

ITU-D CONFERENCE
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THE NEW ITU-R
STUDY GROUP 6 ON
BROADCASTING SERVICES

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Presented by

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DECISIONS OF THE ITU RADIOCOMMUNICATION ASSEMBLY RA-2000

- New Associate Membership
- Alternative Approval Procedure for Recommendations not having regulatory implications
- New forms of cooperation with recognized Standard Setting Organizations

DECISIONS OF THE ITU RADIOCOMMUNICATION ASSEMBLY RA-2000

- Merge SG10 (sound) and SG11 (television) establishing ITU-R Study Group 6 (broadcasting)
- Define scope of new Study Group 6
- Appoint Chairman and Vice-chairmen

1-SCOPE OF STUDY GROUP 6 (BROADCASTING SERVICES)

(Resolution 1-3, RA-2000)

Radiocommunication broadcasting (terrestrial and satellite), including vision, sound, multimedia and data services intended for delivery to the general public.

2-SCOPE OF STUDY GROUP 6 (BROADCASTING SERVICES)

(Resolution 1-3, RA-2000)

Broadcasting makes use of point-to-everywhere information delivery to widely available consumer receivers. When return channel capacity is required (e.g. for access control, interactivity, etc.), broadcasting typically uses an asymmetrical distribution infrastructure that allows high capacity information delivery to the public with lower capacity return link to the service provider. The production and distribution of programs (vision, sound multimedia, data, etc.) may employ contribution circuits among studios, information gathering circuits (ENG, SNG, etc.), primary distribution to delivery nodes, and secondary distribution to consumers.

3-SCOPE OF STUDY GROUP 6 (BROADCASTING SERVICES)

(Resolution 1-3, RA-2000)

“The Study Group, recognizing that radiocommunication broadcasting extends from the production of programmes to their delivery to the general public, as detailed above, studies those aspects related to production and radiocommunication, including the international exchange of programs as well as the overall quality of service.

A NEW ORGANIZATION FOR A NEW STUDY GROUP

- A Study Group has the authority to set up ANY Working Party and/or Task Group which is deemed necessary to perform its mandate.
- The Chairman of the Study Group is the responsible vis-a-vis the Radiocommunication Assembly.

WHY A NEW STRUCTURE

- Match the scope of the SG as defined by RA-2000
- Enhance ITU role in dealing with broadcasting
- Encourage participation in Study Group activities

OBJECTIVES OF A NEW STRUCTURE

(As agreed by the Steering Committee of SG6)

- The ITU-R should re-confirm its role as global b.c. standard setting body
- The ITU-R Recommendations should have an added value vis-a-vis the proposals (no rubber stamp)

CRITERIA TO DEFINE A NEW STRUCTURE

(As agreed by the Steering Committee of SG6)

- **MINIMUM NUMBER** of Working Parties (clearly defined competence areas, no overlap)
- **CLOSER COOPERATION** with other organizations
- **STRUCTURE** not to be soon **OBSOLETE**
- **SMOOTH TRANSITION** from present

DEFINITION OF A BROADCASTING MODEL

- Keeping in mind the scope indicated by RA-2000, it is possible to define a BROADCASTING MODEL using the ISO layered approach which includes the various areas of study
- The model can be used to identify a suitable STRUCTURE for the new Study Group

An end-to-end Broadcasting model

Production

Source signal
characterist.

Analog/Digit.
Representat.

Source coding

Contributions
(SNG, ENG)

Archiv., Films
Rec., Prg. Xchg

Prog. Assbly

Analog/Digit.
Multiplexing

Access Contr.

Transport

Distribution

Service Infor.
(Progr. guide)

Delivery

Channel
coding

Modulation

Frequency
Management

Antennas

Deliv. media
dep. Rx char.

Reception

Delivery med.
Interfaces

Demultiplex.

Inter-
operability

Overall sys.
aspects

User
Requirements

Multimedia

Perform. Assm
Qlty. Control

PRE-REQUIREMENTS FOR A NEW STRUCTURE

- Define clearly the **ROLE** of the **WPs vs. TG's**
- Define clearly the **WORKING PROCEDURES** in the framework of Resolution ITU-R 1-3

THE PRESENT (INTERIM) STRUCTURE

- Although necessary to ease merger, present Interim structure is far from optimal, due to:
 - ◆ WPs mandate not precisely defined to make each WP responsible for only one system aspect (no overlap)
 - ◆ receiver interoperability aspects not included
 - ◆ interactivity not clearly addressed
 - ◆ user requirements not set up by independent group

The INTERIM structure as currently implemented

Production

Source signal
characterist.

Represent.
Analog/Digit.

Source coding
(audio+video)

Contributions
(SNG, ENG)

Archiv., Films
Rec., Prg. Xchg

Prog. Assbly

Analog/Digit.
Multiplexing

Access Contr.

Transport

Distribution

Service Infor.
(Progr. guide)

Delivery

Channel
coding

Modulation

Frequency
management

Antennas

Deliv. media
dep. Rx char.

Reception

Delivery med.
Interfaces

Demultiplex.

Inter-
operability

Overall syst.
aspects

User
requirements

Multimedia &
Interactivity

Quality Ctrl.
Perf. Assmnt.

WP6P

WP6D

WP6E

WP6M

WP6Q

WP6R

WP6S

HOW TO DEFINE WORKING PROCEDURES

- Re-state role of WPs vs. TGs
- Add an ITU value to Recommendation
- Careful (re)draft and assign Questions:
 - ◆ Umbrella Questions to WPs
 - ◆ Urgent Questions to TGs
 - ◆ Clearly specify deliverable, time frame, available resources, etc.

WHAT NEW STRUCTURE

- Study Group 6 at its first meeting envisaged an HORIZONTAL STRUCTURE, based on the broadcasting model, where:
 - ◆ each WP should in principle be responsible for only one system aspect
 - ◆ exceptions admitted for “terrestrial” and “satellite” delivery and “recording”

The FINAL STRUCTURE as currently envisaged by SG6

Production

Prog.Assbly

Delivery/Reception

WP 6P

- Content acq. characterist.
- Analog/Digt representat.
- Requir.for source cod. in Product. and Contr. (ENG,SNG)
- Interfaces for Product.

WP 6A

- Analog/Dig. Mux/Demux
- Access Ctrl.
- Service Info
- Distrb.Intrf
- Coding for prod.,prim. distr,contrb. emission
- Requir. for prim/sec distr

WP6E

- (Terrest.)
- Sys. Charact.
- Chan.cod./decod.
- Mod/Demodulat.
- Freq. Planning and Sharing
- Rx-Tx Antennas & service areas
- Tx&Rx perform. requirem.
- Emiss. source coding requirem.

WP6S

(Satell.)

WP 6R

- Recording
- Arciv,Films
- Prog. Exchg.

WP 6M

- Interactivity
- Multimedia
- Webcas.Intrf

WP 6Q

- Subjec.assess.
- Quality Meas.
- Service Qlty.

SG-AHG

**USER
REQUIR.**

WHAT TO DO

- As invited by RA-2000, SG6 and its Chairman (assisted by a Steering Board) should:
 - ◆ Define new organization
 - ◆ Review all assigned Questions
 - ◆ Present final conclusions to next RA (including review of number of SG VCs)

WHAT TO DO

After approval of Final Structure (I.e. WPs and their competence), SG6 will:

- ◆ Draft new or revised Questions (for approval by correspondence) to match the new Structure
- ◆ Migrate gradually from existing WPs to the newly established as soon as relevant Questions have been approved

WHAT TO DO

- Draft new or revised Questions (for approval by correspondence) to match the new Structure:
 - ◆ *An Ad-Hoc Group has been established with relevant WP Chairmen to draft new or modified Questions within the mandate of each WP in accordance with the model and approved structure.*

WHAT TO DO

- Migrate gradually from existing WPs to the newly established as soon as relevant Questions have been approved:
 - ◆ *Existing WPs should prepare for transition. Due to the carefully selected final structure, such a transition should not dramatically upset their present attributions*

WHAT MANAGEMENT TEAM

- Appointed SG6 Chairman and Vice-Chairmen:
 - ◆ Chairman: Mr.A.Magenta (Italy)
 - ◆ Vice-Chairman: Mr.H.Kussmann (Germany)
 - ◆ Vice-Chairman: Mr.L.Olson (USA)
 - ◆ Vice-Chairman: Mr.J. Kumada (Japan)
 - ◆ Vice-Chairman: Mr.S.Glotov (Ukraine)
 - ◆ Vice-Chairman: Mr.K.M.Paul (India)
 - ◆ Vice-Chairman: Mr.J.A..Flaherty (NABA)
 - ◆ Vice-Chairman: Mr.V.Stepanian (ABU)
 - ◆ Vice-Chairman: Mr.R.Najm (ASBU)

Prof.M.I. Krivocheev is appointed Honorary Chairman

ROLE AND TASKS OF SG6 VICE-CHAIRMEN

- Reflect interest of members and specific regional broadcasting interests
- Identify emerging areas of strategic interest to SG
- Prioritize emerging or existing studies taking into account SG6 members priorities
- Highlight subjects on which support to developing countries is needed
- Consider consistence of new/revised Recommendations with ITU Resolutions

AREAS OF COMPETENCE OF SG6 VICE-CHAIRMEN

- Needs of broadcasters worldwide, Tropical Zone b.c., Production, Service Quality, Digital Coding, Interactivity and Multimedia:
 - ◆ Mr.J. Kumada (Japan)
 - ◆ Mr.J.A..Flaherty (NABA)
 - ◆ Mr.V.Stepanian (ABU)
- Terrestrial and satellite emission, Frequency Planning, Tropical Zone b.c.:
 - ◆ Mr.H.Kussmann (Germany)
 - ◆ Mr.L.Olson (USA)
 - ◆ Mr.S.Glotov (Ukraine)
 - ◆ Mr.K.M.Paul (India)
 - ◆ Mr.R.Najm (ASBU)

COOPERATION OF SG6 WITH STANDARD SETTING BODIES

- Agreements are being concluded with
 - ◆ SMPTE
 - to become ITU-R Sector member, reference in ITU Recommendations
 - ◆ IEEE
 - reference in ITU Recommendations
 - ◆ IEC
 - to set up joint expert groups, issue of joint Recs.

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THANK YOU