

## 4 Radiocommunication Sector (ITU-R)

### 4.1 Situational analysis

- 4.1.1 In order to establish a sound foundation upon which to base ITU-R strategies for the forthcoming years, an analysis of the Radiocommunication Sector (ITU-R) and its environment, both now and in the future, is of primary importance. Such an analysis requires a clear vision of those influential factors, both internal and external to ITU, that will allow ITU-R to take advantage of opportunities that arise to meet its objectives.
- 4.1.2 The biggest challenge for ITU-R is to remain abreast of the rapid and complex changes occurring in the world of international radiocommunications, coupled with a timely response to the needs of the radiocommunication and broadcasting industry in particular and to the membership as a whole. In an environment undergoing constant change and with ever greater demands from its members for products and services, the Sector should ensure that it remains as adaptable and responsive as possible to meet these challenges.
- 4.1.3 Pursuant to Article 1 of the ITU Constitution, the ITU-R is committed to building an enabling environment through management of the international radio-frequency spectrum and satellite-orbit resources. Since the global management of frequencies and orbit resources requires a high level of international cooperation, one of our principal tasks in ITU-R is to facilitate the complex intergovernmental negotiations needed to develop legally binding agreements between sovereign states. These agreements are embodied in the Radio Regulations and in world and regional plans adopted for different space and terrestrial services.
- 4.1.4 The field of radiocommunications addresses terrestrial and space services that are critical and increasingly important for the development of the global economy in the 21st century. The world is witnessing a phenomenal increase in the use of wireless systems in a myriad of applications. International radiocommunication standards (such as those contained in ITU-R Recommendations) underpin the entire global communications framework - and will continue to serve as the platform for a whole range of new wireless applications.
- 4.1.5 The domain of radiocommunications also includes aeronautical telemetry and telecommand systems, satellite services, mobile communications, maritime distress and safety signals, digital broadcasting, satellites for meteorology, and the prediction and detection of natural disasters.
- 4.1.6 In line with Radio Regulations, the recording of space and terrestrial notices and their associated publications are central to ITU-R's mission.
- 4.1.7 The need for continuing development of radiocommunication systems used in disaster mitigation and relief operations has increased and will be a key challenge for the future. Telecommunications are critical at all phases of disaster management. Aspects of emergency radiocommunication services associated with disasters include, *inter alia*, disaster prediction, detection, alerting and relief.

4.1.8 In the area of climate change, the work of ITU-R focuses on the use of ICT (different radio and telecommunication technologies and equipment) for weather and climate-change monitoring and for prediction, detection and mitigation of hurricanes, typhoons, thunderstorms, earthquakes, tsunamis, man-made disasters, etc.

4.1.9 Our stakeholders such as government agencies, public and private telecommunication operators, manufacturers, scientific or industrial bodies, international organizations, consultancies, universities, technical institutions, etc. through the processes linked with world radiocommunication conferences and study groups will need to continue to make decisions on the most profitable and efficient ways to exploit the limited resource of the radio-frequency spectrum and satellite orbits, which will be critical and of increasing economic value for the development of the global economy in the 21st century.

## **4.2 Vision**

The Radiocommunication Sector will remain the unique and universal convergence and regulatory center for worldwide radiocommunication matters.

## **4.3 Mission**

The mission of the ITU Radiocommunication Sector (ITU-R) is, *inter alia*, to ensure rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including those using satellite orbits, and to carry out studies and adopt Recommendations on radiocommunication matters.

## **4.4 Strategic goal**

The strategic goals of ITU-R is threefold, and includes:

- To ensure interference-free operations of radiocommunication systems by implementing the Radio Regulations and regional agreements, as well as updating these instruments in an efficient and timely manner through the processes of world and regional radiocommunication conferences.
- To establish Recommendations intended to assure the necessary performance and quality in operating radiocommunication systems.
- To seek ways and means to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum and satellite-orbit resources and to promote flexibility for future expansion and new technological developments.

## **4.5 Objectives**

The objectives of ITU-R are:

### **4.5.1 Objective 1:**

To promote, foster and ensure cooperation and coordination among all Member States in decision-making on radiocommunication issues, with the participation of Sector Members and Associates, as appropriate.

#### **4.5.2 Objective 2:**

To meet the requirements of the membership for spectrum, orbit access and operations in application of the Constitution, Convention and Radio Regulations, in the light, *inter alia*, of the accelerating convergence of radiocommunication services.

#### **4.5.3 Objective 3:**

To produce Recommendations on radiocommunication services in order to achieve connectivity and interoperability in applying modern telecommunications/ICTs.

#### **4.5.4 Objective 4:**

To respond to the needs of the membership by disseminating information and know-how on radiocommunication issues, by publishing and distributing relevant materials (e.g. reports and handbooks), in coordination and collaboration, as appropriate, with the other Bureaux and the General Secretariat.

#### **4.5.5 Objective 5:**

To provide support and assistance to the membership, mainly to developing countries, in relation to radiocommunication matters, information and communication network infrastructure and applications, and in particular with respect to a) bridging the digital divide; b) gaining equitable access to the radio-frequency spectrum and to satellite orbits; and c) providing training and producing relevant training materials for capacity building.

**Table 4.1 - ITU-R Outputs and Objectives**

Outputs	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5
World Radiocommunication Conference	X				
Regional radiocommunication conference	X				
Radiocommunication Assembly	X				
Radiocommunication Advisory Group	X				
Radio Regulations Board	X				
Processing of space notices and other related activities		X			
Processing of terrestrial notices and other related activities		X			
Improvement (e.g. user-friendly) of Radiocommunication Bureau software		X			
Study groups, working parties, task and joint groups			X		
ITU-R publications				X	
Assistance to members, in particular developing countries and LDCs					X
Liaison/support for development activities					X
Seminars					X

**Table 4.2 - Objectives, outputs, expected results and key performance indicators of ITU-R**

Objectives	Outputs	Expected results	Key performance indicators
<p><b>Objective 1: Coordinating...</b> To promote, foster and ensure cooperation and coordination among all Member States in decision-making on radiocommunication issues, with the participation of Sector Members and Associates, as appropriate</p>	<ul style="list-style-type: none"> <li>• World Radiocommunication Conference</li> <li>• Regional radiocommunication conference</li> <li>• Radio Regulations Board</li> <li>• Radiocommunication Assembly</li> <li>• Radiocommunication Advisory Group</li> </ul>	<p>1 To prepare, organize and provide appropriate and efficient support to:</p> <ul style="list-style-type: none"> <li>• World radiocommunication conferences</li> <li>• Regional radiocommunication conferences, if any</li> <li>• Radio Regulations Board</li> <li>• Radiocommunication assemblies</li> <li>• Radiocommunication Advisory Group</li> </ul> <p>2 Participation in meetings organized by various regional telecommunication organizations to assist in detailed preparations and coordination between regions</p>	<ul style="list-style-type: none"> <li>• Timely preparation and actions before and during the conferences and meetings; satisfaction of delegations</li> <li>• Timely preparation and actions during and before the Information and preparatory meetings</li> </ul>
<p><b>Objective 2: Processing...</b> To meet the requirements of the membership for spectrum, orbit access and operations in application of the Constitution, Convention and Radio Regulations in the light, <i>inter alia</i>, of the accelerating convergence of radiocommunication services</p>	<ul style="list-style-type: none"> <li>• Processing of space notices and other related activities</li> <li>• Processing of terrestrial notices and other related activities</li> <li>• Improvement (e.g. user-friendly) of software of the Radiocommunication Bureau</li> </ul>	<ul style="list-style-type: none"> <li>• To process advanced publications, coordination and notification requests pertaining to space and terrestrial radiocommunication services as well as all other related requests</li> <li>• To undertake the appropriate cost-recovery activities for satellite network filings</li> </ul>	<ul style="list-style-type: none"> <li>• Processing time for each submission within statutory time-limit, in accordance with the applicable procedures and/or pertinent provisions of the Radio Regulations</li> <li>• Timely application of Council Decision 482</li> <li>• Number of downloads and sales of ITU-R Recommendations</li> </ul>

Objectives	Outputs	Expected results	Key performance indicators
<p><b>Objective 3: Producing...</b></p> <p>To produce Recommendations on radiocommunication services in order to achieve connectivity and interoperability in applying modern ICTs, as well as to provide for the most efficient use of spectrum and orbit resources</p>	<ul style="list-style-type: none"> <li>Study groups, working parties, task and joint groups, conference preparatory meetings</li> </ul>	<p>1 To undertake the work programme in response to:</p> <ul style="list-style-type: none"> <li>ITU-R resolutions</li> <li>work assigned by CPM and preparation of draft CPM report to WRC</li> <li>ITU-R resolutions addressing specific areas of study</li> </ul> <p>2 To provide appropriate level of technical and logistical support for meetings</p>	<ul style="list-style-type: none"> <li>Deliverables available to membership within expected time-scale</li> <li>Meetings satisfy objectives within the imposed deadlines</li> </ul>
<p><b>Objective 4: Informing...</b></p> <p>To respond to the needs of the membership by disseminating information and know-how on radiocommunication issues, by publishing and distributing relevant materials (e.g. service publications, reports and handbooks), in coordination and collaboration, as appropriate, with the other Bureaux and the General Secretariat</p>	<ul style="list-style-type: none"> <li>ITU-R publications</li> </ul>	<p>1 To publish annually:</p> <ul style="list-style-type: none"> <li>Some 100 Recommendations, reports and handbooks</li> <li>25 annual issues of BR IFIC (terrestrial and space services) and annual BR IFIC (space services) on DVD</li> <li>Bi-annual editions of the SRS on DVD-ROM</li> <li>11 issues of HFBC schedules</li> <li>Relevant service publications, in the form and with the contents specified in the Radio Regulations</li> </ul> <p>2 To maintain and/or improve where possible the quality of the publications and guarantee or increase to the most appropriate extent possible the level of publications sales income</p>	<ul style="list-style-type: none"> <li>Timely preparation of the relevant inputs for publication, compliance with the statutory requirements and the pre-established schedules and timely publication</li> <li>Number of publications sold and level of publication sales income</li> </ul>

Objectives	Outputs	Expected results	Key performance indicators
<p><b>Objective 5: Assisting...</b></p> <p>To provide support and assistance to the membership, mainly to developing countries, in relation to radiocommunication matters, information and communication network infrastructure and applications, and in particular with respect to:</p> <ul style="list-style-type: none"> <li>• Bridging the digital divide</li> <li>• Gaining equitable access to the radio-frequency spectrum and to satellite orbits</li> <li>• Providing training and producing relevant training materials for capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance to members, in particular developing countries and LDCs</li> <li>• Liaison/support to development activities</li> <li>• Seminars</li> </ul>	<ul style="list-style-type: none"> <li>• To assist developing countries and BDT on aspects of radiowave propagation and spectrum-management techniques and systems</li> <li>• To organize world and regional seminars, workshops and information meetings dealing with radiocommunication conference preparatory issues</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in duplication; improvement of ITU-D products (e.g. SM systems); and satisfaction of users</li> <li>• Timely preparation (documentation and logistics) and participants' satisfaction</li> </ul>

