Host
AFR	Mauritius	2-4 December 2015	EMTEL
AMS	Colombia	25-27 November 2015	CINTEL
ARB	Tunisia	17-18 November 2015	CIFODECOM
ASP	India	28-29 January 2016	Ministry of Communications and Information Technology
CIS	Rep. of Kyrgystan	9 December 2015	Ministry of Transport and Communications and Institute of Electronics and Telecommunications
Europe	Denmark	19 January 2016	European Communication Office

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CoE Strategy Implementation – Implementation of the Action Plans-15

Activities	Global
Planned	69 (10 Arab)
Implemented	39 (6 Arab)

A total of **$45,916** was received from trainings as at 13/11/2015

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CoE Strategy Implementation – HCB Support to CoE's

o   Development of standardized templates

o   Continued development of training materials

o   ITU Academy platform upgrade

o   Fees collection through implementation of payment based enrolment

o   Provision of bank transfer option as an additional method of payment

o   Development of a Coordinators guide and user rights to guide utilization of the new platform

o   Development of Instructors manual to support maximized utilization of new features of the platform

o   Development of plaques for each CoE

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DEVELOPMENT OF TRAINING MATERIALS

- Training programs developed / under development
  - Spectrum Management Training Program (SMTP)
  - Quality of Service Training Program (QoSTP)
  - ICT & Climate Change Training Programme (ICTCCTP)

- Existing training materials are also being aligned to ITU Academy Quality Standards.
  - Economics of Broadband and ICTs.
  - ICT network Deployment and Operation. (with funding from Inter-American Development Bank)
  - Smart Sustainable Cities
  - Conformance and Interoperability
  - Cybersecurity
  - Accessibility

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SMTP

Development

- A total of 15 Modules
- 14 Modules developed
- Module on Terrestrial TV Broadcasting Planning and Digital Transition being developed
- A Pilot programme of the Obligatory Module 1, was conducted between December 2014-February 2015. 40 participants enrolled
- Promotional Video produced to be shared at the end of this presentation

SMTP Modules:

Legal basis and regulatory framework of spectrum management

OM2 - Spectrum engineering fundamentals

OM3 - Wireless telecommunication technologies

OM4 - Economic and market tools of spectrum management

OM5 - Strategic planning and policies for wireless innovation.

EM1.1: Spectrum monitoring

EM1.2: Enforcement and type approval of equipment

EM1.3: SM for satellite systems

EM1.4: SM for HF systems, science, maritime and amateur services

EM1.5: SM for aeronautical and radio determination services and military systems

EM1.6: Computer-aided spectrum management

EM2.1: (Legal Specialization): Advanced spectrum authorization regimes

EM2.2: (Legal Specialization): Socio-economic impact of spectrum regulation; competition and consumer protection

EM2.3: (Technical Specialization): Terrestrial TV broadcasting planning and digital transition

EM2.4: (Technical Specialization): Opportunistic spectrum access and cognitive radio.

Next Steps

- Discussions with Universities on-going for possible partnership on the delivery of the SMTP
  - CTU
  - CINTEL
  - Arab Academy for Science, Technology & Maritime Transport

SMTP
SPECTRUM MANAGEMENT TRAINING PROGRAMME
AN ITU ACADEMY INITIATIVE
http://academy.itu.int

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QoSTP

- Total of 13 Modules

- 11 modules have been developed and peer reviewed

- The module on Regulatory Aspects of QoS (OM5) is still under development.

- Development of Overview module is pending the conclusion of the Regulatory Module.

Modules for the QoSTP

- OM 0 Overview Module
- OM 1 Introduction - Quality of Service and Quality of Experience
- OM 2 Subjective assessment of voice quality
- OM 3 Objective assessment of voice quality
- OM 4 QoS and QoE for Multimedia and assessment methods
- OM 5 Regulatory Aspects of QoS
- EM 1.1 Telephonometry
- EM 1.2 Network Performance Measurement
- EM 1.3 OAM for Performance Measurement
- EM 2.1 Hands-free communication and user interfaces in vehicles
- EM 2.2 Traffic management
- EM 3.1 QoS for mobile services
- EM 3.2 Bitrate measurement of Internet connections

Next Steps
- Discussions with institutions on-going for possible partnership on the delivery of the QoSTP
  - CERT-Tunisia

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QUALITY OF SERVICE TRAINING PROGRAMME

An ITU Academy Initiative

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ICT & Climate Change Training Programme (ICT&CCTP)

- Total of 21 modules Proposed
- Coordination team to oversee development of the materials has been set up
- Recruitment of experts to develop modules is On-going

Modules for ICT&CCTP

- OM: Overview Module.
- FM1:   Introduction to ICT & Climate Change.
- FM2:   Roles of Stakeholders in ICT & Climate Change.
- FM3:   Developing ICT Service Provider Strategies.
- FM4:   Assessing the Impact of ICT on Climate Change.
- FM5:   Applying Green ICT Strategies.
- FM6:   E-waste and the Circular Economy.
- AM1 1:   Climate Modelling
- AM 1.2:   The role of Satellite & Radio Communication in Environmental Modelling
- AM1.3:   Global/Regional Frameworks for GHG Emissions Reduction
- AM2.1   Policy Makers & Regulators
- AM2.2:   TSPs and IT Service Providers
- AM3.1:   Telecom Service Provider (TSP) Strategies
- AM3.2:   IT Service Provider Strategies (including Cloud Services)
- AM3.3:   Adaptation for Infrastructure Providers
- AM4.1:   How to carry out a full LCA
- AM4.2:   How to Assess the Carbon Footprints of Sectors, Countries and Regions
- AM5.1:   Improving the Energy Efficiency of ICT Products and Services
- AM5.2:   GHG reductions in the Power Sector
- AM5.3:   Decarbonising Transport
- AM5.4:   Smart & Sustainable Cities.
- AM6:   The End-of-Life Stage in Life Cycle Assessment

Other Programmes Developed within the Framework of the ITU Academy

- Smart Sustainable Cities (Developed with the Asia Pacific CoE)
- Accessibility
- Two Modules on
    - Economics of broadband and ICTs
    - ICT network deployment and operation (funding from Inter-American Development Bank)
- Review of materials on Conformance and Interoperability to align to ITU Academy standards

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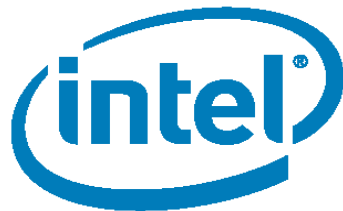# Capacity Building Through Partnerships

Training programmes in spectrum management are run in collaboration with Rhode & Schwarz under this agreement

Satellite communication training supported by BR has been conducted under this agreement

Training programmes in wireless networking are run in collaboration with International Centre for Theoretical Physics (ICTP)

Training programmes in Universal Services Policy for Broadband and Smart Learning Implementation – **Arab Region**

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New Partnerships

ITU and UKTA

Agreement Signed in June for the delivery of a joint online Master of Communications Management. Applications for the Masters degree are open and you can apply via visiting the ITU Academy website: https://academy.itu.int

ITU and CTU

A Corporation Agreement between ITU and Czech Technical University (CTU) is to be signed for the delivery of the spectrum management training programme

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Challenges Experienced

1. Late commencement of implementation of training activities

2. Late submission of training documents to ITU for standardization and advertising of courses

3. The templates provided for preparation of documents not yet fully used and in some instances they are modified when used

4. CoE's not yet utilizing the ITU Academy for advertising of their courses fully

5. Implementation of online payments generated the following challenges:

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Challenges Experienced

Issue	Region/s	Proposed/implemented Solution
Manual generation of invoices	Europe	Working on customizing the platform for automatic generation of invoices
Limited access to bank cards (credit cards and debit cards)	Africa, AMS	Provided an option for payment using bank transfers
Original invoices required which should not be more than 3 days when received. Scanned PDF invoices not accepted	CIS, ASP	ITU Regional coordinator issues the invoice manually using the template provided.
Payment of a course more than once by one participant. This is a result of the participant having been registered manually prior to payment.	AMS	The manual registration of participants should be only reserved for special cases and assessed on a case by case basis.
Difficulties to make international payment (too much time for bank transfers, tax too high, embargos, national restrictions on purchase of foreign currency …)	AMS, ARB, ASP, CIS, AFR	Payment to CoE's, ITU Reginal Office or UNDP. (temporary solution for countries where national legislation restricts payments, and are assessed on individual merits)
Automatic group invoices for companies	Europe	Solutions still being discussed with platform developer
Late requests for invoices (late advertising of courses). Since enrolment of courses is payment based, this delays payment and enrolment	CIS, ARB	Encourage CoE's to advertise for courses early to allow for smooth implementation of payment based enrolment

SC Roles

SC Role – To facilitate cooperation of the regional CoE's
- How can this role be achieved?
- How can ITU assist to intensify cooperation between the CoE's and across regions?

SC Role – To advice on operations of the CoE's
- Timelines on advertising of courses on the ITU Academy Platform
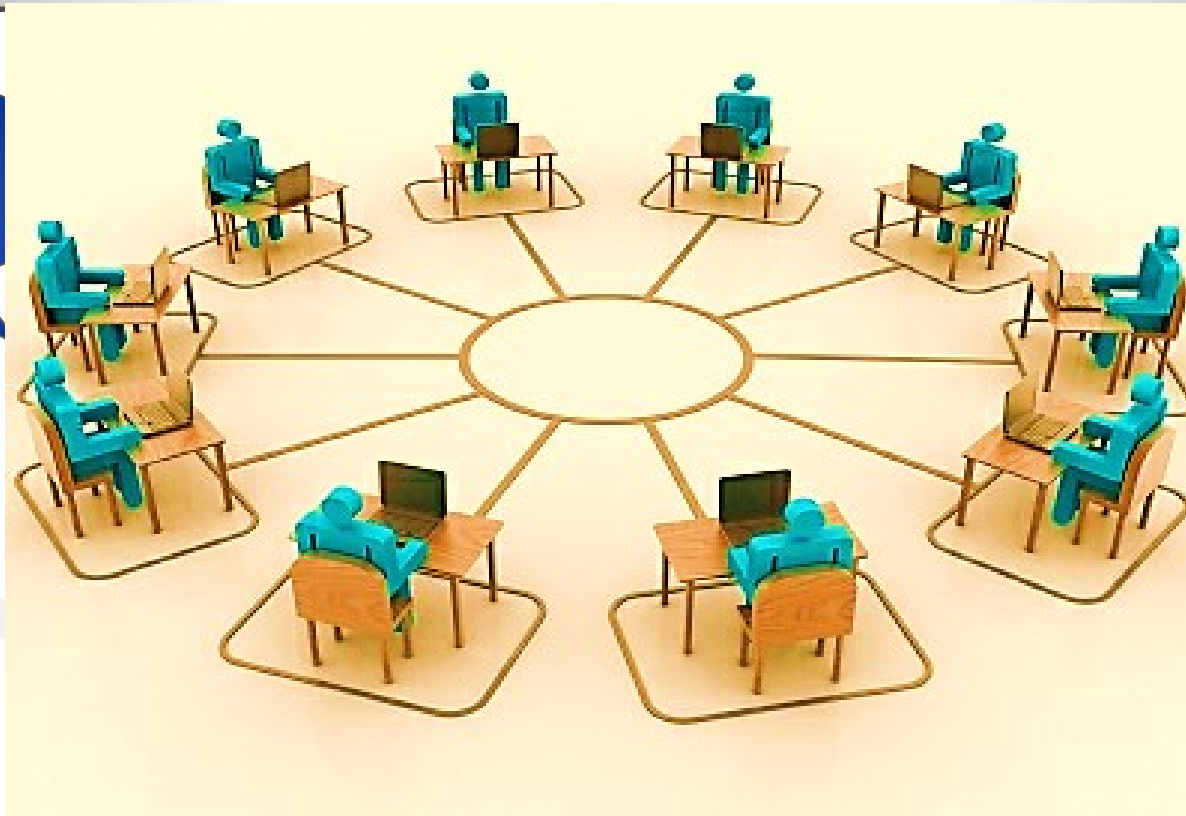- Strategies to increase participation in CoE activities

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ITU ARAB COES NETWORK PROPOSED OP-16

No.	From	To	Title of the event	Country	Status	Topic
1	14/03/2016	16/03/2016	Training on Business Analysis for ICT projects	Sudan	Confirmed	ICT Applications
2	18/04/2016	20/04/2016	Training on Project Management for ICT Implementation	Sudan	Confirmed	ICT Applications
3	17/05/2016	19/05/2016	Training on IPv6 Deployment	Sudan	Confirmed	ICT Applications
4	14/06/2016	16/06/2016	Training on Cloud Computing	Sudan	Confirmed	ICT Applications
5	20/05/2016	22/05/2016	Training on Practices for EMC conformity and electrical safety testing (theory and practice)	Tunisia	TBC	C & I
6	16/05/2016	18/05/2016	Training on Planning and Deployment of 3G/3G+/4G	Tunisia	Confirmed	New Technologies and BB
7	20/06/2016	24/06/2016	Radio Frequency Spectrum Monitoring and Management	Egypt	Confirmed	Spectrum Management
8	03/10/2016	05/10/2016	Training on IPv6 Deployment	Sudan	Confirmed	ICT Applications
9	06/10/2016	10/10/2016	Training on Broadband policy and implementation	Morocco	TBC	Policy and Regulation
10	25/10/2106	27/10/2016	TRA-Bahrain, SUDACAD and CIFODECOM workshop on Internet Governance: Technical Prospective	Bahrain	TBC	Internet Governance
11	07/11/2016	09/11/2016	Training on IoT, M2M and other new ICT applications & services	Sudan	Confirmed	ICT Applications
12	24/11/2016	26/11/2016	Training on C&I of Mobile Devices	Tunisia	TBC	C & I
13	01/12/2016	03/12/2016	Training on ICT Applications & Services and their Impact on Health, Safety, Social & Environmental Elements.	Sudan	Confirmed	ICT Applications
14	07/12/2016	09/12/2016	Training on Planning and Engineering of FTTH	Tunisia	Confirmed	New Technologies and BB
15	12/12/2016	13/12/2016	Training on Cognitive Radio Networks -CRN	Egypt	Confirmed	Spectrum Management
16	20/12/2016	22/12/2016	Training on Interconnect cost models	Morocco	TBC	Policy and Regulation

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Capacity Development Symposium

A biennial event that brings together high level executives to discuss capacity building issues

When:
September 2016

Venue:
Kenya

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THANK YOU!

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