### **RESOLUTION ITU-R 4-7**

# **Structure of Radiocommunication Study Groups**

(1993-1995-1997-2000-2003-2007-2012-2015)

The ITU Radiocommunication Assembly,

considering

- a) No. 133 and Article 11 of the ITU Convention;
- b) that the work of the Radiocommunication Study Groups is involved with developing the technical, operational and procedural bases for efficient use of the radio spectrum and the geostationary-satellite orbit;
- c) that cooperation between the Radiocommunication Sector and international and regional organizations with regard to the development of standards for radiocommunication systems and operations would provide considerable benefits,

resolves

- that six Radiocommunication Study Groups shall be set up as shown in Annex 1;
- that, in liaison with the Telecommunication Standardization Sector, the Telecommunication Development Sector, the ITU General Secretariat and with other interested organizations, the Radiocommunication Bureau organizes the work of a Coordination Committee for Vocabulary, the scope of which is given in Annex 2.

### ANNEX 1

# The Radiocommunication Study Groups

### STUDY GROUP 1

## (SPECTRUM MANAGEMENT)

(Spectrum planning, utilization, engineering, sharing and monitoring)

### Scope:

Spectrum management principles and techniques, general principles of sharing, spectrum monitoring, long-term strategies for spectrum utilization, economic approaches to national spectrum management, automated techniques and assistance to developing countries in cooperation with the Telecommunication Development Sector.

Chairman: Dr S.Y. PASTUKH (Russian Federation)

Vice-Chairmen: Mr J.A. AL MAHRUQI (Oman)

Dr E. AZZOUZ (Egypt)
Mr R. CHANG (China)
Mr L. KIBET BORUETT (Kenya)
Mr T.H. LE (Viet Nam)
Dr I.-K. LEE (Korea (Rep. of))

Mr A. NDIAYE (Senegal)
Mr A. OSHADAMI (Nigeria)
Mr S.M.G. OUEDRAOGO (Burkina Faso)
Dr G. OWEN (Netherlands)

Dr A. SCOTTI (Italy) Mr S. SINGH (India)

Ms B. SYKES (United States)
Mr R. TRAUTMANN (Germany)

# (RADIOWAVE PROPAGATION)

## Scope:

Propagation of radio waves in ionized and non-ionized media and the characteristics of radio noise, for the purpose of improving radiocommunication systems.

Chairman: Mrs C.D. WILSON (Australia)

Vice-Chairmen: Ms C. ALLEN (United Kingdom) Mr S.-H. BAE (Korea (Rep. of))

Mr S.-H. BAE (Korea (Re Mr R. BANSAL (India) Mr A. BELKHADIR (Morocco)

Mr A. BELKHADIR (Morocco)
Mr L. CASTANET (France)
Mr S. KONE (Côte d'Ivoire)

Mr M. OMER (Sudan)

Dr S.I. STARCHENKO (Russian Federation)

Mr Z. ZHAO (China)

### (SATELLITE SERVICES)1

### Scope:

Systems and networks for the fixed-satellite service, mobile-satellite service, broadcasting-satellite service and radiodetermination-satellite service.

Chairman: Mr C. HOFER (ViaSat, Inc.)
Vice-Chairmen: Ms D. ABDALLA (Sudan)

Mr R. ALHAMAD (Saudi Arabia)
Mr T. ASHONG (Ghana)
Mr K. BINI (Côte d'Ivoire)

Mr K. BINI (Côte d'Ivo Mr M. BODIA (Senegal) Mrs S. CONTRERAS (France)

Mr A. DARVISHI (Iran (Islamic Republic of))

Ms S. HASANOVA (Azerbaijan)
Mr N. KAWAI (Japan)
Mr J. MASCIOTRA (Argentina)
Ms E. NEASMITH (Canada)

Mr S.-K. PARK (Korea (Rep. of))

Mr V.V. SINGH (India) Mr M. SOLIMAN (Egypt)

Ms S.V. TERESHCHENKO (Russian Federation)

<sup>&</sup>lt;sup>1</sup> Study Groups 4 and 6 are invited to work together in joint activities, including possible joint meetings to resolve assignment of Questions related to the broadcasting-satellite service, following the guidelines below:

<sup>1)</sup> All Questions, or part of Questions, addressing sharing shall be assigned to Study Group 4.

<sup>2)</sup> All Questions, or part of Questions, addressing frequency usage shall be assigned to Study Group 4.

<sup>3)</sup> All Questions, or part of Questions, addressing performance objectives and quality of service shall be assigned to Study Group 6.

<sup>4)</sup> All Questions, or part of Questions, addressing RF performance requirements of satellite links to meet the service requirements specified by Study Group 6, shall be assigned to Study Group 4.

## (TERRESTRIAL SERVICES)

### Scope:

Systems and networks for fixed, mobile, radiodetermination, amateur and amateur-satellite services.

Mr M. FENTON (United Kingdom) Chairman:

Vice-Chairmen: Mr E.H. ABDOURAMANE (Cameroon)

> (Saudi Arabia) Mr A.S. ALAMRI

Mr S. AL-BALOOSHI (United Arab Emirates)

Dr H. ATARASHI (Japan) (Viet Nam) Mr H.L BUI (Romania) Mr A.S. CALINCIUC Mr J.M. CATTANEO (Argentina) (Canada) Ms C. COOK Mr A. KADAYAN (India) Dr H. MAZAR (ATDI) Mr B. MBAYE (Senegal) (Nigeria) Mr F.I. ONAH Mr G. OSINGA (Netherlands) Dr B. PATTEN (United States) Mr V. POSKAKUKHIN (Russian Federation)

Mr D. SANOU (Burkina Faso) Mr W.M. SAYED (Egypt)

Prof Dr S. SHAVGULIDZE (Georgia)

## (BROADCASTING SERVICE)<sup>1</sup>

### Scope:

Radiocommunication broadcasting, including vision, sound, multimedia and data services principally intended for delivery to the general public.

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. This includes production and distribution of programmes (vision, sound, multimedia, data, etc.) as well as contribution circuits among studios, information gathering circuits (ENG, SNG, etc.), primary distribution to delivery nodes, and secondary distribution to consumers.

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 programmes as well as the overall quality of service.

Chairman: Dr Y. NISHIDA (Japan)

Vice-Chairmen: Dr M. ABDULRAHMAN (Ogero Telecom)

Mr A.S. AL ARAIMI (Oman)
Mr R. BUNCH (Australia)
Mr C. DOSCH (Germany)
Ms A.E. FARIA E SILVA (Brazil)
Mr R. KAPOOR (India)

Mr A. KESSE (Côte d'Ivoire)
Mr A.J. KISAKA (Tanzania)

Mr A.V. LASHKEVICH (Russian Federation)

Mr A.H. NAFEZ (Iran (Islamic Republic of))

Mr K. NIANE (Senegal)
Dr W. SAMI (EBU)
Dr P. ZACCARIAN (Italy)
Mr Q. ZENG (China)

## (SCIENCE SERVICES)

## Scope:

- 1 Systems for space operation, space research, Earth exploration and meteorology, including the related use of links in the inter-satellite service.
- 2 Systems for remote sensing, including passive and active sensing systems, operating on both ground-based and space-based platforms.
- Radio astronomy and radar astronomy.
- 4 Dissemination, reception and coordination of standard-frequency and time-signal services, including the application of satellite techniques, on a worldwide basis.

Chairman: Mr J. ZUZEK (United States)

Vice-Chairmen: Mr A. AMIN (United Arab Emirates)

Mr O.T. ANYAEJI (Nigeria)

Mr B. DUDHIA (United Kingdom)

Mr M.A. HASEEB (Egypt)
Mr Z. LIU (China)
Mr R.R NURSHABEKOV (Kazakhstan)
Mr J. PLA (France)

Mr I.V. ZHELTONOGOV (Russian Federation)

### ANNEX 2

## **CCV**

## (COORDINATION COMMITTEE FOR VOCABULARY)

### Scope:

Coordination and approval in close collaboration with the Radiocommunication Study Groups, the General Secretariat (Conferences and Publications Department) and other interested organizations (mainly the International Electrotechnical Commission (IEC)), concerning:

- vocabulary, including abbreviations and initials;
- related subjects (quantities and units, graphical and letter symbols).

Chairman: Mr Ch. RISSONE (France)
Vice-Chairmen: Mr C. MENÉNDEZ ARGÜELLES (Spain)

Mr V.M. MINKIN (Russian Federation)
Mr P. NAJARIAN (United States)

Mr M.I.A. SADEQ (Qatar)
Mr C. XIE (China)
Mr G. YAYI (Benin)