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| Director, Radiocommunication Bureau |
| report to the EIGHteenth meeting of the radiocommunication advisory group |

# 1 Introduction

This document is intended to provide status reports and background information on some of the issues that are on the provisional agenda for the 18th meeting of RAG (see [CA/194](http://www.itu.int/md/R00-CA-CIR-0194/en) of 17.12.01) to assist the meeting in considering the relevant agenda items.

Separate reports will be submitted for some of the agenda items.

# 2 Council issues

This section covers the relevant issues considered by the 2010 sessions of the Council (see: <http://www.itu.int/council/C2010/> and <http://www.itu.int/council/cext-2010/>).

## 2.1 Cost recovery for the processing of satellite network filings

The status report on the implementation of cost recovery for satellite network filings was presented in Document [C10/14](http://www.itu.int/md/S10-CL-C-0014/en) and noted by the Council. The report indicated that 99% of invoices issued in 2008/2009 due by 31.12.2009 were paid, and that the budget figures related to the 2008-2009 income for cost recovery of satellite network filings have been exceeded. These positive results were considered to be a demonstration of a real consensus among Member States about the pertinence of Decision 482 (modified 2008) and general acceptance of its principles.

Regarding the arrears of satellite network filings, the report indicated that of the 28 administrations/ operators that were entitled to have their invoices revised, 18 have settled their debts and two have signed repayment schedules.

The Council decided to include the status report on implementation of cost recovery for the processing of Satellite Network Filings in the same document that already contains the arrears situation of the Union, on the condition that Decision 482 remains unchanged.

The adoption of Decision 482 on cost recovery for the processing of satellite network filings has definitely played its expected role by limiting, inter alia, coordination filings to projects which have a greater likelihood of becoming real. Through this decision, the problem of backlog in processing of satellite network filings which had accumulated since the early 1990’s as a result of an incoming flow of “paper satellites”, has been solved, and since the end of 2010, there is no backlog in any part of the BR process.

Decision 482 however, is far from having solved the problem of “paper satellites” entirely: many satellite networks are recorded in the MIFR, but no longer in use, and artificially prevent new networks from having access to spectrum/orbit resources. Since 2009, the BR has focused on enforcing, where appropriate, the removal of unused frequency assignments from the MIFR when they have not been in regular use. These efforts have resulted in the total or partial suppression of 83 satellite networks over the last two years. Although significant, this result is insufficient in respect of the flow of incoming satellite networks being recording in the MIFR (about 250 per year).

As a result of the apparent congestion of spectrum/orbit resources, an increasing number of satellite networks are prevented to access these resources or can only do it under precarious conditions (subject to not causing harmful interference to, nor claiming protection from, incumbent networks in the MIFR). More effective means of preventing “paper satellites” to remain in the MIFR should therefore be considered.

Decision 482 has been built on costs related to the processing of new satellite network filings up to the entry of the information in the Master International Frequency Register (MIFR). However, costs related to the maintenance of such information throughout the life of the network were not considered, even though such information is taken into account in the technical examination of new satellite networks and compatibility calculations carried out by the BR involve both the new networks as well as the networks already recorded in the MIFR. As a consequence, it may be concluded that newcomers are taking on a greater financial burden than incumbents, many of which having been recorded prior to the entry into force of Decision 482.

In order to ensure a more equitable apportionment of overall processing costs between satellite users, in particular with respect to the costs associated to the maintenance of frequency assignments during the lifetime of a satellite network, a fee model that would include yearly fees (related to the Bureau’s cost for the maintenance of information in the MIFR) might be considered.

Such consideration lies within the competence of the ITU Council and subsequently, that of WRC for the status of assignments in case of non-payment. The advice of the RAG on this issue, however, would be welcome since it has implications on the efficient use of spectrum/orbit resources.

##  2.2 New Council Working Groups

The 2010 extraordinary session of the Council implemented actions called upon by the 2010 Plenipotentiary Conference (PP-10). In particular, it established the Council Working Group on a stable Constitution (PP-10 Resolution 163) and authorized the Council Group on the Financial Regulations and other related Financial Management Issues (FINREGS) to carry out preparatory work on the new Independent Management Advisory Committee (IMAC) (PP-10 Resolution 162).

## 2.3 Preparation of the draft budget for 2012-2013

Preparation of the draft budget is on-going and details will be provided in a separate document.

# 3 Results of PP-10

## 3.1 Strategic Plan 2012-2015 ([Resolution 71 (Rev. Guadalajara 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res71))

The strategic goal of the ITU Radiocommunication Sector (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.

The objectives and outputs of the ITU Radiocommunication Sector (ITU-R) are:

Objective 1 – Coordinating: 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.
Outputs: world and regional radiocommunication conferences; Radiocommunication Assembly; Radiocommunication Advisory Group; and Radio Regulations Board.

Objective 2 – Processing: 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.
Outputs: Processing of space and terrestrial notices and other related activities; and improvement (e.g. user-friendly) of Radiocommunication Bureau software.

Objective 3 – Producing: To produce Recommendations on radiocommunication services in order to achieve connectivity and interoperability in applying modern telecommunications/ICTs, as well as to provide for the most efficient use of spectrum and orbit resources.
Outputs: study groups, working parties, task and joint groups.

Objective 4 – Informing: 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.
Outputs: ITU-R publications.

#### Objective 5 – Assisting: 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. Outputs: Assistance to members, in particular developing countries and LDCs; Liaison/support for development activities; and seminars.

## 3.2 Financial Plan 2012-2015 (Decision 5 (Rev. Guadalajara, 2010))



The Financial Plan includes appropriations for holding the RA/WRC-12 and provisions for the post-conference activities to be carried out by BR.

Annex 2 to Decision 5 contains measures for reducing expenditure, which include the following items of special relevance to ITU-R: the review of the costs of study groups and other relevant groups; limitation of the number of study group meetings and their duration; limitation of the number of days of meetings for the advisory groups to three days per year maximum with interpretation; incorporation of the first preparatory meeting for the 2015/2016 world radiocommunication conference within the conference period (see 3.2.1 below); taking into account No. 145 of the Convention, a full range of electronic working methods needs to be explored to possibly reduce the costs, number and duration of the Radio Regulations Board meetings in the future, e.g. reduction of the number of meetings in one calendar year from four to three; move, to the extent practicable, from present communications by fax between the Union and Member States to modern electronic communication methods. Moreover, the first three measures for reducing expenditure in Annex 2 to Decision 5 related to the coordination and harmonization of seminars and workshops across the ITU are already being implemented under the supervision of the three Directors since beginning of 2011 (see Section 8.1) .

### 3.2.1 Date of the first session of the CPM for WRC-15/16

With respect to measure 13 of Annex 2 to PP-10 Decision 5 regarding the date of the first preparatory meeting for the [2015] [2016] world radiocommunication conference, the RAG is invited to consider the dates proposed below for the first session of the CPM (CPM15-1), as this information needs to be announced at least four months in advance of the meeting (see § 2.4.3.2 of the Guidelines for the working methods).

Considering that:

i) the approval of the agenda for WRC-15/16 and of the preliminary agenda for the subsequent WRC is most likely to occur at the very end of WRC-12;

ii) the membership and the secretariat will need to carefully analyse the items on those future WRC agendas in order to propose a suitable organization for the ITU-R preparatory studies;

iii) participants at CPM15-1 would not necessarily be attending the final week of WRC‑12.

the following dates are proposed for CPM15-1:

 Option 1: Saturday 18 and Sunday 19 February 2012;

 Option 2: Monday 20 and Tuesday 21 February 2012.

## 3.3 Admission of academia ([Resolution 169 (Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res169))

Through Resolution 169 (Guadalajara, 2010), PP-10 decided to admit academia, universities and their associated research establishments concerned with the development of telecommunications/information and communication technology (ICT) to participate in the work of the three Sectors, pursuant to the provisions of Resolution 169 (Guadalajara, 2010), without the need for any amendment to Articles 2 and 3 of the ITU Constitution, for a trial period until the next plenipotentiary conference.

The General Secretariat is implementing the necessary procedures to provide a framework for their participation in the work of the Sectors.

Updated information on the establishments which have been admitted to participate in the work of the ITU-R can be found at the [ITU Global Directory](http://www.itu.int/cgi-bin/htsh/mm/scripts/mm.list?_search=UNIV&_languageid=1).

According to Resolution 169 (Guadalajara, 2010), the Radiocommunication Assembly may wish to mandate the RAG to study, whether there is a need for any additional measures and/or arrangements to facilitate such participation that are not covered by Resolution ITU-R 1, and adopt such modalities, if they deem it necessary or required, and report the results to the Council.

## 3.4 Admission of Sector Members from developing countries ([Resolution 170 (Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res170))

Through Resolution 170 (Guadalajara, 2010), PP-10 decided to allow Sector Members from the category of developing countries (with an annual per capita income of less than USD 2 000 according to the United Nations Development Programme classification) to participate in the work of ITU-R based on the level of financial contribution at one-sixteenth of the value of a contributory unit for Sector Members.

Currently, there is no ITU-R Sector Member which falls into this category.

Council was instructed to submit a report on this participation to the next Plenipotentiary Conference on the basis of an evaluation thereof by the RAG, so as to enable the PP to make a final decision on such participation in the light of the report and the proposals therein.

## 3.5 Free online access to some ITU-R publications ([Decision 12 (Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#dec12A))

Through Decision 12 (Guadalajara, 2010), PP-10 decided to provide free online access to ITU-R recommendations and reports to the general public and that paper copies of ITU-R recommendations and reports will continue to be charged for on the basis of a two-tier pricing policy, whereby Member States, Sector Members and Associates pay a price based on cost recovery, whereas all others, i.e. non-members, pay a "market price” (defined as the price determined by the ITU Sales and Marketing Division, which is established to maximize revenues without being so high as to discourage sales).

The Council was instructed to undertake a holistic study on the costs/benefits of providing other texts of the Union, including the Radio Regulations, free online.

The statistics related to the downloading of ITU-R Recommendations will be presented in an addendum to this document.

## 3.6 Documents and publications of the Union ([Resolution 66 (Rev. Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res66))

Through Resolution 66 (Rev. Guadalajara, 2010), PP-10 decided that a two-tier pricing policy be established whereby Member States, Sector Members and Associates pay a price based on cost recovery, whereas all others, i.e. non-members, should pay a “market price".

In application of the PP-10 decisions, a new publication pricing policy has been established to be applied to the publications being issued since 1.1 2011. As an example, the 2011 edition of the ITU‑R [Spectrum Monitoring Handbook](http://www.itu.int/pub/R-HDB-23) has been put on the market at a price of CHF 230 (on paper or DVD), as opposed to CHF 50 for the 2002 edition plus its supplement of 2008 at CHF 68; the most recent version of the List of Ship Sections and Maritime Service Identity Assignments has been put on the market at CHF 295 (see <http://www.itu.int/pub/R-SP-LM.V-2011> ), as opposed to CHF 133 (List V) and CHF 108 (List VIIA) for the previous publications, which have now been merged into one.

## 3.7 Electronic meetings working methods ([Resolution 167 (Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res167))

Considering that developments in technologies and facilities for the holding of electronic meetings and the further development of electronic working methods (EWM) enable more open, rapid and easy collaboration between participants in the activities of ITU, which may be paperless, PP-10 decided, through Resolution 167 (Guadalajara, 2010), that ITU should further develop its facilities and capabilities for remote participation by electronic means in appropriate meetings of the Union, should continue to develop its electronic working methods concerning the development, distribution and approval of documents, and the promotion of paperless meetings, and gave instructions on the use of hyperlinks in ITU documents (the instructions are not applicable to the outputs of study groups).

PP-10 instructed the RAG to be involved in the evaluation of the use of electronic meetings and to develop further procedures and rules associated with electronic meetings, including the legal aspects. Moreover, PP-10 instructed the Director, BR, to take action, in consultation with the RAG, in order to provide appropriate electronic participation or observation facilities in Sector meetings for delegates unable to attend face-to-face meetings.

The Report of the RAG Correspondence Group on EWM (Document RAG11-1/5) contains information on actions taken in relation to these aspects.

## 3.8 Contributions and registration ([Resolution 165 (Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res165))

Through Resolution 165 (Guadalajara, 2010), PP-10 decided to establish a firm submission deadline for all contributions of no later than **fourteen calendar days** before the opening of conferences and assemblies of the Union, so as to ensure timely translation and their thorough consideration by delegations.

PP-10 also instructed the Secretary-General, in consultation with the Directors of the Bureaux, to explore, together with the Sector advisory groups, as appropriate, the issue of harmonizing deadlines for the submission of proposals as well as the procedures governing registration for meetings of the Union.

It’s noted that § 8.3 of Resolution ITU-R 1-5 contains the following instructions concerning deadlines for submission of contributions:

**“**For meetings of all groups (Study Groups, Working Parties, Task Groups, etc.), the following deadlines apply for the submission of contributions:

*– where translation is required,* contributions should be received at least **three months** prior to the meeting, and will be made available not later than four weeks before the meeting. For later contributions, no commitment can be made by the Secretariat to ensure the document will be available at the opening of the meeting in all the required languages;

– otherwise, for documents *not requiring translation*, contributions (including Revisions, Addenda and Corrigenda to contributions) received by 1600 hours UTC, **seven calendar days** prior to the start of the meeting are made available for the opening of the meeting. The deadline applies only to contributions from Member States, Sector Members and Associates.

The secretariat cannot accept submissions later than the aforementioned deadline. Documents not available at the opening of a meeting cannot be discussed at the meeting.”

In accordance with the No. 40 of the General Rules (GR), Member States are asked to submit, at least four months before the start of a radiocommunication conference, their proposals for the work of the conference. GR 82 provides that proposals or amendments presented after the opening of the conference shall be delivered to the chairman of the conference, to the chairman of the appropriate committee or to the secretariat of the conference for publication and distribution as conference documents.

In response to Resolution 165, [TSAG](http://www.itu.int/md/T09-TSAG-110208-TD-GEN-0247/en) (8-11 February 2011) agreed that a correspondence group “Deadlines and Registration” be established to explore to which extent deadlines and registration can be harmonized across the three Sectors. Mr Vladimir Minkin (Russian Federation) was appointed the convener of the correspondence group. The Terms of Reference are given in the following:

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| “The Correspondence Group is established to study the following matters:1. The appropriate deadlines for contributions to Study Group meetings from the membership in one language (without request for translation), the time required to be posted on the website by the secretariat and the deadlines for all meeting documents, including from Secretariat and chairmen/rapporteurs, be posted on site.
2. Harmonization of deadlines across the sectors of the ITU and harmonization in documentation numbering and classification, if any.
3. Whether registration to ITU-T Study Group meetings should be provided through Designated Focal Points

In conducting its work, the group should consult with the Advisory groups of the R and D sectors and take into account PP Res. 165 (Guadalajara, 2010) and contribution C-39 from Russia.The Group shall report its findings and proposals to the next meeting of TSAG.” |

At the same time, the ITU General Secretariat has established an internal group to carry out a review of the current methodology and practices for delegate registration in the General Secretariat and the three Sectors.

## 3.9 Number of vice-chairmen of RAG, ITU-R study groups and other groups ([Resolution 166 (Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res166))

Through Resolution 166 (Guadalajara, 2010), PP-10 invited the RA in consultation with the Director, BR to review the current situation with a view to establishing the necessary criteria for appointment of the optimum numbers of vice-chairmen for the RAG, study groups and other groups(including, to the extent practicable, CPM and SC-RPM), as the case may be, taking into account the following guidelines:

1) The number of vice-chairmen should be limited to the minimum necessary experienced professionals, as per the respective Sector resolutions relating to the appointment of vice-chairmen of Sector advisory groups, study groups and other groups

2) Equitable geographical distribution among ITU regions and the need to promote more effective participation by the developing countries should be taken into account so as to ensure that every region be represented at least by one or two competent and experienced persons in the Sector advisory groups, study groups and other groups

3) The total number of chairmen and vice-chairmen proposed by any administration should be fairly reasonable, so as to observe the principle of equitable distribution of posts among the Member States concerned

4) Regional representation in the advisory groups, study groups and other groups of all three Sectors should be taken into account, such that no single individual may hold more than one vice-chairmanship position in these groups in any one Sector, and only in exceptional cases hold such a position in more than one Sector

5) Each ITU region attending RA is encouraged, when assigning the positions to individual experienced professionals, to fully observe the principle of equitable geographical distribution among ITU regions, and the need to promote more efficient participation by the developing countries

6) The above-mentioned guidelines may, to the extent practicable, be applied to CPM and SC‑RPM in ITU‑R

PP-10 instructed the Director, BR to include this matter in the agenda of the RAG, with a view to duly establishing the required harmonized criteria for the selection/appointment of the above-mentioned positions and to make the necessary arrangements for the RA to review the criteria referred to above in its respective resolutions, including by preparing and providing necessary information regarding the position(s) already held by individual persons from each country in all three ITU Sectors under *instructs the Directors of the three Bureaux*.

## 3.10 Conformance and interoperability ([Resolution 177 (Guadalajara, 2010)](http://www.itu.int/council/Basic-Texts/ResDecRec-PP10-e.docx#res177))

PP-10 invited the Member States to contribute to RA-12 in order for it to consider and take appropriate actions as deemed necessary with respect to the provisions of Resolution 177 (Guadalajara, 2010).

At the recent TSAG meeting, the Director, TSB presented [TD224](http://www.itu.int/md/T09-TSAG-110208-TD-GEN-0224/en) “Elements of a business plan to implement the conformity and interoperability programme”, an outline of a business plan for the long term implementation of the programme including an initial estimate of over CHF500k/annum costing. TSAG welcomed the initiation of work on a business plan but recognized that the draft business plan which is under development on an on-going basis to be submitted to the Council in October 2011 would need to be considerably more detailed. TSB was requested to ensure that consultation be undertaken with all stakeholders on the development of the business plan.

An inter-sector task force involving the three Bureaux was set up within the ITU on the conformity and interoperability programme. The BR is following developments with a view to exploring any future applicability of a conformity and interoperability programme as well as a mark programme to ITU-R Recommendations.

# 4 Study group activities

**4.1 Working methods**

Study Group activities have been pursued within a stable Study Group (SG) and Working Party (WP) structure according to the work programmes defined in the ITU-R Operational Plan. Working methods have been satisfactorily applied in accordance with Resolution ITU-R 1-5 (and the associated Guidelines), with increased emphasis placed on the use of electronic facilities that have brought considerable benefit to delegates as well as a significant economy in paper. Access to documentation during meetings via a dedicated Sharepoint website is the standard practice, with only a minimal number of paper copies printed for meetings held in Geneva. It is proposed that the forthcoming Study Group and Working Party move progressively towards being completely paperless, as is already the case with most of the ITU-T meetings. The use of Sharepoint facilities has been extended to meetings held outside of Geneva and all such meetings are now completely paperless.

A file synchronization facility is being implemented for all Study Group/Working Party meetings to facilitate access to the most recent versions of documents during meetings.

On an increasing number of occasions, the shortage of meeting rooms at ITU Headquarters is seriously hindering the effective planning of meetings. The problem is exacerbated by four main factors: i) the increasing number of meetings being arranged by all three Sectors and the General Secretariat, ii) the lack of meeting rooms with a capacity of around 150-200 participants, iii) the need to avoid overlap and clashes of meeting dates, and iv) the very long lead times required for bookings and the limited availability in alternative facilities such as CCV and CICG. This problem will be particularly acute this year due to renovation work being carried out on Room B from May to October 2011.

**4.2 Study Group preparations for WRC-12**

As noted in Section 6.1, the Study Groups prepared their elements of the draft CPM Report to WRC-12 according to schedule. The Study Groups are now finalizing proposed draft new and revised Recommendations and Reports that are referenced in the Annex of the CPM Report to WRC-12.

## 4.3 Notable activities in the Study Groups

* After four years of complex studies, WP 1C, with the authorization of SG 1, approved the complete new edition of the Handbook on Spectrum Monitoring (2011 Edition), which reflects the latest developments in telecommunication and monitoring technology and is recognised to be of particular benefit to developing countries.
* With the approval of Report ITU-R M.2176 “Vision and requirements for the satellite radio interface(s) of IMT-Advanced”, ITU-R has commenced the process of developing ITU-R Recommendations for the satellite component of the IMT-Advanced radio interface(s). This work is guided by Resolution ITU-R 57.
* The approval of Report ITU-R S.2199 “Studies on compatibility of broadband wireless access (BWA) systems and fixed-satellite service (FSS) networks in the 3 400-4 200 MHz band” reflects the successful joint work between SGs 4 and 5 conducted by the relevant Working Parties in both Study Groups.
* Work progressed on IMT-Advanced in accordance with the foreseen time-scales. Six candidate radio interface proposals were submitted to WP 5D and evaluated for compliance with minimum technical and operational requirements. The subsequent consensus building led to the selection of two radio interface technologies, LTE-Advanced and WirelessMAN-Advanced, to be included in the final standardization phase of IMT-Advanced. The ITU-R Recommendation containing the detailed technical specifications of IMT-Advanced are scheduled for adoption at the SG 5 meeting in November 2011, and to be sent to RA-12 for approval.
* SG 6 co-hosted/participated in an ITU-R/ITU-T/EBU Workshop on Accessibility broadcasting and IPTV in November 2010. The Study Group also approved a Report, ITU-R BT.2207 “Accessibility to broadcasting services for persons with disabilities” at its October 2010 meeting.

## 4.4 Liaison and collaboration with ITU-D and ITU-T, and with other organisations

Inter-sector activities have been very evident throughout the period, particularly concerning ITU’s priority topics of climate change and emergency communications, further details of which are contained in § 7.

*Concerning ITU-D:* Of particular importance has been ITU-R and BR’s contribution to several BDT Development Fora linked with the preparation for WTDC-10. These events provided an opportunity to present ITU-R’s standardization activities and, in turn, to demonstrate their contribution to Resolution 123 (Rev.Antalya, 2006) in bridging the standardization gap. BR was also present at the WTDC-10 Regional Preparatory Meetings held for the CIS, European and Arab regions.

Experts from ITU-R SG 1 will continue to assist in the development of the SMS4DC software application, in accordance with Resolution ITU-R 11-4.

In connection with ITU-D Study Group activities:

* BR contributed to the annual update of the Report of Rapporteur Group 9-3/2 describing those studies and their outputs of particular interest to developing countries;
* ITU-R WP 7C provided information to the ITU-D Rapporteur Group on Question ITU‑D 22/2 on the use of radio-based remote sensing in disaster prediction, detection and mitigation;
* ITU-R SG 1 continued its active collaboration with ITU-D Study Group 2 in the implementation of the new phase of studies falling under ITU-D Resolution 9 (Rev. Hyderabad, 2010) and, based on the newly approved Handbook on Spectrum Monitoring, ITU-R WP 1C provided technical information on spectrum monitoring in support of the studies in response to Question ITU-D 23/1 on strategies and policies concerning human exposure to electromagnetic fields;
* In addition to the continuing update of Report ITU-R BT.2140 on the transition from analogue to digital terrestrial broadcasting, ITU-R SG 6 has started the preparation of a Handbook on digital television (DTV) implementation. This Handbook will gather together all relevant technical material and will complement the Report and be of benefit to administrations that are planning migration. The work is foreseen to be of particular relevance to ITU-D;
* ITU-R WP 4C provided further information to ITU-D SG 2 on the use of MSS networks in the event of natural disasters and similar emergencies.

*Concerning ITU-T:* In addition to climate change and emergency communications, topics of mutual interest between ITU-R and ITU-T include:

* ITU-T Resolution 72 on the effects of human exposure to radio-frequencies where studies in ITU-T SG 5 have been followed, particularly in ITU-R SG 1, with respect to the monitoring and measurement of electromagnetic fields;
* Standardization activities on power line telecommunication (PLT) systems. These are currently under study in ITU-T SG 15, for which i) ITU-R WP 1A has established a Rapporteur Group including representatives from ITU-T SG 15 to develop protection requirements and criteria of radiocommunication services in respect to the impact of PLT systems in the frequency bands of interest, and ii) an ITU Forum was organized jointly by BR and BDT to share this information and the progress made so far with other standardization organizations;
* Activities in ITU-T SG 13 on standards for future networks and next generation networks as well as mobility management and fixed-mobile convergence, having particularly in mind current studies in ITU-R SGs 4 and 5;
* Recent collaborative discussions with ITU-T, ISO and IEC with regard to issues related to IPR have involved the development of a draft revised Guidelines for implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC. It was prepared by the World Standards Cooperation (WSC) Patent Task Force and contains all the revisions proposed by ITU/ISO/IEC since the adoption of the Common Patent Guidelines in March 2007, in particular clarification on the explanation of the term “Patent” and introduction of a new paragraph on “Assignment or Transfer of Patent Rights”;
* The output report of the ITU/EBU Joint Workshop on Accessibility proposed the setting up of an ITU-T Focus Group on audio-video media accessibility, under the umbrella of ITU-T SG 16; the FG (see [terms of reference](http://www.itu.int/en/ITU-T/focusgroups/avaccessibility/Pages/tor.aspx)) will bring together experts from ITU-R, ITU-T and user organizations.

There continues to be a requirement for close coordination on a number of topics being addressed by ITU-T that impinge on radiocommunication issues to reduce the potential for overlap, duplication and conflict of work undertaken by the two Sectors.

*Concerning other organizations:* Healthy liaison has continued between the ITU-R Study Groups and Other Organisations, with due reference to Resolution ITU-R 9-3 where required. ITU-R and BR representatives have continued their active involvement in the Global Standards Collaboration (GSC), including its annual meeting held on 30 August to 2 September 2010 hosted by CCSA. Liaison has also been evident with UN bodies and agencies in various fields, e.g. climate change and climate monitoring (WMO, UNFCCC, Global Humanitarian Forum, GEO, SFCG, NASA, ESA, JAXA) and EMF exposure (WHO).

# 5 RA-12 preparation

RA-12 is scheduled from 16 to 20 January 2012. Invitations were dispatched by the Secretary‑General in Circular Letters DM-1002 and 1003. The Radiocommunication Assembly website is available at: <http://www.itu.int/ITU-R/go/RA-12>.

The duties and functions of the Radiocommunication Assembly are defined in Article 13 of the Constitution and Article 8 of the Convention, while the working methods of the Assembly are described in § 1 of Resolution ITU-R 1-5.

In view of the ready availability of the documents on the ITU website and of the file synchronization facilities that will be provided during RA-12, it is considered unnecessary to provide a CD-ROM of the output files at the end of the RA. Further, it is proposed that the Book of ITU-R Resolutions be compiled immediately after the RA and be made freely available in electronic format.

# 6 WRC-12 preparation

WRC-12 is scheduled from 23 January to 17 February 2012. Invitations were dispatched by the Secretary-General in Circular Letters No. 11 and DM-11/1000 of 10 March 2011 and by BR in Circular Letters CA/196 of 6 April 2011. The Conference website is available at: <http://www.itu.int/ITU-R/go/WRC-12>.

In accordance with Resolution 95 (Rev.WRC-07) and in connection with WRC-12 Agenda item 4, a general review of Resolutions and Recommendations of previous conferences was undertaken by BR and was presented directly to the Second Session of CPM-11 (CPM11-2) in Document [32](http://www.itu.int/md/R07-CPM11.02-C-0032/en), after consultation with the Chairmen and Vice-Chairmen of the RAG and Radiocommunication Study Groups, given that the consideration at a meeting of the RAG could not take place for schedule reasons. Annex 4-1 in Chapter 6 of the CPM Report to WRC-12 contains the proposals for consideration of the conference.

In accordance with Resolution 28 (Rev.WRC-03) and in connection with WRC-12 Agenda item 2, a list of those ITU-R Recommendations incorporated by reference in the Radio Regulations (RR) which have been revised and approved during the elapsed study period, has been prepared by BR for possible inclusion in the CPM Report. In addition, in accordance with Resolution 27 (Rev. WRC-07), BR also identified the RR provisions and footnotes containing references to ITU-R Recommendations, as well as the RR provisions and footnotes containing references to WRC Resolutions that contain references to ITU-R Recommendations. This information was presented to CPM11‑2 in Document [32](http://www.itu.int/md/R07-CPM11.02-C-0033/en) and was included § 6/2, Chapter 6 of the CPM Report to WRC-12.

In connection with WRC-12 agenda item 8.1, a preliminary version of the Director’s Report to WRC-12 has been prepared for submission to CPM11-2 in Document [34](http://www.itu.int/md/R07-CPM11.02-C-0034/en).

A Preparatory Task Force for WRC-12 was established within the ITU to address all the administrative, logistical and financial preparatory actions.

As foreseen in Resolutions 80 (Rev. Marrakesh, 2002) and 72 (Rev. WRC-07), an Informal Group for the preparation of WRC-12 was established by the representatives of regional groups under the chairmanship of Dr. J-C. Albernaz of Brazil. The group met three times since 2009 and considered the matters related to the structure and officers of the Conference. Information on the Informal Group is found at the WRC-12 website.

# 6.1 CPM11-2

Preparations for the second session of CPM-11 (CPM11-2) were undertaken in accordance with the results of the first session, CPM11-1, as contained in Administrative Circular CA/171 and its Addendum 1.

During the May-July 2010 period, final meetings were held of the “responsible groups” for draft CPM texts that were all provided before the deadline of 16 July 2010 and subsequently used to compile the draft CPM Report at the CPM-11 Management Team Meeting held on 26-30 July 2010. The English version of the draft CPM Report was available on the ITU-R website (as Document [CPM11-2/1](http://www.itu.int/md/R07-CPM11.02-C-0001/en)) on 13 August 2010. Extracts from the draft CPM Report on regulatory/procedural matters were prepared as a document to the Special Committee for its meeting 1-5 November 2010. The Report from the SC was available as Document [CPM11-2/2](http://www.itu.int/md/R07-CPM11.02-C-0002/en) on 12 November 2010.

As indicated in above, BR also prepared Documents CPM11-2/ [32](http://www.itu.int/md/R07-CPM11.02-C-0032/en), [33](http://www.itu.int/md/R07-CPM11.02-C-0033/en) and [34](http://www.itu.int/md/R07-CPM11.02-C-0034/en), as well as an updated version of Annex 1 to the draft CPM Report in Corrigendum 1 to Document CPM11-2/[1](http://www.itu.int/md/R07-CPM11.02-C-0001/en).

CPM11-2 was held in Geneva from 14 – 25 February 2011, the announcement for which was contained in Administrative Circular CA/191 + Addenda 1 and 3. CPM11-2 was attended by more than 1100 participants representing 109 ITU Member States and 69 Radiocommunication Sector Members, including international organizations. It considered 160 input contributions and approved the CPM Report to WRC-12 in all the six languages of the Union (see at: <http://www.itu.int/md/R07-CPM11.02-R-0001>).

It is worth noting that the printed form of the [CPM Report to WRC-12](http://www.itu.int/pub/R-ACT-CPM.1-2011) (in the six official languages) is available for sale for the first time.

# 6.2 Other preparatory activities for WRC-12

The BR organized the [2nd ITU Information Meeting on WRC-12 Preparation](https://www.itu.int/exchweb/bin/redir.asp?URL=http://www.itu.int/ITU-R/index.asp?category=conferences%26rlink=wrc-12-info-10%26lang=en) (Geneva, 24‑25.11.10). The meeting was attended by 134 participants representing 54 countries and 18 companies and organizations including the following six regional telecommunication organizations - APT, ASMG, ATU, CEPT, CITEL and RCC. Fellowships were given to 20 participants from the following Member States:  Benin, Burkina Faso, Burundi, Comoros, Dem. Rep. of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Haiti, Honduras, Kyrgyz Republic, Lao People’s Dem. Rep., Lesotho, Malawi, Myanmar, Rwanda, Uganda, Uzbekistan and Viet Nam.

Following the successful results of the 2009 and 2010 meetings, a 3rd ITU Information Meeting on WRC-12 Preparation is planned for 7-8 November 2011 to focus on the presentation of positions and views from the regional groups based on the CPM Report and the Director’s Report to WRC‑12.

BR staff have been attending most of the WRC-12 preparatory meetings of the regional groups and when requested, making presentations on the progress of the ITU-R preparations.

Information on all the regional groups in charge of the preparation for WRC-12 are accessible from: <http://www.itu.int/ITU-R/go/wrc-12-regional>.

## 6.3 Resolution 80 (Rev.WRC-07)

Resolution **80 (Rev.WRC-07)** “invites the other organs of the Radiocommunication Sector, in particular the RAG, to make relevant contributions to the Director of the Radiocommunication Bureau for inclusion in his report to each future World Radiocommunication Conference.”

The [Report of the CPM to WRC-12](http://www.itu.int/md/R07-CPM11.02-R-0001/en), § 6/8.1.3 contains information on the work already performed by ITU-R in response to Resolution **80 (Rev.WRC-07)**, in particular the development and approval of numerous ITU-R Recommendations and Reports related to improving equitable access to, and the efficient use of the geostationary-satellite orbit/spectrum resource.

The Radio Regulations Board (RRB) was tasked under resolves 2 of Resolution 80 (Rev.WRC-07) “to consider and review possible draft recommendations and draft provisions linking the formal notification, coordination and registration procedures with the principles contained in Article 44 of the Constitution and No. 0.3 of the Preamble to the Radio Regulations”. The Board focused its efforts in this regard on concepts to address issues the Board and the Bureau had faced since WRC‑07 that affected the fulfilment of these principles.

The following summarizes the work of the Board’s Working Group (WG) on Resolution 80 since the last RAG meeting:

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| * At its 53rd meeting (22-26 March 2010), the WG decided the approach to be taken at the next meeting regarding its task under *resolves* 2 ofResolution 80 (Rev.WRC-07*)* would focus on issues that have arisen during the work of the Board, specifically:

1. Issues associated with No. 13.6 for further review: • The meaning of “reliable information”. • Number and timing of reminders. • What constitutes a response to an enquiry? • The meaning of “brought into regular operation”. • Cancellation of a network by the BR and confirmation by the Board. 2. Considerations regarding the status of assignments involved in harmful interference situations (see Annex 6 to Document RRB09-2/4) and factors affecting the resolution of harmful interference.3. Considerations on Resolution 80 from Board Members (e.g. see Document RRB10-1/4, Annex 1). 4. Difficulties experienced regarding satellite network coordination, particularly the situation where very few coordination agreements have been completed at the time of notification. * At its 54th meeting (5-13 July 2010), the WG focused on issues that have arisen during the work of the Board, specifically:

• Issues associated with the application of RR No. 13.6.• Considerations regarding the status of assignments involved in harmful interference situations.• Difficulties experienced regarding satellite network coordination including the application of RR No. 11.41.The WG agreed to add monitoring and intentional harmful interference to the above list of issues and to include, in an annex to its report to WRC-12, considerations on other issues that were raised by Board Members related to its Resolution 80 (Rev.WRC-07) mandate. * At its 55th meeting (23 November-3 December 2010), the WG discussed the formulation of text on new issues raised at the 54th meeting of the RRB (i.e. monitoring and intentional harmful interference), adjusted the text on the implementation of RR No. 13.6, and agreed that the draft report had matured to a sufficient state that it could be posted to the RRB website following the incorporation of the comments received during the 55th meeting. The WG decided to further develop the report during 2011 and complete its work prior to WRC‑12.
* At its 56th meeting (28 March -1 April 2011), recognizing that the work will have to be completed at the next (57th) meeting of the Board in order to be included in the Report of the Director of the Radiocommunication Bureau to WRC-12 four months prior to the conference, the Board decided to finish the work begun by the previous Board adding the following items to the report: executive summary; table of contents; expanded discussion of the BR’s workshops on the efficient use of the spectrum/orbit resource; new section on leasing considerations; new section on Resolution 49 (Rev. WRC-07); new annex(es) provided by Board Members, if any (in particular, the effect of the use of steerable beams and of maximum/minimum parameters on coordination).
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The [Draft Report by the RRB on Resolution 80](http://www.itu.int/md/R10-RRB.10.3-INF-0001/en) has been posted on the RRB website. It considers the application of No. 13.6 of the Radio Regulations, the status of assignments involved in certain unresolved harmful interference situations, and difficulties experienced in satellite network coordination and notification. The RRB will further develop the report during 2011 and complete its work prior to WRC-12.

## 6.4 Emergency communications database

With relation to the implementation of Resolution 647 (WRC-07), BR set up a website at: <http://www.itu.int/ITU-R/go/res647> containing the entry point to the terrestrial and space related databases of available frequencies/frequency bands for use in emergency situations as submitted by responsible administrations.

It was noted that until the date of the preparation of this report, the BR had only received data from the following administrations: Argentina, Saudi Arabia, Bahrain, Myanmar, Brunei Darussalam, Canada, Spain Egypt, Italy, Jordan, Kuwait, Malaysia, New Zealand, Oman, Seychelles, Syria, Thailand, UAE, Uzbekistan for terrestrial services, and Canada, Czech Republic, UK, Malaysia and Romania for space services.

In order to achieve the objectives of Resolution 647 (WRC-07), administrations are strongly encouraged to communicate to the BR, as soon as possible, the available frequencies and information about their spectrum management practices for use in an event of disaster or emergency situation (see Circular Letter CR/323 of 31 March 2011).

## 6.5 Conference-related software development

*Space services:* Appendix 30B Articles 6 and 8 data have been loaded to the SNS database and SNS Online queries adapted to make this data available via the SNS Online website at:  <http://www.itu.int/sns/plans.html> (see Circular Letter [CR/321](http://www.itu.int/md/R00-CR-CIR-0321/en) of 11.12.10). A new intranet application was developed to enable the capture of service area exclusion requests received under RR No.**23.13**; new queries were developed in **Space Network List (SNL)** to display service area exclusion requests under No.**23.13**.

*Terrestrial services:* The development and integration into ***TerRaSys*** of the ***GE06*** Agreement portion relating to the notifications under Article 5 has been completed. This is now stable in production, including the associated technical examination and BR IFIC publication modules. The modifications to the Terrestrial Database, resulting from the modifications to the RR Appendix 4(Rev WRC 07) were completed. All other ***TerRaSys*** modules concerning the capture and validation of the electronic notifications (***TerRaNotices*** and ***TerRaNV***) were aligned accordingly and made available to the administrations on the terrestrial BR IFIC.

# 7 Operational Planning

The draft Operational Plan for the period 2012-2015 is available at:
[http://www.itu.int/ITU-R/go/operational-plans/](http://www.itu.int/ITU-R/go/operational-plans/en) for the consideration of RAG. This plan is structured in a result-based way so as to ensure a complete linkage with the budget and other financial tools of the Union. It also addresses the strategic aspects of ITU-R and provides appropriate linkage with the strategic plan of ITU.

The Performance Report for 2010 is available at: [http://www.itu.int/ITU-R/go/performance-reports/](http://www.itu.int/ITU-R/go/performance-reports/%20). It aims at providing the relevant information regarding the implementation of the outputs and activities foreseen in the ITU‑R Operational Plan for 2010. The Performance Report provides the comparison between the realized results and the expected ones as well as the respective key performance indicators. These are specified with each major Objective and within each relevant output in the document.

# 8 Seminars and Workshops

Seminars and Workshops organized directly by the ITU‑R or in cooperation with other Sectors and/or regional or national entities are listed at: <http://www.itu.int/ITU-R/go/seminars>.

The following events took place since the last RAG meeting with the participation of BR staff:

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| **Title** | **Place** | **Date** |
| **Radiocommunication Seminar** |
| [World Radiocommunication Seminar](http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=wrs-10&lang=en) (WRS-10) | Geneva | 6-10.12.10 |
| **Space Seminars & Workshops** |
| [Regional workshop (BR/BDT) on SpaceCom software](http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=moscow-2010&lang=en) | Moscow | 2-3.3.10 |
| ITU-R Sub-regional Space Regulatory Workshop | Wellington, New Zealand | 26-30.4.10 |
| [ITU/IDA workshop on efficient use of spectrum/orbit resource](http://groups.itu.int/Default.aspx?alias=groups.itu.int/br-ssd) | Singapore | 17-18.6.10 |
| Training on spectrum management for ASEAN countries | Hanoi | 23-27.8.10 |
| CITEL/BR Workshop on Appendix 30B | Fortaleza, Brazil | 1-2.9.10 |
| ITU (BR/BDT) - Training Workshop on Satellite | Bangkok | 28-30.9.10 |
| **Terrestrial Seminars and Workshops** |
| ITU-AICTO Radio spectrum management workshop on terrestrial services | Tunis | 18-20.5.10 |
| CoE-CIS workshop on radio monitoring and enhancement | Kiev | 7-9.9.10 |
| **General** |
| ANCOM 1st meeting on digital dividend | Bucharest | 30.3.10 |
| CRASA/SADC Forum | Maseru, Lesotho | 26-28.4.10 |
| [ITU-D Regional Development Forum for the Europe and CIS Countries: "NGN and Broadband"](http://www.itu.int/ITU-D/tech/events/DevelopmentForums/2010/EUR/RDF10_EUR_Program.html) | Chisinau, Moldova | 4-6.5.10 |
| [Regional seminar (BR/BDT) on management of radiofrequency and satellite orbit at international level](http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=tashkent-2010&lang=en) | Tashkent, Uzbekistan | 20-23.6.10 |
| [ITU-D Regional Development Forum for the Africa Region: "Modern Spectrum Management and Transition from Analogue to Digital Broadcasting - Trends and Technologies"](http://www.itu.int/ITU-D/tech/events/DevelopmentForums/2010/AFR/RDF10_AFR_Program.html)  | Banjul, Gambia | 14-16.7.10 |
| RAPF Workshop on Migration to Digital Broadcasting | Bamako, Mali | 31.8 – 4.9.10 |
| [EMC Europe 2010](http://www.emceurope.eu/2010/) | Wroclaw, Poland | 13-17.9.10 |
| [ITU Symposium on ICTs and the Environment & Climate Change](http://www.itu.int/ITU-T/worksem/climatechange/201011/index.html) | Cairo | 2-3.11.10 |
| [ITU-D Regional Development Forum for the Arab Region: "NGN and Broadband"](http://www.itu.int/ITU-D/tech/events/DevelopmentForums/2010/ARB/RDF10_ARB_Program.html) | Cairo | 13-15.12.10 |
| ITU-ANFR workshop for spectrum management in the Pacific Islands | Nouméa, New Caledonia | 11-15.4.11 |
| ITU-AICTO radio spectrum management workshop on terrestrial services | Amman, Jordan | 10-12.5.11 |
| Regional spectrum management and migration to DTTB workshop | Hanoi, Vietnam | 26-27.5.11 |
| **Study Group issues** |
| ITU-EBU Joint Workshop on Accessibility to Broadcasting and IPTV access for all | Geneva | 23-24.11.10 |
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In addition, BR Space Service Department held meetings and workshop on with representatives of Venezuela, the Netherlands and Bolivia during the first half of 2010 in Geneva, and participated in the UN OOSA/ESA Small satellite workshop (Graz, Austria). BR Study Group Department participated in UN meetings related to climate change (e.g., UNFCC Climate Change Talks, Tianjin, China; COP16 in Cancun, Mexico), the 15th meeting of the Global Standards Collaboration, and the 24th meeting of the Wireless World Research Forum (Penang, Malaysia), as well as the 34th Joint Meeting of RCC on EMC.

The WRS-10 was attended by 469 participants of 115 Member States and 21 representatives of 11 organizations; 36 fellowships were granted to delegates of the following countries: Benin, Bhutan, Burkina Faso, Burundi, Cameroun, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Côte d’Ivoire, Cuba, Djibouti, Ethiopia, Eritrea, Gambia, Haiti, Indonesia, Kyrgyzstan, Lao People’s Dem. Rep., Lesotho, Madagascar, Maldives, Mali, Mauritania, Moldova, Mongolia, Mozambique, Myanmar, Nepal, Niger, Pakistan, Papua New Guinea, Rwanda, Samoa, Senegal, Sudan, Tajikistan, Uganda, Vietnam, and Yemen.

For 2011, the BR, in cooperation with the BDT, is planning to hold several ITU workshops on spectrum management, with a particular emphasis on the transition to digital terrestrial broadcasting and digital dividend. These workshops are intended to address the specific spectrum management requirements at sub-regional level. They will be organised jointly with interested parties in each sub-region, in close cooperation with the BDT and ITU regional offices. The detailed programme is available on the ITU-R website (see at “ Seminar/Workshops”).

## 8.1 Inter-sectoral coordination of seminars and workshops

The Plenipotentiary Conference in Annex 2 of Decision 5 identifies a number of measures aimed at reducing expenditure in the 2012-2015 budget period and, to this end, calls for the “coordination and harmonization of seminars and workshops organized by the General Secretariat and the three Sectors in order to avoid duplication of the subjects covered and to optimize secretariat attendance”.

The three Directors of Bureaux decided to set up a joint Task Force to rationalize, coordinate and consolidate the events held on a same topic. Henceforth, all workshops and seminars will be branded ITU to reflect the “One ITU” concept and no longer as sector-specific events.

The Task Force met several times in the first and second quarters of 2011 to 1) identify what events were being planned from the very early stage in order to find synergies at the very outset, 2) identify candidates for merging and 3) when merging of events is not feasible for example in the case of different target audience, identify areas for cross-fertilization (selection of timing and venue back-to-back with existing events to decrease administrative overheads such as participation of experts, logistical arrangements, travel costs, use of internal expertise, coordination of contents, etc.).

The Task Force also identified the list of topical areas where inter-sectoral coordination was found to be necessary and focal points from each Bureau and from the General Secretariat were nominated for each of the following topics: accessibility, advisory groups, conformance and interoperability an, ITU Academy, spectrum management, broadcasting, statistics, security, emergency telecommunications and climate change.

# 9 Statistics on Sector Members and Associates

The statistics on Sector Members and Associates will be presented in an addendum to this document.

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