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| **Radiocommunication Advisory GroupGeneva, 22-24 May 2013** |  |
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|  | **Document RAG13-1/1-E** |
| **20 March 2013** |
| **Original: English** |
| Director, Radiocommunication Bureau |
| report to the twentieth 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 20th meeting of RAG (see [CA/207](http://www.itu.int/md/R00-CA-CIR-0207) of 18.01.13) 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 related to the 2012 and 2013 sessions of the Council (see: <http://www.itu.int/council/>).

## 2.1 Implementation of WRC-12 decisions – RA-15 and WRC-15 agenda, dates and venue

Council noted that the financial implications of the decisions of WRC-12 amounted to CHF 1.1 million and agreed that this cost should be covered by efficiency measures and savings by BR. It also noted that efficiency would be improved by using the electronic communication methods based on WRC-12 Resolutions 907 and 908.

In discussing the duration of WRC-15, there was no opposition to the four-week period. Council approved Resolution 1343 ([Document C12/85(Rev.1](http://web.itu.int/dms_ties/itu-s/md/12/cl/c/S12-CL-C-0085%21R1%21MSW-E.docx))) containing the agenda for WRC-15 as well as the dates and venue for WRC-15 (Geneva, 2-27 November 2015) and for RA-15 (Geneva, 26‑30 October 2015). This Council Resolution was subsequently approved by the ITU Member States by correspondence. Council noted the dates and venue proposed for the Second Session of the CPM for WRC-15 (CPM15-2, Geneva, 23 March - 2 April 2015).

It was suggested that, in the interests of expediency, the first session of the CPM (CPM-1) should be held immediately after the WRC signing ceremony and continue on the Saturday following the end of the conference, thus, avoiding delegations having to spend the whole weekend at the venue waiting for CPM-1 to begin in the following week. Others considered that delegates should be able to rest over the weekend. This topic will be further studied in view of the past and recent experiences and will be reported at the 2014 meeting of the RAG.

## 2.2 Publications

By Decision 12 (Guadalajara, 2010), PP-10 expanded the free online access policy to include, *inter alia*, ITU‑R Recommendations and Reports. As previously reported, the number of downloads and number of distinct users downloading these publications has increased markedly. The free online access policy is thus resulting in dissemination of ITU standards to a broader public, especially in developing countries with financial constraints. This wide outreach via free online access will help build the visibility of ITU’s mission and mandate and reinforce ITU as a global telecommunication authority.

The issue of the free online access to the Radio Regulations (RR) had been previously discussed in RAG which concluded that “the extension of the free online access to the RR is encouraged although it is a matter for the Council to decide. RAG noted that the income from the sales of the online version currently represents less than 3% of the total sales of the Radio Regulations and that the statistics of the sale’s income figures of the CD and paper versions of the RR would be different once free online access would be granted.” Council 2012 decided to provide free online access to the Radio Regulations to the general public for a trial period until PP-14. The table below reflects the sales results based on the data collected as of end February 2013:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Edition | Sales period | Total sold | Online | DVD | Paper | Free downloads |
| 2012 | 3 months | 3 821 | 0 | 7 | 3 814 | 4 926 |
| 2008 | 52 months | 15 183 | 312 | 1 077 | 13 794 | Not offered |

## 2.3 Cost recovery for satellite network filings

In line with the instructions of Council 2011, WRC-12 was informed of the summary of discussions on the establishment or otherwise of an annual cost recovery fee for assignments recorded in the ITU MIFR.

Opposition to the introduction of an annual fee for the maintenance of the MIFR was reaffirmed with the argument that there was no need to change the current system that works well or that an additional fee could have a negative impact on developing countries – a two-tier fee plan had been proposed for developing and developed countries. Taking note of these, and of other comments, it was decided that Council would come back on the matter at a future session.

With reference to Resolution 555 (Rev.WRC-12) concerning additional regulatory provisions for BSS networks in the band 21.4-22 GHz in Regions 1 and 3, it was noted that the objective of the Resolution is to facilitate equitable access to such networks. Moreover, given the limited scope of application of the request of cost recovery charge exemption, in terms of involved space services and associated frequency band, the Council was invited to exempt modification submissions of BSS in the band 21.4-22 GHz from cost recovery charges under Decision 482 (MOD). Accordingly, Council approved the inclusion of the following text to Decision 482:

*“11 that publication of special sections for the amateur-satellite service, the notification for recording of frequency assignments for earth stations, for the conversion of an allotment into an assignment in accordance with the procedure of former Section I of Article 6 of Appendix 30B, the addition of a new allotment to the plan for a new Member State of the Union in accordance with the procedure of Article 7 of Appendix 30B and submissions under resolves 3 and 4 of Resolution 555 (WRC-12) shall be exempt from any charges;”*

The Bureau has not received any modification of submissions of BSS satellite networks in the band 21.4-22 GHz, envisaged under *resolves* 3and4 of Resolution 555 (Rev.WRC-12) to be exempted from cost recovery charges.

At its 62nd meeting, the Radio Regulations Board approved a rule of procedure on the consolidation of frequency assignments of different geostationary-satellite networks submitted by an administration at the same orbital position into frequency assignments of a single satellite network with an effective date of application of 1 July 2013. During the discussion, the Board noted the Bureau’s information that the consolidation of recorded frequency assignments from different satellite network notices into one notice would entail significant data processing and publication by the Bureau that could incur a cost recovery charge under Decision 482 to be considered by the Council at its June 2013 meeting.

## 2.4 Conformance and interoperability

Council extensively discussed the conformance and interoperability (C&I) programme as approved by PP-10, which consists of four pillars:

1) Conformity assessment programme

2) Interoperability events

3) Capacity building

4) Establishment of test centres in developing countries.

TSB leads pillars 1 and 2, and BDT leads 3 and 4. An internal C&I Task Force, with participation of TSB, BDT and BR, coordinates all ITU C&I issues.

PP-10 Resolution 177 instructs the Director TSB “to prepare a business plan for the long-term implementation of this resolution”. A call for tender was issued, KPMG was selected and its entire business plan was presented to Council 2012, which concluded that there was strong support to go forward with the proposed C&I action plan. In particular, Council noted that:

• based on the secretariat’s analysis, for the implementation of the C&I programme in 2012 and 2013, no additional resources would be necessary, so that any financial implications regarding human resources of the ITU secretariat would be for Council 2013 to decide;

• the proposed action plan by the secretariat was quite focused, and that the study groups and the market would play a decisive role in shaping the programme;

• a number of constructive ways forward was suggested, which received support and should be included in the action plan;

• as for a further market study, the secretariat has announced that there was a request from industry players to run a conformance assessment program regarding an ITU‑T Recommendation, so that it could be the first testing ground for ITU‑T to get data into the ITU conformity database. As this was a market-driven initiative, it was also a good testing ground for a possible market study. The TSB Director should report to Council 2013 on how successful this trial had been. In any case, it would be for Council 2013 to decide if funding would be needed for a further market analysis. A preliminary estimate of the cost of a market study is at least CHF 500 000;

• the technical issues in the Business Plan (such as whether to pursue route 4 or not) would be for discussion in ITU‑T and that the WTSA should be requested to identify a suitable forum for this discussion to take place.

Regarding the ITU Mark, Council considered that a decision concerning the implementation of such a mark would be postponed until pillar 1, conformity assessment, has reached a more mature stage of development.

Council also welcomed the news that the secretariat would shortly issue a report on counterfeiting. Counterfeiting was frequently mentioned in discussions on C&I. Regarding mutual recognition agreements, the secretariat clarified that ITU would have no role in negotiating these but would only facilitate them through guidance documents, taking into account international and regional best practices when developing these guidelines.

## 2.5 Draft budget for 2014-2015 period

Based on the submission to Council (Document C13/10), the 2014-2015 planned expenses for the Radiocommunication Sector is maintained at the same level as the current 2012-2013 budget (see table below) with a slight variation in the programme budget. It provides the minimum financial estimates that will be required so as to ensure an efficient and successful implementation of the strategic and operational plans for the ITU‑R for the 2014-2015 timeframe.

ITU‑R expenses

|  |  |  |  |
| --- | --- | --- | --- |
|   |   |   |  *In thousands of Swiss francs* |
| ITU‑R | Budget | Actual | Budget | Actual\* | Estimates | Variance |
| Expenses | 2010-2011 | 2010-2011 | 2012-2013 | 2012 | 2014-2015 |
|   | a  | b | c | d | e | f = e – c | g = f / c |
| WRC | 0 | 2 | 3 000 | 2 619 | 0 | −3 000 | −100.0% |
| RA | 0 | 0 | 375 | 359 | 0 | −375 | −100.0% |
| CPM | 0 | 0 | 0 |   | 313 | 313 | − |
| RRB | 1 250 | 977 | 1 363 | 467 | 1 462 | 99 | 7.3% |
| RAG | 150 | 115 | 123 | 50 | 144 | 21 | 17.1% |
| Study group meetings | 2 515 | 2 244 | 1 750 | 226 | 1 750 | 0 | 0.0% |
| Activities and programmes | 2 490 | 1 585 | 1 920 | 460 | 1 700 | −220 | −11.5% |
| Seminars | 474 | 476 | 944 | 177 | 1 044 | 100 | 10.6% |
| Bureau | 58 893 | 55 267 | 52 325 | 26 359 | 53 104 | 779 | 1.5% |
| **Total Radiocommunication Sector** | **65 772** | **60 666** | **61 800** | **30 717** | **59 517** | **−2 283** | **−3.7%** |

\*At 25 February 2013

Although the current projection has not included any ITU‑R conference or assembly, it is however foreseen that, in accordance with Council Resolution 1343, the forthcoming World Radiocommunication Conference and Radiocommunication Assembly will be held in 2015. Their costs are estimated to be CHF 5 million in total; therefore, the Secretary-General proposes that the Council authorizes the secretariat to draw that amount from the reserve account.

## 2.6 Space protocol

Council 2012 agreed to authorize the Secretary-General to continue to express interest in the ITU becoming the Supervisory Authority of the future international registration system for space assets under the draft Space Protocol, noting that the matter of whether or not ITU could become the Supervisory Authority should not be prejudged at this stage; the Council also authorized the Secretary-General or his representative, to participate in the work of the Preparatory Commission as observer. The first meeting of the Preparatory Commission is planned for 6-7 May 2013 in Rome (Italy).

Council 2012 concluded that the Secretary-General would report back to Council 2013 which will consider the matter further in light of developments on the establishment of the Preparatory Commission and progress if any, taking into account the financial, juridical and technical implications for ITU. To allow the ITU Secretary-General to carry out this task in a fully transparent manner, a SharePoint was created, open to Council Member States, to share information and comments online at: [https://extranet.itu.int/ITU‑R/space-assets](https://extranet.itu.int/ITU-R/space-assets).

# 3 Results of RA-12 and WRC-12

## 3.1 Correspondence groups

BR established Sharepoint sites to support the work of the new correspondence groups agreed during the RAG-12 meeting:

• [Revision of Resolution ITU‑R 1-6](https://extranet.itu.int/itu-r/conferences/rag/cg_resolution_itu_r_1_6), Mr Robin Haines (USA),
[https://extranet.itu.int/ITU‑r/conferences/rag/cg\_resolution\_itu\_r\_1\_6/](https://extranet.itu.int/itu-r/conferences/rag/cg_resolution_itu_r_1_6/)

• [Format(s) of ITU‑R Recommendations](https://extranet.itu.int/itu-r/conferences/rag/cg_format_itu_r_rec), Mr Albert Nalbandian (Armenia)
[https://extranet.itu.int/ITU‑r/conferences/rag/cg\_format\_itu\_r\_rec/](https://extranet.itu.int/itu-r/conferences/rag/cg_format_itu_r_rec/)

• [Revision of Resolution ITU‑R 6-1](https://extranet.itu.int/itu-r/conferences/rag/cg_resolution_itu_r_6_1), Mr Paolo Zaccarian (Italy)
[https://extranet.itu.int/ITU‑r/conferences/rag/cg\_resolution\_itu\_r\_6\_1/](https://extranet.itu.int/itu-r/conferences/rag/cg_resolution_itu_r_6_1/)

## 3.2 Results of WRC-12

### 3.2.1 Software development to implement decisions of the Conference

BR has pursued software development and implementation to implement WRC-12 decisions. The following table presents a summary of the main tasks under consideration, in line with the discussions held at RAG-2012 on the BR information system.

Software development activities to implement WRC-12 decisions

|  |
| --- |
| SNS database changes |
| New Appendix 4 data items introduced by WRC-12 |
| Addition of tables for Resolution 552 – new due diligence procedure for 21.4-22 GHz  |
| Addition of data items for Resolution 554 – special procedure for submission of BSS assignments in 21.4-22 GHz |
| Modifications for Resolution 908 – electronic API |
| Modifications to tr\_aff\_ntw table to provide a mandatory list of satellite networks under 9.36.2 and 9.41 |
| Modification to existing software |
| New RS49 capture interface for Resolution 552 |
| New Resolution 552 publication |
| Modifications to technical examination software for Resolution 553 |
| Modifications to technical examination software for Resolution 554 – Examination tool with new pfd mask inside the coordination arc |
| Modifications to findings capture for Resolution 553 |
| Modifications to SpaceCom for Resolution 553 |
| Modifications to Batch Findings software to maintain list of satellite networks under 9.36.2 and 9.41 |
| New CR/F publication for Resolution 553 |
| Modification to Spacecap to allow capture 20 points with the service area for Resolution 553  |
| New SRSConvert6to7 to convert SNS database V6 to V7 |
| Modifications to all BR software applications to adapt to the SNS Database V7 |
| New applications |
| Resolution 907 – develop a new web application which will provide administrations with means to submit correspondence and filings to the BR in a secure environment. All correspondence between administrations and BR will be stored in BR Documentum. |
| Resolution 908 – develop a new web application which will provide administrations with means to capture Advance Publication subject to coordination under Article 9 Sub-Section 1B |
| Resolution 908 – develop a new web application to publish Advance Publication subject to coordination under Article 9 Sub-Section 1B.  |
| Resolution 908 – develop an application to manage APIs which will make publications available to the IFIC and SNL. Remove APIs after 2 years when the BR has not received a corresponding CR or notification. |

### 3.2.2  General actions to implement decisions of the Conference

The following [BR circular-letters](http://www.itu.int/md/R00-CR-CIR/en) contain information related to actions to implement decisions of WRC-12:

|  |  |  |
| --- | --- | --- |
|  BR Circular | Date | Subject |
| CR/331 | 16.3.2012 | Implementation of Resolution 555 (WRC-12) |
| CR/333 | 01.05.2012 | WRC-12 decisions included in the minutes of plenary meeting relating to space services procedures |
| CR/334 | 08.05.2012 | Implementation of Resolution 755 (WRC-12) of the World Radiocommunication Conference, Geneva, 2012 (WRC-12)  |
| CR/336 | 06.07.2012 | Implementation of decisions of the World Radiocommunication Conference, Geneva, 2012 (WRC-12) and associated transitional arrangements that entered into force on 18 February 2012 |
| CR/338 | 22.10.2012 | Submission of Appendix 4 information for space services to the Radiocommunication Bureau and the update of related BR space software and databases |
| CR/343 | 17.01.2013 | **Implementation of provisions relating to the bringing into use and suspension of a frequency assignment to a space station in the geostationary-satellite orbit** |

The Bureau analysed the decisions of the WRC-12 and their impact on the current Rules of Procedure and submitted proposals to the Radio Regulations Board (RRB). Pursuant to the provisions of Nos. 13.12 and 13.14 of the Radio Regulations, the RRB at its 60th meeting (10‑14 September 2012) approved new or modified Rules of Procedure as contained in circular letter CR/339 of 22.10.2012.

Following WRC-12, a 2012 edition of the Rules of Procedure has been published. The new edition incorporates all revisions up to and including the approved Rules listed in the annexes to circular letter CR/329 of 5 January 2012.

# 4 Study group activities

This topic is presented in an addendum to this document.

## 4.1 Results of WTSA-12 of direct interest to ITU‑R

This section describes some decisions of the 2012 World Telecommunication Standardization Assembly ([WTSA-12](http://www.itu.int/en/ITU-T/wtsa12/Pages/default.aspx)) which are relevant to the work of ITU‑R. A more comprehensive briefing is planned to be provided by TSB during the RAG meeting.

Resolution 18 (Principles and procedures for the allocation of work to, and coordination between, ITU‑R and ITU‑T): contain provisions for intersector rapporteur groups (IRGs), which are easier to set up than intersector coordination groups (ICGs).

[Resolution 55 (Mainstreaming gender in ITU‑T activities](http://www.itu.int/pub/T-RES/%09%09%09%09%09%09%09publications.aspx?lang=en&parent=T-RES-T.55-2008)): resolves to invite the Sector’s advisory groups to assist in the identification of subjects and mechanisms to foster the mainstreaming of a gender perspective, as well as matters of mutual interest in that regard.

[Resolution 57 (Strengthening coordination and cooperation among ITU‑R, ITU‑T and ITU‑D on matters of mutual interest](http://www.itu.int/pub/T-RES/%09%09%09%09%09%09%09publications.aspx?lang=en&parent=T-RES-T.57-2008)): resolves to invite the Sector’s advisory groups to assist in the identification of subjects common to the three Sectors and mechanisms to enhance cooperation and collaboration in all Sectors on matters of mutual interest.

# 5 WRC-15 preparation

After the adoption of Council Resolution 1343 (see section 2.2 above), the CPM Steering Committee met on 18 December 2012 to review the preparation of the Draft CPM Report to WRC‑15. The Chairmen of the ITU‑R Study Groups and of the ITU‑R responsible groups were also invited to attend this meeting for which the remote participation facilities were very useful. Based on Resolution 1343 (C12), Resolution ITU‑R 2-6 and the availability of the CICG, the Second Session of CPM-15 (CPM15-2) was agreed to be held in Geneva from 23 March - 2 April 2015. It was further decided that the final draft CPM texts from the responsible groups must be received by the respective CPM-15 Chapter Rapporteurs, with a copy to the Bureau by 15 August 2014. The meeting of the CPM-15 Management Team will be held in Geneva from 1-5 September 2014 to consolidate the draft CPM texts from the responsible groups into the draft CPM Report. It was noted that the meeting of the working party of the Special Committee is planned to be held in December 2013 and that the meeting of the Special Committee will be planned during the last quarter of 2014. Moreover,the CPM-15 Steering Committee updated the allocation of ITU‑R preparatory work for WRC‑15 (see the Annex to Addendum 1 of CA/201). It was also recalled that an executive summary for each WRC-15 Agenda item has to be developed on a regular basis by the relevant responsible group in the form of progress status reports of the ongoing preparatory studies. This will be used by the Bureau for informing the regional groups of progress throughout the WRC study cycle, in accordance with section 2.5 of Annex 1 to Resolution ITU‑R 2-6.

The Bureau is planning to organize the First ITU Inter-regional Workshop on WRC-15 Preparation in Geneva on 4-5 December 2013, in order to review the progress made halfway through the preparatory cycle on the ITU‑R studies related to the WRC-15 agenda items and to provide opportunities for exchanging information and have a better understanding of the preliminary draft common proposals, positions and/or views on the WRC-15 issues from the concerned entities such as the main regional groups and international organizations.

The ITU‑R webpage for WRC-15 has been set up at: [www.itu.int/go/wrc-15](http://www.itu.int/go/wrc-15) and detailed information regarding the ITU‑R preparatory studies for the WRC-15 agenda items can be found on the following ITU webpage: [www.itu.int/ITU‑R/go/rcpm-wrc-15-studies](http://www.itu.int/ITU-R/go/rcpm-wrc-15-studies).

# 6 BR information system

RAG-19 (2012) advised the Director to implement recommended actions within the proposed time-frame, as described in the agreed roadmap, which comprises Phase 1 (Implementation of WRC-12 decisions) until 31 December 2012; Phase 2 (Rewrite some existing software) until 31 December 2015, and Phase 3 (Set up a project team to implement common framework, security system and centralized space database) from 1 January 2016 to 31 December 2018. RAG encouraged Member States and Sector Members to give their comments on Phase 3.

The report on the progress made on the to the next meetings of the RAG.

This topic is presented in Annex 1 to this document.

# 7 Cooperation on harmful satellite interference resolution

For some years, the ITU Radiocommunication Bureau (BR) has regularly been either requested for assistance or copied on exchanges of letters between administrations regarding harmful interference seriously affecting transmissions on various satellites, duly supported by satellite networks recorded in the ITU Master Register. In most cases, the information provided by the affected administration included evidence on the location of the source of harmful interference. As the information is often coming from a single source, and in the absence of ITU proper means to investigate or corroborate the information, the response by the BR has been so far limited to appeal to all parties that may be involved to exercise the utmost goodwill and provide mutual assistance in the application of the provisions of Article 45 of the ITU Constitution and Section VI of Article 15 of the Radio regulations with a view to settle these issues of harmful interference.

Within this context, the BR is in the process of drawing up memorandums of cooperation with administrations that have the capacity to monitor the use of spectrum allocated to satellite services in order to assist the BR to perform measurements related to cases of harmful interference for which an administration is seeking the assistance of the BR. A memorandum of cooperation has already been signed by ITU and the International Civil Aviation Organization (ICAO) regarding cases of interference involving the global navigation satellite system (GNSS) on board civil aircraft. Additional contacts have also been initiated with organizations including the Satellite Industry Association (SIA), the European Satellite Operator’s Association (ESOA), and the Global VSAT Forum (GVF) for assistance in providing satellite monitoring information and helping to determine sources of harmful interference.

Such above approach should allow the BR to be provided with independent sources of information on the origin of harmful interference cases, facilitate regulatory actions foreseen under Article 15 of the Radio Regulations. BR initiative is also to establish a framework to ensure that there is no duplication of efforts, as well as to benefit from the potential synergies between the parties acting in their respective field of responsibility and develop a long-term strategy in solving the issue of harmful interference.

# 8 Operational planning

The draft Operational Plan for the period 2014-2017 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 2012 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 2012. 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.

# 9 Information and assistance to membership

In order to inform and assist the ITU membership, in particular in developing countries, on issues relating to radiocommunication matters, the BR organizes or participates in a number of spectrum related workshops, seminars, meetings and capacity building efforts. This activity is being carried out in close cooperation with the BDT, the ITU regional and area offices and the relevant international organizations or national authorities. These activities contribute directly to the capacity building and experience sharing of the ITU membership on spectrum issues. A particular effort has been to assist membership and promote cooperation in the area the transition to digital terrestrial television and the allocation of the digital dividend.

The list of events to which the BR participated in 2012 is given in Annex 2.

A comprehensive list of seminars and workshops organized directly by the ITU or in cooperation with other regional or national entities is given at: [http://www.itu.int/ITU‑R/go/seminars](http://www.itu.int/ITU-R/go/seminars).

## 9.1 Radiocommunication seminars

This topic is presented in an addendum to this document.

# 10 BR International Frequency Information Circular (BR IFIC)

In Circular Letter CR/332 of 24 April 2012, the Bureau informed administrations of its decision to update the software and database container of the BR IFIC (Terrestrial Services).

Since edition No. 2719 of 15 May 2012, an additional DVD containing the beta version of the BR IFIC (Terrestrial Services) in its new format, using the SQLite database management system (www.sqlite.org), as well as new and upgraded versions of the associated software packages (***TerRaQ***, ***TerRaNotices*** and ***TerRaNV*** ), has been distributed along with the regular BR IFIC DVD, for assessment by administrations and all subscribers.

Some of the main new features of the BR IFIC DVD are:

• a new “navigation menu” in a “plug-and-play” mode, which allows the user to browse the data, perform queries, execute one of the above-mentioned software packages, directly from the DVD without the need to perform any installation;

• an “install-on-demand” utility, which allows the user to install the BR IFIC data and/or its software packages;

• full compatibility with Windows 7® [[1]](#footnote-1).

• the new BR IFIC DVD (Terrestrial Services) does not require the user to:

– have administrator privilege for using/installing the BR IFIC;

– adjust Windows® security settings to install the database;

– have licences for using the database.

During this test phase, the Bureau collected the comments and suggestions received and worked on enhancing the BR IFIC (Terrestrial Services) accordingly, so as to improve it and add more features to fulfil the administrations and subscribers needs. After several months of successful testing, the BR IFIC (Terrestrial Services) in its new format was presented and used for the workshops during the World Radiocommunication Seminar 2012 (WRS‑12), and the overall feedback was extremely satisfactory.

Consequently, the Bureau informed administrations in Circular Letter CR/344 that, as from the publication of BR IFIC No. 2739 of 5 March 2013, the former BR IFIC (Terrestrial Services) publication on DVD, based on the Microsoft Access® database, will be discontinued and replaced by the new one using the SQLite database management system.

# 11 Statistics on Sector Members, Associates and Academia

This topic is presented in an addendum to this document.

**Annexes:** 2

Annex 1

|  |
| --- |
| BR Information Systems |
| Phase 1: 1 April 2012 – 31 December 2012 |
| ***Implement WRC-12 decisions*.** SNS Database modified and all BR Space Software adapted and distributed to administrations on January 2013.  |
| ***Resolution 907*** – Analysis and design of modern means of communication for Resolution 907 making good progress. This project addresses many aspects of web development that will be valuable for future BR web application development: – Security – secure identification of a Notifying Administration.– Reliability – ensure that submission of filings and correspondence are complete and dependable.– Ease of use – although the application must be secure and reliable, it must also be easy to use and the security aspect should not be cumbersome.– Alert – an administration must be made aware whenever a document is available for them.– Traceability – all activities must be logged so that no document or submission is left untreated. |
| ***Resolution 908*** – Electronic submission and publication of Advance Publication filings subject to coordination. Design and development ongoing. This project will be developed using the infrastructure developed for Resolution 907.  |
| Business Continuity and Disaster Recovery – ongoing taskIdentified the Scope for the BR.Ensure integrity and accuracy of the Master Register and various Plans for Space and Terrestrial Services.Ensure that incoming submissions are processed and that the backlog generated by a disruption of service is acceptable.Ensure the fortnightly BR IFIC PublicationMade an inventory of data and software that must be protected in order to ensure business continuity within the BR.Identified business critical services. Training – 2 persons from BR participated in a Practical Computer Security course given by EPFL in Lausanne. |
| Phase 2 – 1 April 2012 – 30 December 2015. |
| ***Resolutions 907/908*** *–* continue development and provide web applications for testing by administrations early 2014. |
| Business Continuity and Disaster Recovery Based on the work done in Phase 1 – develop and test a plan for the BR Information Systems. |
| ***Rewrite technical examination software written in Cobol*** – task initiated.  |
| ***Design and develop the BR Space Information System***– currently BR Space has many standalone applications written in VB6 and VO with their own specific interface. The aim is to build one single user interface that will integrate in the future all BR Space services using state-of-the-art technologies. This task has been initiated and the proposed architecture validated with a prototype: – It is based on Service Oriented Architecture (SOA). The SOA separates the user interface from the service implementation. Each BR Space application will be exposed as an autonomous WCF (Windows Communication Foundation) service and can be easily deployed across both Windows and web platforms. – WPF (Windows Presentation Foundation) technology is considered to be used for the design and development of the User Interface (UI). WPF is the leading modern UI design tool. WPF separates the presentation design layer from the logic layer. – The whole system uses a composite application design pattern (Prism is the Composite Application Guidance for WPF). This improves the system modularity and allows developers to build and maintain system modules independently.  |
| ***Rewrite SpaceQry written in VO* –** analysis and design initiatedSpaceQry will be the first application rewritten in the *BR Space Information System* following the selected architecture: – It will be used as a template for future development to the system so that all BR Soft has the same look and feel– It will provide an easy to use interface that can perform complex queries– In addition, the querying service will be used for SNS Online as a web service |
| ***Review SNS Online*** – this application is written using AWK scripts, which makes it very awkward to maintain. To be reviewed with the possibility of using the querying service (SpaceQry) that will be implemented in the *BR Space Information System.*  |
| ***Rewrite BR soft applications written in VB6*.** All VB6 BR Soft applications will be rewritten in the *BR Space Information System* following the established architecture. |
| ***Consider rewriting the merge* –** low priority. We have not found any statement from Microsoft that says the remote shell will not be supported in Windows 8. In addition, the review of the Notice processing flow may consider eliminating the requirement for a merge. |
| ***Review SNTrack*** – This task should be done in conjunction with the development of Resolutions 907 and 908. BR is examining the possibility of using Nintex (a workflow application based on Sharepoint) to develop a new SNTrack application. |
| ***Migrate SRS.mdb* –** Due to a MS Access space limitation we are looking into migrating to a new container such as SQL Server localdb or SQLite. |

Annex 2

List of events to which the BR participated in 2012

| Title | Start | End | Place |
| --- | --- | --- | --- |
| SPECIALIZED UN AGENCIES |  |  |  |
| 49th Session COPUOS Scientific & Techn. Subcom. (STS-49) | 13/2/12 | 13/2/12 | Vienna |
| UNIDROIT – Diplomatic Conference | 27/2/12 | 2/3/12 | Berlin |
| 32nd session UN Inter-Agency Meeting on Outer Space Affairs | 7/3/12 | 9/3/12 | Rome |
| 16th session of IMO COMSAR | 12/3/12 | 16/3/12 | London |
| 26th meeting of ICAO Aeronautical Coms. Panel WG-F | 21/3/12 | 30/3/12 | Montreal |
| 51st Session Legal Subcommittee COPUOS (19-30 March) | 26/3/12 | 28/3/12 | Vienna |
| 12th Annual Plenary Meeting UNGIWG (28-30 March) | 29/3/12 | 30/3/12 | Vienna |
| UNIDIR – Space Security Conference | 29/3/12 | 30/3/12 | Geneva |
| 55th session of COPUOS | 6/6/12 | 15/6/12 | Vienna |
| Dialogue on Sustainable Development | 16/6/12 | 19/6/12 | Rio de Janeiro |
| Rio +20 Summit | 20/6/12 | 22/6/12 | Rio de Janeiro |
| 27th meeting of ICAO Aeronautical Coms. Panel WG-F | 17/9/12 | 26/9/12 | Montreal |
| 8th Meeting of IMO/ITU Joint Experts Group | 8/10/12 | 12/10/12 | London |
| UN/Japan Nano-Satellite Symposium | 10/10/12 | 13/10/12 | Nagoya |
| WMO – A Dialogue for Climate Services Users and Providers (GCS) | 26/10/12 | 27/10/12 | Geneva |
| WMO – Extraordinary session of the World Meteorological Congress | 29/10/12 | 31/10/12 | Geneva |
| Sessions UN Framework Convention Climate Change and Kyoto Protocol | 26/11/12 | 30/11/12 | Doha |
| REGIONAL TELECOMMUNICATION ORGANIZATIONS |  |  |  |
| 2nd meeting of FM Maritime Forum Group (former PT46) | 7/3/12 | 8/3/12 | Hamburg |
| 3rd Meeting of the WG FM Project – FM PT 49 | 20/3/12 | 21/3/12 | Copenhagen |
| ETSI General Assembly | 20/3/12 | 21/3/12 | Cannes |
| ANCOM Regional Meeting on Mobile Communications Spectrum Harmonization | 29/3/12 | 30/3/12 | Bucharest |
| 12th Meeting of the APT Wireless Group (AWG-12) | 10/4/12 | 13/4/12 | Xiamen  |
| CEPT/CPG Meeting | 16/4/12 | 18/4/12 | Mainz |
| PITA Annual Telecommunication Conference | 16/4/12 | 20/4/12 | Norfolk |
| 74th WGFM | 23/4/12 | 27/4/12 | Bern |
| Joint ECC/ETSI/COST-TERRA Workshop on Cognitive radio | 2/5/12 | 3/5/12 | Mainz |
| RCC WG on preparations for WRC-15  | 21/5/12 | 25/5/12 | Moscow |
| COSPAS SARSAT JC-26 | 12/6/12 | 20/6/12 | Montreal |
| CEPT/ECC WG FM PT 49 (PPDR) | 14/6/12 | 15/6/12 | Germany |
| XIX Meeting of CITEL PCC.II + Seminar on WRC-12 +Satellite issues (3 July) | 2/7/12 | 6/7/12 | Bucaramanga |
| CITEL Meeting + Seminar on WRC-12 +Satellite issues (3 July) | 2/7/12 | 6/7/12 | Bucaramanga |
| CEPT PTB Meeting | 3/9/12 | 5/9/12 | London |
| CEPT PTA Meeting | 5/9/12 | 7/9/12 | London |
| APT Conf. Prep. Group for WRC-15 (APG15-1) & AWG-13 | 10/9/12 | 15/9/12 | Danang (Vietnam) |
| FM Working Group | 24/9/12 | 28/9/12 | Minsk |
| 4th meeting of FM Maritime Forum Group (former PT46) | 2/10/12 | 4/10/12 | Malta |
| 5th Meeting ECC FM PT 49 | 16/10/12 | 17/10/12 | Helsinki |
| XX Meeting of CITEL PCC.II | 22/10/12 | 27/10/12 | Mexico City |
| XX Meeting of CITEL PCC.II | 25/10/12 | 25/10/12 | Mexico City |
| ETSI 60th General Assembly | 13/11/12 | 14/11/12 | Mandelieu |
| CEPT PTC Meeting | 11/12/12 | 13/12/12 | Copenhagen |
| 6th Meeting ECC FM PT 49 | 12/12/12 | 13/12/12 | Biel |
| RCC WG on preparations for WRC-15  | 17/12/12 | 21/12/12 | Kiev |
| Non-ITU CONFERENCES & SYMPOSIA |  |  |  |
| ABU-HFC and HFCC/ASBU Coordination Meeting | 9/1/12 | 13/1/12 | Kuala Lumpur |
| GSMA Mobile World Congress 2012 – Ministerial Programme | 27/2/12 | 1/3/12 | Barcelona |
| CABSAT & Satellite MENA | 29/2/12 | 29/2/12 | Dubai |
| Dynamic Spectrum Conference | 7/3/12 | 7/3/12 | Brussels |
| Satellite 2012  | 12/3/12 | 15/3/12 | Washington |
| Munich Satellite Navigation Summit – GNSS | 13/3/12 | 15/3/12 | Munich |
| Radio Symposium | 12/3/12 | 12/3/12 | Tokyo |
| CJK Meeting | 14/3/12 | 16/3/12 | Miyazaki |
| 8th Annual Professional Conference CERD 2012 | 15/3/12 | 16/3/12 | Bratislava |
| Middle East Spectrum Conference | 20/3/12 | 21/3/12 | Bahrain |
| Annual Colloquium of the Journal of Regulation | 22/3/12 | 22/3/12 | Paris |
| 2nd Caribbean Spectrum Management Seminar: Digital Switchover | 2/4/12 | 3/4/12 | Port of Spain |
| Asia Pacific Radio Spectrum Conference 2012 | 12/4/12 | 13/4/12 | Hong Kong |
| South East Europe Digital Television (digi.TV) Conference | 19/4/12 | 20/4/12 | Trieste |
| IISC Workshop concerning the Satellite Data Association (SDA) | 9/5/12 | 9/5/12 | Isle of Man |
| Workshop “ICT and Women” occasion of World Telecom Day | 17/5/12 | 17/5/12 | Izmir |
| 12th Annual Rio Wireless International Conference | 21/5/12 | 22/5/12 | Rio de Janeiro |
| Intl. Seminar on transition towards all-digital in broadcast.sector | 22/5/12 | 23/5/12 | Conakry |
| Global Space Exploration Conference | 22/5/12 | 24/5/12 | Washington  |
| Intl. Space Workshop on WRC-12 results – SES University | 24/5/12 | 25/5/12 | Luxemburg |
| CASETEL “Lineamientos para una Agenda Digital” | 7/6/12 | 7/6/12 | Caracas |
| XV Cumbre de Reguladores y Operadores | 11/6/12 | 12/6/12 | Bogota |
| 32nd Annual Space Frequency Coordination Group (SFCG)  | 12/6/12 | 20/6/12 | Darmstadt |
| CASBAA Satellite Industry Forum | 18/6/12 | 18/6/12 | Shangri-La |
| CommunicAsia2012 Summit – Satellite Communications Track | 19/6/12 | 20/6/12 | Singapore |
| EU Spectrum Management Conference | 19/6/12 | 20/6/12 | Brussels |
| Broadband for All – Annual Seminar Ericsson | 25/6/12 | 26/6/12 | Stockholm |
| Space Law & Policy Event during Toulouse Space Show | 26/6/12 | 26/6/12 | Toulouse |
| Digital TV Group (DTG) – Seminar on Spectrum | 28/6/12 | 28/6/12 | London |
| Tall Ships Race | 5/7/12 | 7/7/12 | St. Malo |
| 5th OECD Workshop on Space Security | 9/7/12 | 9/7/12 | Paris |
| Pacific Broadband Forum 2012 | 26/7/12 | 28/7/12 | Fiji |
| CTO Digital Broadcasting Switchover Caribbean | 13/8/12 | 14/8/12 | St. John’s |
| V Congreso de Telecomunicaciones, Tecnologías de la Información | 4/9/12 | 6/9/12 | Galapagos |
| IBC2012 Conference | 6/9/12 | 11/9/12 | Amsterdam |
| International Forum on “Empowering Arab Youth through ICT | 17/9/12 | 18/9/12 | Tunis  |
| BIT’s 1st Annual World Congress of Ocean – Wireless Technologies | 20/9/12 | 23/9/12 | Dalian (China) |
| 11th Forum Italradio – Celebration of 80 Years of Radio Monte | 21/9/12 | 21/9/12 | Lugano |
| APSCC 2012 Satellite Conference & Exhibition | 25/9/12 | 27/9/12 | Seoul |
| 76th IEC Council and SMB meetings | 1/10/12 | 5/10/12 | Oslo |
| 63rd Intl. Astronautical Congress -Lecture Outcomes of WRC-12 | 1/10/12 | 5/10/12 | Naples |
| ABU Technical Committee Meeting | 12/10/12 | 14/10/12 | Seoul |
| World Broadband Forum | 17/10/12 | 17/10/12 | Amsterdam |
| 9th Resolution 609 Consultation Meeting | 17/10/12 | 19/10/12 | Tokyo |
| 10th Annual CTO Forum & 52nd Council Meeting | 22/10/12 | 26/10/12 | Mauritius |
| WWRF + Wireless World 2020 (WW2020) Workshop  | 23/10/12 | 25/10/12 | Berlin |
| 14th Annual meeting ISRMM | 23/10/12 | 25/10/12 | Shenzhen (China) |
| 2nd Annual Americas Spectrum Management Conference | 23/10/12 | 23/10/12 | Washington  |
| Latin American Spectrum Conference | 24/10/12 | 25/10/12 | Mexico City |
| Meeting organized by National Polytechnic Institute of Mexico | 25/10/12 | 26/10/12 | Mexico City |
| Spectrum Management Forum | 5/11/12 | 7/11/12 | Munich |
| 7th Intl. Comm. on Global Navigation Satellite Systems (ICG) | 5/11/12 | 9/11/12 | Beijing |
| EBU – Forecast ‘12 | 14/11/12 | 15/11/12 | Geneva |
| 6th International Symposium on Telecommunications | 6/11/12 | 8/11/12 | Teheran |
| GS Forum 2012 – Digital Broadcasting Worldwide | 7/11/12/ | 8/11/12 | Kaliningrad |
| Satellite Interference Reduction Group Annual Conference | 18/11/12 | 20/11/12 | Dubai |
| BBC – International Broadcasting Without Barriers Event | 20/11/12 | 20/11/12 | London |
| Launch meeting for transition to Digital TV | 27/11/12 | 28/11/12 | San Salvador |
| WBU-ISOG Forum | 27/11/12 | 28/11/12 | Geneva |
| SWFs Brussels Space Policy Round Table: 2012 Space Security Index Launch in Europe | 29/11/12 | 29/11/12 | Brussels |
| EBU – Sustainable Spectrum Management Group | 17/12/12 | 17/12/12 | Geneva |
| ITU SEMINARS, WORKSHOPS & MEETINGS |  |  |  |
| ITU Regional Workshop on transition to digital TV | 27/2/12 | 2/3/12 | Bangkok |
| ITU/AICTO Seminar | 28/2/12 | 29/2/12 | Tunis |
| Connect Arab States Summit | 5/3/12 | 7/3/12 | Doha |
| ATU/ITU Workshop on transition to digital TV | 12/3/12 | 15/3/12 | Bamako |
| CoE training on the transition and digital dividend | 14/3/12 | 16/3/12 | Athens |
| ITU Regional Workshop on transition to digital TV | 16/4/12 | 20/4/12 | Kampala |
| Regional Development Forum for the Americas | 18/4/12 | 19/4/12 | Mexico City |
| ITU Regional Space Workshop | 23/4/12 | 27/4/12 | Bangkok |
| Workshop on Spectrum Management and Digital Dividend | 7/5/12 | 8/5/12 | Warsaw |
| Regional Development Forum for Africa | 9/5/12 | 11/5/12 | Kigali |
| Americas Region Preparatory Meeting for WTSA-12 | 14/5/12 | 15/5/12 | Buenos Aires |
| Regional Development Forum for Asia-Pacific | 16/5/12 | 18/5/12 | Bangkok |
| ITU Asia-Pacific Centres of Excellence Training Workshop | 20/5/12 | 23/5/12 | Isfahan |
| Regional Workshop for Caribbean  | 21/5/12 | 25/5/12 | Barbados |
| Regional Development Forum for CIS countries | 23/5/12 | 23/5/12 | Chisinau |
| 7th Symposium on ICTs, the Environment and Climate Change | 29/5/12 | 31/5/12 | Montreal |
| Seminar on transition to digital TV | 30/5/12 | 1/6/12 | Montevideo |
| Workshop on Radiocommunication develop.in light of WRC-12 | 5/6/12 | 8/6/12 | St. Petersburg |
| FTRA 2012 – 13th Forum Telec. /ICT Reg. & Partnership | 18/6/12 | 20/6/12 | Libreville |
| ITU Spectrum Management Workshop | 18/6/12 | 21/6/12 | Bogota |
| Connect Americas Summit | 17/7/12 | 19/7/12 | Panama  |
| CLM/ITU Multi-stakeholder Forum – Role of ICT in Disaster | 24/7/12 | 26/7/12 | Bogota |
| ITU/TTA Regional BSG for countries in Asia-Pacific region | 30/7/12 | 31/7/12 | Ventiane |
| ITU for SADC sub-reg. GE06 Freq. Coord. Workshop DTT Broadcasting Migration | 20/8/12 | 24/8/12 | Johannesburg |
| Sect. Member Reg. Meeting Public/Priv. Partnership CIS countries | 21/8/12 | 24/8/12 | Issyk-Kul lake |
| Workshop Key event | 5/9/12 | 7/9/12 | Kazakhstan |
| ITU Regional Forum for CIS countries | 11/9/12 | 13/9/12 | Kiev |
| Regional Development Forum + ICT4all | 17/9/12 | 20/9/12 | Hammamet |
| ITU Seminar for Americas Region on Spectrum Management | 20/9/12 | 21/9/12 | Manta |
| ATU/ITU Digital Transition and Spectrum Policy Summit | 27/9/12 | 28/9/12 | Accra |
| GSR-12 | 2/10/12 | 4/10/12 | Colombo |
| ITU Telecom | 14/10/12 | 18/10/12 | Dubai |
| ITU Global Forum on building human capabilities & skills | 22/10/12 | 25/10/12 | Cape Town |
| ITU Regional Radiocommunication Seminar | 30/10/12 | 2/11/12 | San Jose |
| ITU Regulatory Seminar on Digital Broadcasting | 5/11/12 | 7/11/12 | Budapest |
| 4th ITU CTO meeting + Reception with GSS speakers & Elected Officials | 18/11/12 | 18/11/12 | Dubai |
| GSS & WTSA-12 | 19/11/12 | 29/11/12 | Dubai |
| WTSA-12 | 25/11/12 | 29/11/12 | Dubai |
| WCIT-12 | 3/12/12 | 14/12/12 | Dubai |
| ITU/GISFI Workshop on Bridging the Standardization Gap | 17/12/12 | 18/12/12 | Bangalore |
| ASSISTANCE/INFORMATION REQUESTS |  |  |  |
| Assistance to Albania on Strategies for transition to digital TV | 10/1/12 | 10/1/12 | Tirana |
| Technical assistance to NICTA (Papua New Guinea) | 30/7/12 | 3/8/12 | Port Moresby |
| Assistance to Palestine | 10/9/12 | 13/9/12 | Palestine |
| Assistance to MERCOSUR | 29/10/12 | 2/11/12 | Brasilia |
| Assistance to Gabon | 12/11/12 | 16/11/12 | Gabon |
| Assistance to Thailand | 12/11/12 | 15/11/12 | Bangkok |
| Assistance to Maldives | 26/11/12 | 30/11/12 | Maldives |
| Assistance to NBTC Thailand | 10/12/12 | 14/12/12 | Bangkok |
| MISCELLANEOUS (MSC) |  |  |  |
| 63rd Annual Technology & Engineering EMMY Award | 12/1/12 | 12/1/12 | Las Vegas |
| 100th Meeting MPEG Celebration Event | 2/5/12 | 2/5/12 | Geneva |
| Visit to INVAP in Bariloche + ARSAT in Benavidez | 26/5/12 | 29/5/12 | Buenos Aires |
| Lecture on Satellite Communications at the University of Luxemburg | 20/11/12 | 20/11/12 | Limpertsberg |

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1. The Bureau is currently working on upgrading the install utility to ensure full compatibility with Windows 8® as well. [↑](#footnote-ref-1)