ITU SPECTRUM MANAGEMENT TRAINING PROGRAMME (SMTP)

Concept Presentation

Mike Nxele
Human Capacity Building Officer
(HCB/PKM/BDT)

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presents

SPECTRUM MANAGEMENT TRAINING PROGRAMME

ADDRESSED PROBLEM

- Efficient running of Spectrum Management (SM) requires well educated professionals;
- Today there are no formal holistic SM education programmes;
- Spectrum managers must also have a clear understanding of legal and economic issues;
- Large institutions train SM staff by seconding them to experienced workers, but this offers narrowed vision and no formal quality check. This is not possible in smaller institutions.

THE SOLUTION: SMTP

- First in a series of ITU training programmes
- It offers access to SM training and forward-looking professional vision
- Full set of high level materials prepared by high caliber subject-matter experts
- Materials sanitized through Quality Assurance Mechanism
- Designed for anyone either a beginner or a specialist
- Provision of certain level of knowledge
- Different certification options
- International recognition, with possible option of university credits/diploma

PROGRAMME OBJECTIVES

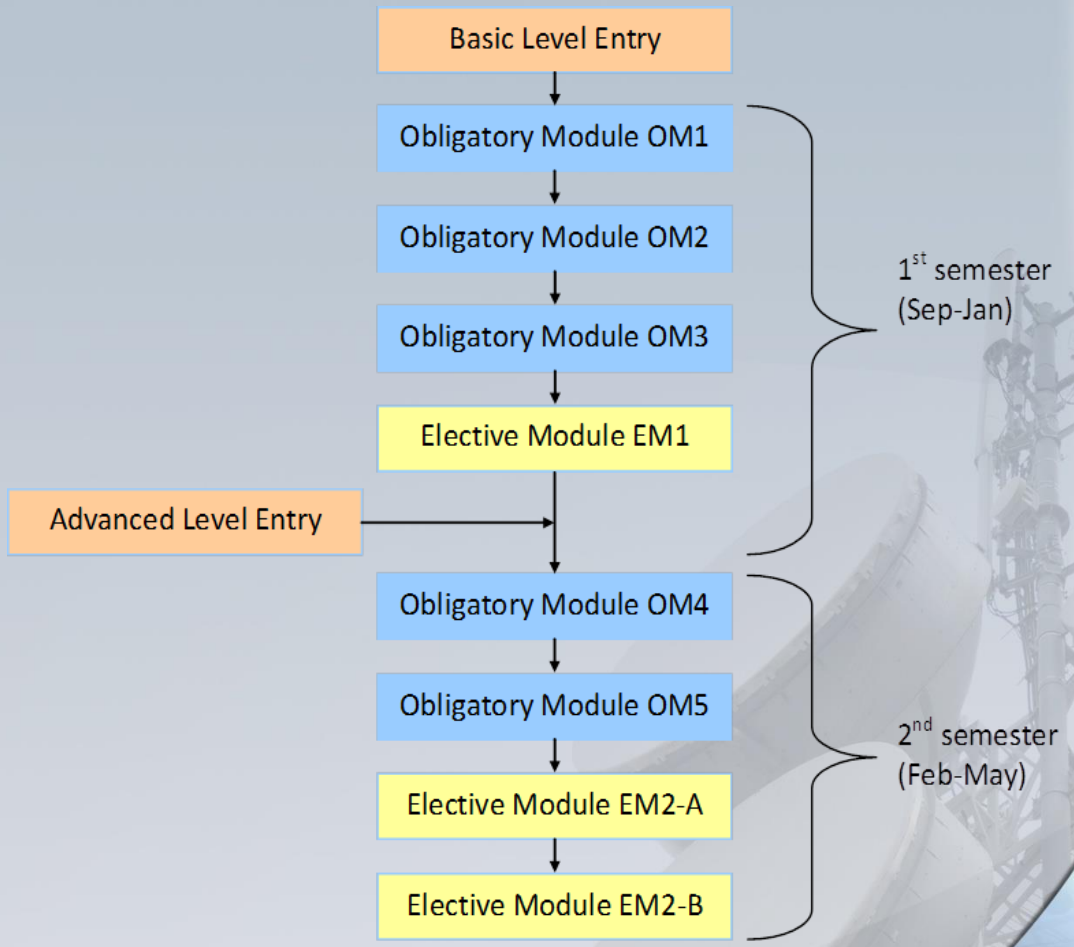
- Provide ITU membership with capacity building solutions in SM
- Provide access to the latest learning tools
- Build human and institutional capacity by designing and making available high quality training materials

BENEFITS FOR THE ITU

- Preserving and spreading the wealth of SM knowledge accumulated in the ITU (BR/BDT and ITU-R SG: staff's know-how and Reports/Recs)
- Additional facet to the ITU's global leadership role as enabler and facilitator of ICT development
- Service to Member States and Sector Members
- Course completion certificate as quality reference for candidates assessment in ITU and administrations' hiring processes

THE VISION

- Two entry levels
- Specialisation possibility:
  - Technical
  - Legal/economic
- Accordingly structured set of obligatory modules and specialised electives.



COMPOSITION OF THE PROGRAMME

BASIC LEVEL

Obligatory Modules (OM):

- **OM1** "Legal Basis and Regulatory Framework of SM"
- **OM2** "Spectrum Engineering Fundamentals"
- **OM3** "Wireless Telecommunications Technologies"

Elective Module 1 (EM 1)includes 6 options:

- **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"

COMPOSITION OF THE PROGRAMME

ADVANCED LEVEL

Obligatory Modules (OM):

- **OM4** "Economic and Market Tools of Spectrum Management"
- **OM5** "Strategic Planning and Policies for Wireless Innovation"

Elective Module 2 (EM2):

Legal Specialization:

- **EM 2-1**"Advanced Spectrum Authorization Regimes"
- **EM 2-2**"Socio-Economic Impact of Spectrum Regulation; Competition and Consumer Protection"

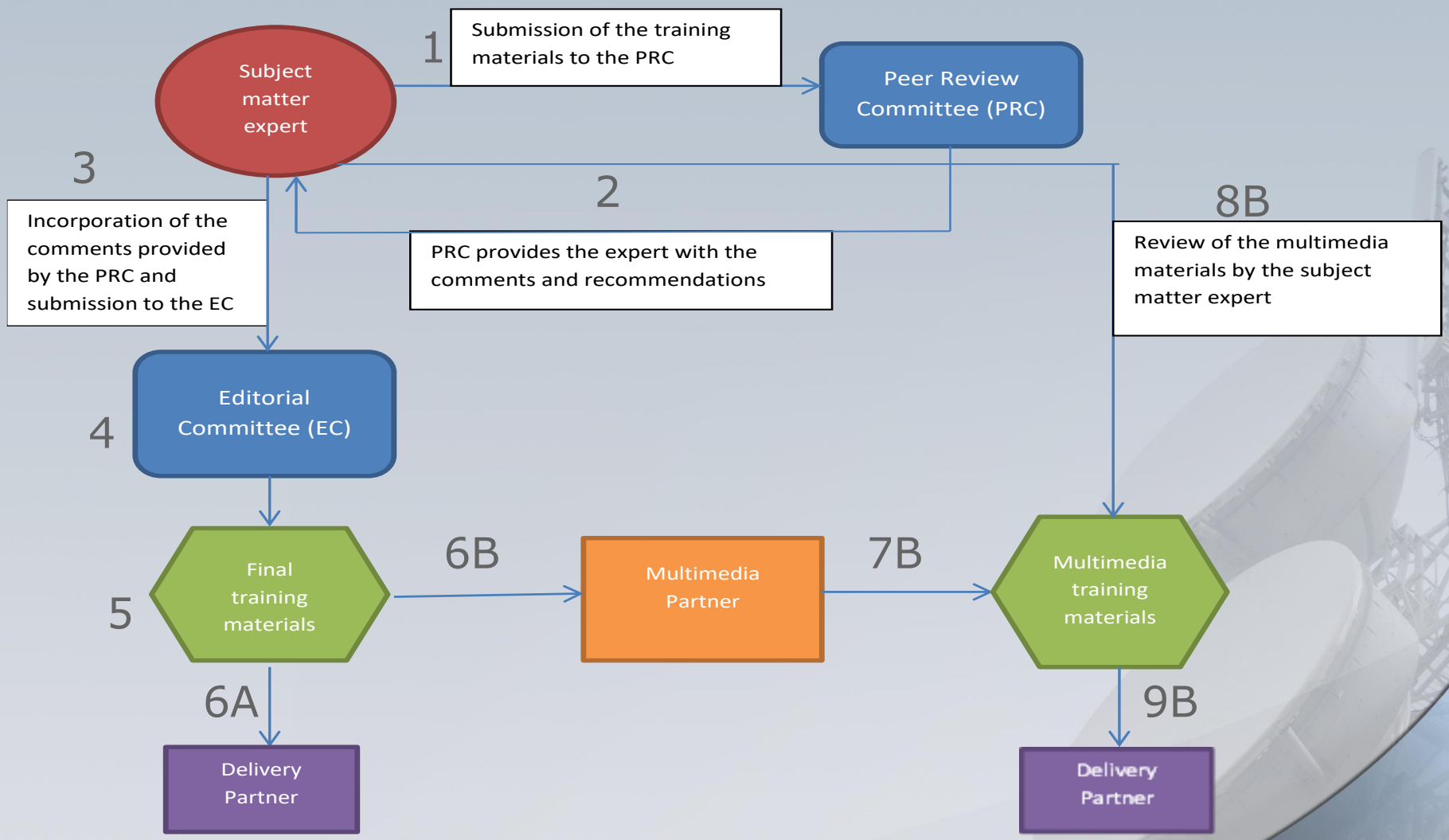
Technical Specialization:

- **EM 2-3**"Terrestrial TV Broadcasting Planning and Digital Transition"
- **EM 2-4**"Opportunistic Spectrum Access and Cognitive Radio"

IMPLEMENTATION

- Identification of subject-matter experts within the global SM community
- Preparation of high level training materials by experts
- Establishment of the Quality Assurance Mechanism
- Instructional design and editing of SMTP training modules
- Establishment of partnership with universities and other institutions in order to deliver the SMTP.

WORKING MECHANISM



QUALITY ASSURANCE MECHANISM (QAM)

The QAM will include:

- **Peer Review Committee**

It will ensure that technical quality of the content is of the highest standard

- **Editorial Committee**

It will ensure that language and terminology used in the training materials conforms to the rules, policies, procedures and instruments of the ITU.

ULTIMATE IMPLEMENTATION OPTIONS

1. International university Master course:

1)Courses organized via collaboration of university/ies and ITU as well as ITU-R sector members;

2)Diploma conferred by partner university/ies.

2. International professional SM certificate:

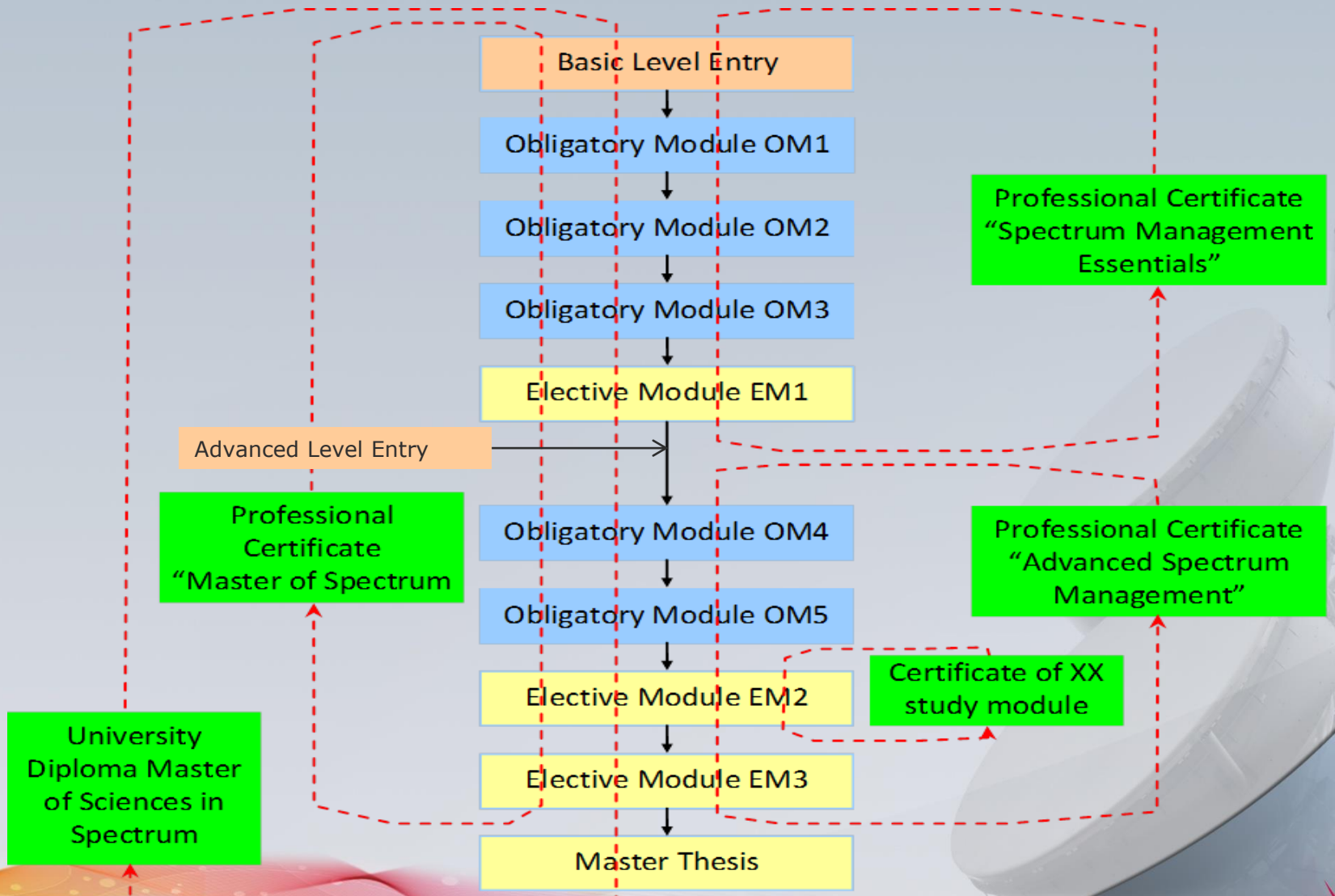
1)Developed content becomes a guide for self-studies, supported by practical experience in administrations

2)ITU Academy administers the remote testing to established standard and issues ITU certificate to those who successfully passed the exams

3. Combination of the above

DELIVERY OPTIONS FOR SMTP

FLEXIBLE CERTIFICATION ROUTES



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CURRENT STATUS: BASIC LEVEL OF SMTP

Module	Material delivery			Peer review		
	PPP	Q/A	Lab	PPP	Q/A	Lab
OM1	☹	☹	N/R			
OM2	✓	✓	N/R	✓	✓	N/R
OM3:						
Fixed services	✓	✓	N/R	✓	✓	N/R
Short range devices	✓	✓	N/R	✓	✓	N/R
Broadcasting	✓	☹	N/R	✓		
Mobile	✓	☹	N/R	✓		
Satellite	✓	✓	✓	✓	✓	✓
EM1-1	☹	☹	☹			
EM1-2	✓	✓	✓	✓	✓	✓
EM1-3	☹	✓☹	N/R			
EM1-4:						
Maritime	✓	✓	N/R	✓	✓	N/R
HF	✓	✓	N/R	✓	✓	N/R
Science	☹	☹	N/R			
Amateur	✓☹	☹	N/R	✓☹		
EM1-5	✓☹	✓☹	☹			
EM1-6	✓	✓	✓	✓	✓	✓

NEXT STEPS

- Finalizing and editing Basic Level of SMTP
- Preparing Basic Level for the pilot testing
- Recruiting experts for the development of Advanced Level

CONCLUSIONS

- The SMTP is a first high quality training solution in the domain of SM
- SMTP will be a part of the ITU Academy library
- SMTP will help to bridge the SM gap and will provide necessary tools and skills

THANK YOU!

For more information please contact

hcbmail@itu.int

http://academy.itu.int/news/item/1077/