



90th Anniversary
CCIR/ITU-R Study Groups
(1927-2017)

Radiocommunication Bureau (BR)

Administrative Circular
CA/233

18 May 2017

To Administrations of Member States of the ITU, and
Radiocommunication Sector Members

Subject: **Summary of conclusions of the twenty-fourth Radiocommunication Advisory Group meeting**

Reference: **Administrative Circular CA/232 of 2 December 2016**

The Radiocommunication Advisory Group (RAG) met for the twenty-fourth time from 26 to 28 April 2017 in Geneva.

The summary of conclusions of the meeting is contained in the Annex to this letter.

Additional information about this meeting may be found on the RAG website at <http://www.itu.int/ITU-R/go/RAG>.

François Rancy
Director

Annex: 1

Distribution:

- Administrations of Member States of ITU
- Radiocommunication Sector Members
- Chairmen and Vice-Chairmen of Radiocommunication study groups
- Chairman and Vice-Chairmen of the Radiocommunication Advisory Group
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of ITU, Director of the Telecommunication Standardization Bureau,
Director of the Telecommunication Development Bureau

ANNEX

SUMMARY OF CONCLUSIONS OF THE
TWENTY-FOURTH RADIOCOMMUNICATION ADVISORY GROUP MEETING

Radiocommunication Advisory Group
Geneva, 26-28 April 2017



Revision 2 to
Document RAG17/TEMP/3-E
28 April 2017
English only

Chairman, RAG

TWENTY-FOURTH MEETING OF THE
RADIOCOMMUNICATION ADVISORY GROUP

SUMMARY OF CONCLUSIONS

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Agenda Item	Subject	Conclusions
1	Opening remarks	The meeting was formally opened by the Chairman, Mr. Daniel Obam (Kenya). In line with the agenda of the meeting, and in absence of the Secretary-General, opening remarks were delivered by the Director of the BR. Mr. Obam expressed his appreciation to Member States and Sector Members for their contribution to the work of the RAG.
2	Approval of the agenda <i>(Doc. RAG17/ADM/1 (Rev.2))</i>	The draft agenda in Doc. RAG17/ADM/1(Rev.2) was agreed without changes. The meeting also agreed with the proposed Time Management Plan.
3	RAG Chairman and Vice-Chairmen <i>(Doc. INFO/1)</i>	The Chairman invited the RAG vice-chairs present in the room for a brief introduction, following which he explained that Ms Anabel Cisneros (Argentina), who had been elected RAG vice-chair at RA-15, is no longer available. He briefly introduced Mr. Oscar Gonzalez, proposed by Argentina to replace Ms Cisneros. RAG endorsed Mr. Gonzalez as RAG vice-chairman by acclamation.
4	Report to the 24 th meeting of the Radiocommunication Advisory Group <i>(Doc. RAG17/1(Rev.1))</i>	RAG noted the information provided in the Director's report related to ITU-R, and agreed to address each section of the report when dealing with the respective agenda item.
5	Council-17 related matters <i>(Docs. RAG17/1(Rev.1), 10, 11)</i>	<p>RAG noted with satisfaction that the free online access policy continued to provide a platform for a large dissemination of ITU-R Recommendations and welcomed the Director's initiative to extend the free access to all ITU-R Handbooks.</p> <p>RAG also noted the information provided in the Director's report on cost recovery for satellite network filings and space protocol related issues.</p> <p>RAG considered Doc. RAG17/11 from the Russian Federation, which addresses the issue of processing of filings for non-GSO FSS systems, cost recovery for such filings as well as possible actions required from the Council-17 to deal with the increase of processing time of non-GSO FSS filings and resulted in the delay of GSO FSS filings publication as well.</p> <p>RAG noted that Council Decision 482 does not fully accommodate cost recovery for non-GSO FSS systems submitted to the BR recently (during the last 12-18 months). There is a substantial difference (in some cases more than 10 times) between the cut-off limit of units established by Council</p>

Agenda Item	Subject	Conclusions
		<p>Decision 482 and the actual number of units required to process extensive non-GSO FSS networks filings. It is recognized that this is, among other issues, the result of the complexity of these non-GSO FSS systems and the huge number and complexity of their examination procedure. This resulted not only in delaying non-GSO FSS filings publication but GSO FSS filings publication as well. RAG advised the BR Director to inform Council-17 of this ongoing consideration.</p> <p>RAG also advised the BR Director to inform Council about the following two possible options for the cost recovery of processing by the BR of extensive non-GSO FSS filings:</p> <ul style="list-style-type: none"> - to compensate the cost for processing of non-GSO FSS filings by the BR through the ITU Budget. For this purpose BR Director is invited to assess and report to the Council-17 possible cost which could not be recovered for non-GSO FSS filings when applying Council Decision 482 in force. It is noted that this increase of the budget should include financial support for future development of EPFD validation software once the revision of Recommendation ITU-R S.1503-2 is completed; - to revise Council Decision 482 through the development of specific cost recovery procedure for extensive non-GSO FSS networks. For this purpose the BR Director is invited to clarify technical issues of such a procedure, in consultation with relevant ITU-R Study Groups and the RRB, in particular whether there is a possibility for the individual non-GSO filings (API/coordination/notification) containing: <ul style="list-style-type: none"> a) non-homogeneous satellite orbits with differing altitudes and inclinations, or b) different constellation configurations, to be separated into filings containing each individual constellation or individual types of satellite orbit, for the purposes of processing by the BR. <p>With respect to the issue of how the BR should process modifications to non-GSO filings when specific orbital characteristics are changed (whether some flexibility should be allowed or not), it is noted that this question is currently under consideration within WP 4A under the issue of future evolution of Recommendation ITU-R S.1503.</p>

Agenda Item	Subject	Conclusions
		<p>RAG further invited the Director to request the Council to provide guidance on how to address the issue of cost recovery of the non-GSO FSS filings without adverse impact on the ITU's satellite network filing process.</p> <p>RAG noted the draft proposed budget for the Radiocommunication Sector for the 2018-2019 timeframe, pending the approval by Council-17 of the 2018-2019 budget of the Union.</p> <p>RAG considered Doc. RAG17/10 from the Russian Federation, which draws attention to the fact that in recent decades, more and more attention has been focused on efforts to increase the efficiency of radio-spectrum and satellite-orbit use. Ample evidence of this is to be seen in the ever-increasing numbers of participants at world radiocommunication conferences (WRCs), with some 2 000 having been registered at WRC-97 (held in 1997), and over 3 300 at WRC-15 (held in 2015). At the same time, there is a significant increase in the types, complexity and volume of the tasks being accomplished by the staff of BR, which essentially constitutes the executive machinery of the international spectrum and satellite orbit management system.</p> <p>The document contains an analysis of financial resources allocated to the ITU-R and human resources in the Radiocommunication Bureau during the period 1996-2017. This analysis highlights the significant reduction of the ITU-R budget during last years and draws attention to the proposed further reduction in the ITU-R draft budget for the period 2018-2019. It shows that the ITU-R budget is proposed to be reduced in a greater extend comparing with the respective budget reductions in other ITU organs for the same period. It also raises a number of issues related to BR staff reduction during last years that, as a result, leads to the situation where the BR is not able to fulfill anymore its regulatory obligations due to the lack of financial and human resources combined with increased complexity of tasks as well as the growing number and complexity of satellite network filings, which generate significant additional work for the BR.</p> <p>The conclusion states that the problems identified above are due in large measure to a reduction in the financial and human resources made available to the Radiocommunication Sector in recent years (including a steep reduction in BR's workforce), and that measures need to be taken rapidly to ensure fulfilment of the increasingly complex objectives of the Bureau. This position was widely supported by RAG participants.</p>

Agenda Item	Subject	Conclusions
		<p>An explanation was given by the Director on the variation of staff levels over the years, stemming back to the early 1990's when there was up to a two-year delay in the processing of filings against RR No. 9.38 regulatory time limit of four months for processing CR/R submissions as outlined in the Radio Regulations. He explained that when cost recovery measures were put in place there was a reduction, to some extent, in the submission of filings. This relative decrease, coupled with new software applications that made processing more efficient, allowed for the staff reduction occurred during his tenure. However, a new backlog has been developing over the past 12-18 months, due to a large increase in the number and complexity of both GSO and Non-GSO satellite network filings. RAG concluded that Member States may bring these concerns to the Council if they so wish, for which the Summary of Conclusions of the present RAG meeting could be cited by them as a reference. RAG also stressed the need to adopt a proportional and balanced approach in the financing of the ITU Sectors and the General Secretariat that should take into account the recent increase in the workload of the Radiocommunication Bureau and the related expectations of the membership. RAG also recommended to the Director to inform the Council about these concerns in his report.</p> <p>RAG noted the approval by Council-16 of Resolution 1380 containing the venue, dates and agenda for WRC-19 as well as the venue and dates for RA-19, which was subsequently the object of a consultation to Member States, and it received the agreement of the required majority of the Member States of ITU.</p> <p>RAG further noted that the Administration of Egypt has recently confirmed their commitment to host both the RA and WRC-19 in Sharm El-Sheikh on the dates already approved by Council.</p>
6	<p>Implementation of WRC-15 Decisions (Docs. RAG17/1(Rev.1), 12)</p>	<p>RAG noted the actions so far undertaken by the Bureau to implement WRC-15 decisions relating to both space and terrestrial services, in particular the software development activities aimed at implementing Resolution 907 (Rev.WRC-15) on the use of modern electronic means of communication for satellite network-related administrative correspondence, and Resolution 908 (Rev.WRC-15) on electronic submission of satellite network filings.</p> <p>The Chairman of the Rapporteur Group on the Implementation of Resolutions 907 and 908 indicated that the group had not been very active until now, but as the software will be soon ready for initial testing by Member States, the group could contribute with such tests. He invited interested administrations to contact him (Mr. Alexandre Vallet, Alexandre.Vallet@anfr.fr) in order to join the</p>

Agenda Item	Subject	Conclusions
		<p>Rapporteur Group and take part in the proposed exercise.</p> <p>RAG noted that the software being developed to implement Resolution 907 will ensure that communications between the Administrations and the Bureau are properly tracked and that the sender will be issued an acknowledgment of receipt for each communication, similarly to the approach implemented for terrestrial services when receipt of any frequency assignment notice submitted by an administration to the BR is automatically acknowledged by the relevant system.</p> <p>RAG considered Doc. RAG17/12 from Japan highlighting several aspects to be taken into account for the implementation of Resolution 908. RAG thanked Japan for their contribution and requested the Bureau to take the proposals contained in the document into consideration. It further requested the Bureau to submit a progress report on the implementation of Resolution 908 to the next meeting of the RAG.</p>
7	<p>RA/WRC-19 preparation (Docs. RAG17/1(Rev.1)+Corr.2, 7, 16)</p>	<p>RAG noted the report on the preparations for RA-19/WRC-19 and CPM19-2, in particular regarding the progress in the preparation of the texts for the draft CPM Report to be submitted to CPM19-2. It also noted with satisfaction that the preliminary version of the Conference Proposal Interface (CPI) for WRC-19 has been developed and is available at: www.itu.int/net4/Proposals/CPI/WRC19/Main, for use by administrations to retrieve texts from the 2016 Edition of the RR in proper format. RAG noted that this information has been brought to the attention of the ITU-R groups responsible for the preparation of draft CPM texts (see e.g. Doc. 1A/160). RAG requested that the tool be demonstrated during the 1st ITU Inter-regional Workshop on WRC-19 Preparation to be held in Geneva in November 2017. RAG thanked the Bureau for their support to the Regional Groups in their preparation for WRC 19, as well as for the useful and updated information included in the ITU-R webpages for WRC-19 (www.itu.int/go/wrc-19) and the CPM (www.itu.int/ITU-R/go/rcpm).</p> <p>RAG noted the presentation delivered by ITU's Communication team on the proposed WRC-19 visual identity, which is part of an ITU-wide project to modernize and harmonize ITU branding.</p> <p>RAG considered Doc. RAG17/7 from China on the Decisions of Regional Radiocommunication Conferences. RAG noted that the issue raised in the document is not within its purview, but within that of the Plenipotentiary Conference. It also noted that, so far, there have not been practical problems with decisions by Regional Radiocommunication Conferences that might have become</p>

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		<p>incompatible with the Radio Regulations and that the RRB has been very efficient in dealing with this type of situations.</p> <p>RAG also considered Doc. RAG17/16 from France on a proposed review of Resolution ITU-R 2, supporting the current CPM process while proposing changes in various aspects to provide more time for the ITU-R Working Parties to conclude their work on the draft CPM texts as well as to reduce the duration of the duration of CPM-2 to 8 working days, from a Tuesday to a Thursday. RAG noted the document and indicated that Members States are free to submit their proposals for a possible revision of Resolution ITU-R 2 directly to RA-19.</p>
8	Study Group activities (Docs. RAG17/1(Add.1), 2, 13)	<p>RAG noted the report on Study Group activities, in particular the increased participation in Study Group meetings and the consequent logistical challenges related to adequate-sized room availability. RAG advised that an ITU-wide mechanism should be put in place to provide adequate availability of rooms for core statutory ITU activities. The issue of available rooms for official ITU meetings may become more pressing when the Headquarter premises are reconfigured. Therefore, it would be important to take into account the need for sufficient rooms in the requirements for the new ITU building. RAG provided additional advice on aspects to improve the work of the Study Groups, such as further promoting remote participation, as well as updating and harmonizing the website information.</p> <p>RAG reiterated its position that ITU-R Study Groups and their associated Working Parties, Working Groups and sub-groups need to normally hold their meetings during the working hours announced at the beginning of the meeting. Holding meetings outside those hours needs to be agreed by consensus. Holding meetings during the week-end, either on Saturday or Sunday, or on very exceptional cases on both days, if any, needs to:</p> <ul style="list-style-type: none"> a) be agreed by the plenary on a consensus basis; and b) should not be extended beyond 17:00 hours on any of these two days. <p>RAG advised the Director, to the extent practicable, to harmonize, in collaboration with the Directors of other Bureaus and the General Secretariat, the structure and features of their respective webpages in a user-friendly manner for easy search and quick access by the membership.</p>

Agenda Item	Subject	Conclusions
		<p>RAG confirmed the need that all documents, whenever possible, be made available in Word format to enable membership to make use of the Word texts in their contributions and preparatory activities for subsequent meetings of the Sector.</p> <p>RAG advised the Director to continue his current efforts in improving the features and functioning of the share point in order that the use of the share point by Study Groups and Working Parties be done in a harmonized and easy fashion in their follow up actions, in particular when documents are revised and/or updated.</p> <p>RAG confirmed the need that the agenda of all meetings of Study Groups and Working Parties, sub-groups and other groups be prepared in advance and posted on the website or share point of these groups in advance (before the starting of the meeting). All documents included in the agenda should be hyperlinked to the agenda to facilitate an easy and quick access of the delegates attending the corresponding meetings.</p> <p>RAG confirmed that every effort should be made to avoid overlapping of RAG meetings with the meetings of other ITU-R Study Groups and Working Parties in order to allow membership, to the maximum extent possible, attend RAG and those other ITU-R meetings.</p> <p>Should ITU-R meetings be held outside the seat of the Union, they should be open to all membership without any restriction.</p> <p>RAG reiterated that all Study Groups, Working Parties, sub-groups and other groups need to fully observe the working methods as stipulated in Resolution ITU-R 1-7 and its subsequent/updated versions. In particular, decide on issues in a consensus-based approach as outlined in Resolution ITU-R 1-7 and its subsequent updates, maintaining the principle of universality and consensus as a well-established principle in the UN and the ITU.</p> <p>RAG also confirmed that Study Groups, Working Parties and other groups need to take into account the conclusions reached at earlier meetings of the RAG.</p> <p>RAG considered Doc. RAG17/2 from Italy and the Vatican City, proposing to merge into a single resolution the three resolutions that relate to the work of the CCV (Resolutions ITU-R 34, 35 and 36). RAG noted that the proposal had been also submitted to the CCV, which is preparing a proposed</p>

Agenda Item	Subject	Conclusions
		<p>revision of Resolution ITU-R 36 along those lines for submission to RA-19. It was noted that a Member State, if it so wishes, may also submit such a proposal directly to the RA-19.</p> <p>RAG considered Doc. RAG17/13 from Japan which proposed that the “Format of ITU-R Recommendations” (http://www.itu.int/oth/ROAOE000097) in the guidelines for the working methods be revised to clarify the usage of notes and footnotes in ITU-R Recommendations, along the lines of definitions used in ISO/IEC and ITU-T texts. It was noted that there may be a need to ensure that there are no implications for those Recommendations that are incorporated by reference in the Radio Regulations. The Japanese Administration may wish to take any following actions on the matter, as appropriate.</p>
9	<p>Inter-sector coordination (Docs. RAG17/1(Rev.1), 5, 8, 15, INFO/3, INFO/4)</p>	<p>RAG noted the information contained in the Director’s report concerning ITU-R cooperation with ITU-D and ITU-T, as well as with international and regional organizations.</p> <p>RAG considered Doc. RAG17/5 from the Chairman of ITU-R Study Group 1, on the interaction between ITU-R SG 1 and ITU-D SG 1 on the WTDC Resolution 9 (Rev. Dubai, 2014) activities between 2014 and 2017. RAG recognized that, despite the many exchanges between the two sectors as shown in Doc. INFO/3, the comments made by ITU-R were not fully taken into consideration and properly reflected in the drafting of the final report for Resolution 9. RAG stressed the need to ensure that the main thrust of Resolution 9, which is still valid, is carried out without duplicating efforts in the two Sectors, while making certain that the work carried out by ITU-D is consistent with that of ITU-R.</p> <p>RAG also considered Doc. RAG17/15 from France, which proposes a Liaison Statement to be sent to the TDAG to convey the above-mentioned concerns. RAG decided to send a Liaison Statement to the TDAG to reflect those concerns and suggest possible improvements on cooperation and coordination between ITU-R and ITU-D on WTDC Resolution 9. The Liaison Statement, which is included in Annex 1, also contains the RAG view that the concerns of ITU-R on the Res.9 Report need to be taken into account before it is published and considered by WTDC-17.</p> <p>RAG considered Doc. RAG17/8 from the Russian Federation, proposing the establishment of a joint ITU Coordination Committee for Vocabulary. RAG supported the proposal, and noted that it had been sent to Council for its consideration.</p>

Agenda Item	Subject	Conclusions
10	<p>Draft Rolling Operational plan for 2018-2021 (Docs. RAG17/1(Add.2)+Corr.1, 6, 9, INFO/2)</p>	<p>RAG noted the key elements of the draft rolling Operational Plan for the ITU-R for the period 2018-2021, in particular the additional outcome indicators that were included for each objective to better measure the impact of the related key performance indicator.</p> <p>RAG also noted the projection of the financial resources allocation to BR outputs for 2018-2021. RAG considered Doc. RAG17/9 from the Russian Federation, which proposes additional outcome indicators and other improvements to the ITU-R Operational Plan. RAG noted that such proposal could be taken into consideration when developing the Strategic Plan and the corresponding Operational Plans for the next cycle, as the current ones were adopted by the Plenipotentiary Conference in 2014.</p> <p>RAG endorsed the proposed draft ITU-R rolling Operational Plan for 2018-2021 with some amendments, as presented in Annex 2, and requested the Director to take into consideration the following aspects for the preparation of the Strategic Plan and the corresponding ITU-R Operational Plans for the coming cycle:</p> <ul style="list-style-type: none"> - to distinguish between the objectives of the ITU-R Sector and those of the Bureau; - to ensure that the statistical values (indicators) are collected from trustworthy sources. <p>The Director offered to present a first draft of the Strategic and Operational Plans for the next cycle to the next meeting of the RAG.</p> <p>RAG further noted with thanks the proposed draft rolling Operational Plan for 2018-2021 of the General Secretariat.</p>
11	<p>110th Anniversary of the Radio Regulations (Doc. RAG17/3)</p>	<p>RAG noted with satisfaction the activities organized by the Bureau in the framework of the celebrations to mark the 110th Anniversary of the Radio Regulations, and encouraged members that were not able to participate to take advantage of the existence of verbatim records of the panel discussions to listen to the debates.</p>

Agenda Item	Subject	Conclusions
12	90 th Anniversary of the CCIR/ITU-R Study Groups <i>(Doc. RAG17/4(Rev.1))</i>	RAG welcomed the plan proposed by the Bureau for the celebration of the 90 th Anniversary of the CCIR/ITU-R Study Groups, which encompasses various events extended throughout the year. In particular, RAG noted that this year there will be a new feature at ITU Telecom World, where the BR has been offered a 200 square-meter surface to invite ITU-R Sector Members to showcase their activities.
13	BR information system <i>(Doc. RAG17/1(Rev.1), 14)</i>	RAG noted with thanks the progress achieved in software development activities to implement the actions included in the roadmap as advised by the RAG-19, aimed at further developing the BR information system. RAG also noted the ongoing efforts to migrate from Ingres, which are being gradually implemented for both space and terrestrial applications. RAG considered Doc. RAG17/14 from Japan on the operation and maintenance of the ITU-R Documents Database Search Facility. RAG thanked Japan for their availing of resources for the development of this tool, as well as for the valuable contribution of Japanese experts to this project, particularly that of Dr. Hashimoto.
14	Membership outreach activities <i>(Doc. RAG17/1(Rev.1)+Corr.1)</i>	RAG noted the main activities carried out by the Bureau over the past year regarding technical assistance to members, including Radiocommunication-related seminars and workshops. RAG noted with satisfaction the increasing number of downloads of free publications, and requested the Director to seek further simplification of the access to such publications by the members. RAG also noted the efforts made by the BR in attracting more Sector Members including Academia, as well as the communication and promotion activities carried out by the Bureau. RAG recommended that a harmonized approach for the website of all sectors be pursued.
15	Date of next meeting	The 25 th meeting of the RAG is planned to take place from 26 to 29 March 2018. It is foreseen to have the second day of the meeting (without interpretation) dedicated to discussion on the draft strategic and operational plans.
16	Any other business	

ANNEXES:

ANNEX 1: RAG Liaison Statement to TDAG – Cooperation and coordination between ITU-R and ITU-D on WTDC Resolution 9 (Rev. Dubai, 2014)

ANNEX 2: Draft 4-year rolling operational plan for the Radiocommunication Sector for 2018-2021

ANNEX 1

RAG LIAISON STATEMENT TO TDAG

(Copy to ITU-R Study Group 1 and
to ITU-R Working Parties 5A and 5D for information)

**Cooperation and coordination between ITU-R and ITU-D
on WTDC Resolution 9 (Rev. Dubai, 2014)**

Introduction

The Director of the Telecommunication Development Bureau (BDT) in its [Document 1/110](#) of 11 June 2014 invited the Director of the Radiocommunication Bureau to ensure that ITU-R continues the collaboration with ITU-D in the implementation of Resolution 9 (Rev. Dubai, 2014) of the World Telecommunication Development Conference 2014 (WTDC-14).

This liaison statement would like to bring to the attention of TDAG the RAG views concerning possible improvements on Cooperation and coordination between ITU-R and ITU-D on WTDC Resolution 9 (Rev. Dubai, 2014).

ITU-R experience about the work on WTDC Resolution 9 (Rev. Dubai, 2014) between 2014 and 2017

During the ITU-D 2014-2017 study cycle, several liaison statements have been exchanged between various ITU-R Working Parties (e.g. WP 1B and WP 5D) and the group of ITU-D Study Group 1 dedicated to the preparation of the draft Report to WTDC-17 in response to Resolution 9 (Rev. Dubai, 2014). This draft Report has been thoroughly reviewed by the concerned ITU-R Working Parties, resulting in requests to ITU-D Study Group 1 to amend the draft Report in order to ensure its consistency with the results of the relevant ITU-R studies and to avoid duplication of existing ITU-R information.

The limited amount of time at the subsequent Resolution 9 Group meetings (i.e. half a day during the September 2016 meeting of ITU-D Study Group 1, 1 day in January 2017 and half a day during the March 2017 meeting of ITU-D Study Group 1), the limited number of contributions and contributors in general as well as the limited participation of ITU-R experts did not enable appropriate consideration of all the ITU-R requested modifications.

The final version of the Report on Resolution 9 was, nevertheless, approved at the March 2017 meeting of ITU-D Study Group 1.

Comments from ITU-R Working Party 1B have therefore not been adequately reflected in the Report developed by ITU-D Study Group 1. This situation results in very serious concerns on the relevance and completeness of the Report on Resolution 9, and on its consistency with the ITU-R work.

Course of action to resolve this situation and foster further cooperation and coordination between ITU-R and ITU-D (Resolution ITU-R 7-3) in the implementation of WTDC Resolution 9 (Rev. Dubai, 2014)

To diligently effect the required cooperation and coordination between ITU-R and ITU-D on spectrum management related topics, RAG proposes that TDAG take the following measures:

- to bring directly to the attention of the relevant ITU-R Study Groups the case studies and special requirements of national spectrum management organizations from developing countries. This would facilitate the consideration of developing countries' special requirements in providing best practices in spectrum management in ITU-R deliverables, such as in ITU-R Recommendations, Reports and/or Handbooks;
- to organise ITU seminars and/or workshops on spectrum management topics in conjunction with the ITU-R Study Group 1 or its Working Parties meetings with the support of the BDT to facilitate the participation of developing countries. The participation at these events would give the opportunity to share information with ITU-R spectrum management experts on concrete issues or specific cases that have been already dealt with in other countries and to be involved actively in the ITU-R Study Group 1 studies;
- to continue gathering national practical case studies and make them rapidly available through the ITU-D website. In conjunction with the development of thematic web pages referencing existing ITU-R material on specific radio topics, this would decrease the workload of both ITU-D and ITU-R Study Groups 1 while ensuring that the most accurate information on the most relevant radio spectrum issues is gathered and available in a single place;
- should Resolution 9 be maintained, together with its associated Report, to consider necessary revision of Resolution 9, including appropriate procedures for the approval of the associated Report, based on ITU practices including those of the ITU-R as contained in Resolution ITU-R 1-7, in order to reflect the needs of developing countries and prevailing trends in spectrum management and to keep consistency of content of the Report on Resolution 9 with ITU-R deliverables on spectrum management.

With regard to the Report on Resolution 9 approved by the March 2017 meeting of ITU-D Study Group 1, RAG is of the strong view that concerns of ITU-R on the Report should be taken into account before the Report is published and considered by WTDC-17. The RAG wishes to inform the TDAG that the opportunity of ITU-R Study Group 1 meeting in June 2017 be taken in this regard.

Status: For action

Contact: Mr. D. Obam, RAG Chairman (e-mail: daniel.obam@ties.itu.int)

ANNEX 2

DRAFT 4-YEAR ROLLING OPERATIONAL PLAN FOR THE RADIOCOMMUNICATION SECTOR FOR 2018-2021

1. Introduction

The four-year rolling Operational Plan for the ITU Radiocommunication Sector (ITU-R) has been prepared in full alignment with the ITU Strategic Plan for 2018-2021, within the limits of the Financial Plan for 2018-2021 and the corresponding biennial budgets. The structure follows the ITU-R results framework, outlining the ITU-R objectives, the corresponding outcomes and the indicators to measure their progress, as well as the outputs (products and services) produced by the activities of the Sector.

The planning, implementation and monitoring and evaluation process for the Radiocommunication Bureau (BR) will be complemented by the following internal mechanisms:

- i) the Work Plans of the Departments and Divisions of the BR, and
- ii) the Service Level Agreements (SLAs) for the planning, monitoring and evaluation of the support services.

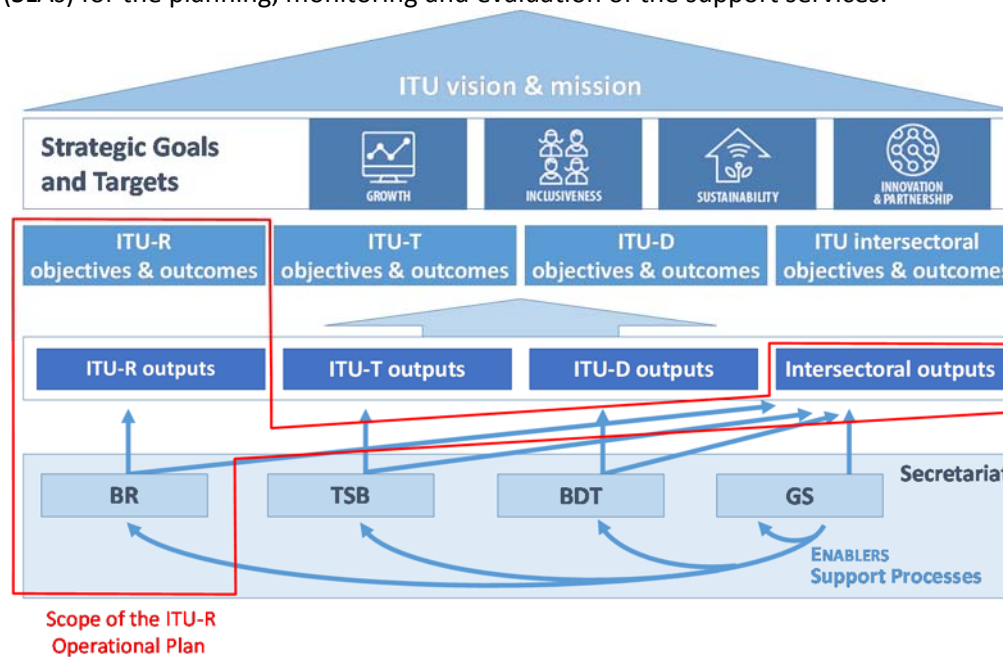


Figure 1: ITU-R OP and the ITU strategic framework for 2016-2019

2. Outline and key priorities for the ITU-R Sector

The period 2018-2021 will be marked by the implementation of the decisions of RA-15 and WRC-15, the preparation of RA-19 and WRC-19 and the development of key standards and best practices in radiocommunications. The key issues are listed below, against the four operational activities of the ITU-R Sector and the supporting activities of the Radiocommunication Bureau:

2.1 To establish and update international regulations on the use of the radio-frequency spectrum and satellite orbits

- The implementation of the decisions of WRC-15,
- The adoption by the RRB of the associated Rules of Procedure.

2.2 To implement and apply international regulations on the use of the radio-frequency spectrum and satellite orbits

- The development and delivery to the membership of the software tools relating to the application of the Radio Regulations and associated Rules of Procedure,
- The proper and timely application of the provisions of the Radio Regulations and applicable Regional Agreements for terrestrial and space services, with the update of the Master International Frequency Register (MIFR) and assignment and/or allotment Plans and Lists,
- The monitoring of harmful interference cases and more generally of situations of conflicts in sharing spectrum/orbit resources and the resolution of these cases,
- The associated publications (BR IFIC, Maritime service publications, list of international monitoring stations).

2.3 To establish and update worldwide Recommendations, Reports and Handbooks for the most efficient use of the radio-frequency spectrum and satellite orbits

- The preparation of RA-19 and WRC-19 in ITU-R Study Groups and in close collaboration with the regional groups, including the development of draft technical, regulatory and procedural texts in support of the CPM19-2,
- The development of key Recommendations, Reports and Handbooks, in particular on the radio interface of IMT-2020, in close cooperation with ITU-T, regional organizations and other standard making bodies.

2.4 To inform and assist the ITU-R membership in radiocommunication matters

- The publication and promotion of the ITU-R products (such as Radio Regulations, Recommendations, Reports and Handbooks).
- In close cooperation with the other Sectors, the ITU regional offices, the relevant regional organizations, and the membership,
 - The dissemination and sharing of information, including Worldwide and Regional Radiocommunication seminars, conferences, workshops and other events.
 - The assistance to the membership in facing the challenges raised by the development of their radiocommunication services, in particular in relation to the transition to digital television broadcasting and the use of the digital dividend.

2.5 Supporting activities of the Radiocommunication Bureau

- The continuing development, improvement, and maintenance of the BR software tools, with a view to maintaining a high level of efficiency, reliability, user-friendliness, and satisfaction of the membership.

- The logistical and administrative support to ITU-R Study groups and the participation in the related activities of the regional groups.
- The rendering of assistance to the membership, in close collaboration with the other Bureaux, the ITU regional offices, and the regional organizations.

3 ITU-R results framework for 2018-2021

3.1 Linkage with the ITU Strategic Goals¹

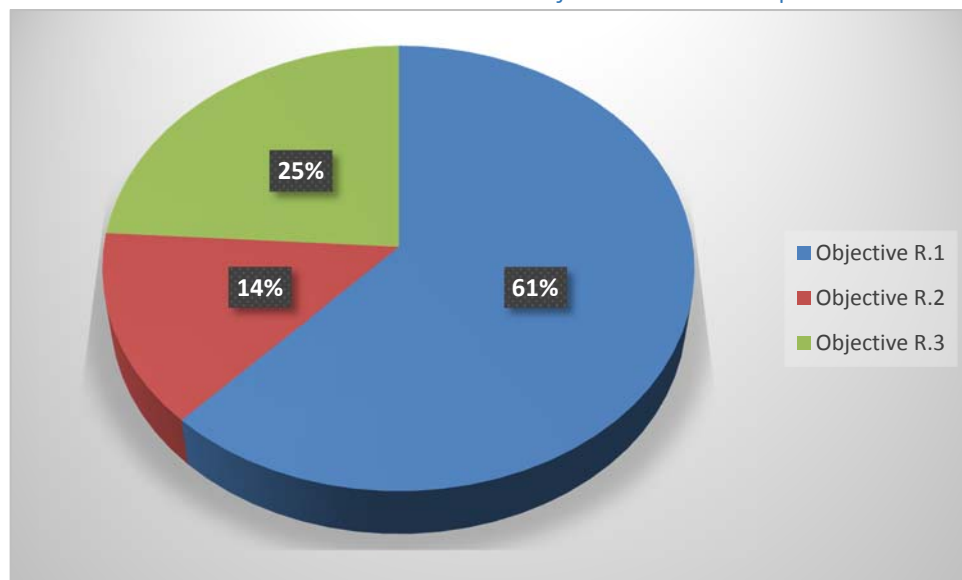
ITU-R objectives	Goal 1: Growth	Goal 2: Inclusiveness	Goal 3: Sustainability	Goal 4: Innovation & partnership
R.1 Meet, in a rational, equitable, efficient, economical and timely way, the ITU membership's requirements for radio-frequency spectrum and satellite orbit resources, while avoiding harmful interference	☑	✓	✓	✓
R.2 Provide for worldwide connectivity and interoperability, improved performance, quality, affordability and timeliness of service and overall system economy in radiocommunications, including through the development of international standards	☑	✓	✓	✓
R.3 Foster the acquisition and sharing of knowledge and know-how on radiocommunications		☑		

¹ Boxes and ticks demonstrate primary and secondary links to goals.

3.2 ITU-R objectives, outcomes and outputs

Objectives	R.1 Meet, in a rational, equitable, efficient, economical and timely way, the ITU membership's requirements for radio-frequency spectrum and satellite-orbit resources, while avoiding harmful interference	R.2 Provide for worldwide connectivity and interoperability, improved performance, quality, affordability and timeliness of service and overall system economy in radiocommunications, including through the development of international standards	R.3 Foster the acquisition and sharing of knowledge and know-how on radiocommunications
Outcomes	<p>R.1-1: Increased number of countries having satellite networks and earth stations recorded in the Master International Frequency Register (MIFR)</p> <p>R.1-2: Increased number of countries having terrestrial frequency assignments recorded in the MIFR</p> <p>R.1-3: Increased percentage of assignments recorded in the MIFR with favourable finding</p> <p>R.1-4: Increased percentage of countries which have completed the transition to digital terrestrial television broadcasting</p> <p>R.1-5: Increased percentage of spectrum assigned to satellite networks which is free from harmful interference</p> <p>R.1-6: Increased percentage of assignments to terrestrial services recorded in the MIFR which are free from harmful interference</p>	<p>R.2-1: Increased mobile-broadband access, including in frequency bands identified for international mobile telecommunications (IMT)</p> <p>R.2-2: Reduced mobile-broadband price basket, as a percentage of gross national income (GNI) per capita</p> <p>R.2-3: Increased number of fixed links and increased amount of traffic handled by the fixed service (Tbit/s)</p> <p>R.2-4: Number of households with digital terrestrial television reception</p> <p>R.2-5: Number of satellite transponders (equivalent 36 MHz) in operation and corresponding capacity (Tbit/s); Number of VSAT terminals; Number of households with satellite television reception</p> <p>R.2-6: Increased number of devices with radionavigation-satellite reception</p> <p>R.2-7: Number of Earth exploration satellites in operation, corresponding quantity and resolution of transmitted images and data volume downloaded (Tbytes)</p>	<p>R.3-1: Increased knowledge and know-how on the Radio Regulations, Rules of Procedures, regional agreements, recommendations and best practices on spectrum use</p> <p>R.3-2: Increased participation in ITU-R activities (including through remote participation), in particular by developing countries</p>
Outputs	<ul style="list-style-type: none"> – Final acts of world radiocommunication conferences, updated Radio Regulations – Final acts of regional radiocommunication conferences, regional agreements – Rules of Procedure adopted by Radio Regulations Board (RRB) – Results of the processing of space notices and other related activities – Results of the processing of terrestrial notices and other related activities – RRB decisions other than the adoption of Rules of Procedure – Improvement of ITU-R software 	<ul style="list-style-type: none"> – Decisions of Radiocommunication Assembly, ITU-R resolutions – ITU-R recommendations, reports (including the CPM report) and handbooks – Advice from the Radiocommunication Advisory Group 	<ul style="list-style-type: none"> – ITU-R publications – Assistance to members, in particular developing countries and LDCs – Liaison/support to development activities – Seminars, workshops and other events
<p>The following outputs of the activities of the ITU governing bodies contribute to the implementation of all the objectives of the Union:</p> <ul style="list-style-type: none"> – Decisions, resolutions, recommendations and other results of the Plenipotentiary Conference – Decisions and resolutions of the Council, as well as results of the Council Working Groups 			

3.3 Allocation of resources to ITU-R objectives and outputs for 2018-2021



R.1 Meet, in a rational, equitable, efficient, economical and timely way, the ITU membership's requirements for radio-frequency spectrum and satellite-orbit resources, while avoiding harmful interference 61%

R.2 Provide for worldwide connectivity and interoperability, improved performance, quality, affordability and timeliness of service and overall system economy in radiocommunications, including through the development of international standards 14%

R.3 Foster the acquisition and sharing of knowledge and know-how on radiocommunications 25%

Planned allocation of resources per Output

	% of total	% of objective
R.1-1 Final acts of world radiocommunication conferences, updated Radio Regulations	5.4%	8.8%
R.1-2 Final acts of regional radiocommunication conferences, regional agreements	0.5%	0.8%
R.1-3 Rules of Procedure adopted by Radio Regulations Board (RRB)	2.0%	3.3%
R.1-4 Results of the processing of space notices and other related activities	24.4%	39.9%
R.1-5 Results of the processing of terrestrial notices and other related activities	12.1%	19.8%
R.1-6 RRB decisions other than the adoption of Rules of Procedure	2.0%	3.3%
R.1-7 Improvement of ITU-R software	12.4%	20.2%
R.2-1 Decisions of Radiocommunication Assembly, ITU-R resolutions	2.4%	17.4%
R.2-2 ITU-R recommendations, reports (including the CPM report) and handbooks	9.1%	65.6%
R.2-3 Advice from the Radiocommunication Advisory Group	1.8%	13.3%
R.3-1 ITU-R publications	12.4%	49.4%
R.3-2 Assistance to members, in particular developing countries and LDCs	3.9%	15.7%
R.3-3 Liaison/support to development activities	2.3%	9.1%
R.3-4 Seminars, workshops and other events	5.5%	22.0%
PP: Decisions, resolutions, recommendations and other results of the Plenipotentiary Conference *	1.5%	1.5%
Council/CWGs: Decisions and resolutions of the Council, as well as results of the Council working groups *	2.2%	2.2%

* Cost of these Outputs is allocated to all the Objectives of the Union.

4 Risk analysis

Moving from strategy to implementation, the following top-level operational risks presented in the Table below have been identified, analysed and evaluated. The Bureaux and each Department will manage all the risks associated with the achievement of the corresponding outcomes.

RISK FOCUS	DESCRIPTION OF RISK	PROBABILITY	IMPACT LEVEL	MITIGATION ACTIONS ²
OPERATIONAL RISK	a) Total or partial loss of integrity of data in the MIFR or in any of the Plans, resulting in inadequate protection of the rights of administrations to use spectrum/orbit resources	Low	Very High	<ul style="list-style-type: none"> - Daily backup of data - Development of high data security program - Ability to restore data/operation within a limited time period
	b) Total or partial loss of operations in the processing of notices, resulting in delays in the recognition of rights of administrations to use spectrum/orbit resources and risks for the corresponding investments.			
	c) Occurrence of harmful interference (e.g. due to lack of observance of the regulatory provisions), resulting in disruptions in the radiocommunication services provided by the membership.	Low	High	<ul style="list-style-type: none"> - Promote capacity building on international regulations, through worldwide and regional seminars, and any other appropriate events - Provide BR assistance in applying the international regulations - Promote regional or sub-regional coordination to resolve interference problems, with BR support - Report, inform and assist in resolving cases of harmful interference in accordance with the instructions to the Director of the Bureau in Resolution 186 (Busan, 2014)
ORGANIZATIONAL RISK	Inadequate facilities for meetings in ITU (e.g. due to lack of meeting rooms and overcrowded meetings schedule), resulting in membership dissatisfaction and delays in work programmes.	Medium	High	<ul style="list-style-type: none"> - Hold more meetings externally - Increase the use of virtual meeting rooms for small meetings

² Risk owners will be appointed by the Director of the Bureau.

5 ITU-R objectives, outcomes and outputs for 2018-2021

ITU-R Sector objectives will be met by achieving the related outcomes, through the implementation of the outputs. ITU-R objectives, in the context of the remit of the Sector, contribute to the overarching goals of the Union. The Radiocommunication Bureau is also contributing to the implementation of the intersectoral objectives, outcomes and outputs (presented in the General Secretariat's Operational Plan).

- 5.1 R.1 Meet, in a rational, equitable, efficient, economical, and timely way, the ITU membership's requirements for radio-frequency spectrum and satellite-orbit resources, while avoiding harmful interference.

Outcome	Outcome Indicator	2013	2014	2015	2016	2020 target	Source
R.1-1: Increased number of countries having satellite networks and earth stations recorded in the Master International Frequency Register (MIFR)	Number of countries having satellite networks recorded in the MIFR	49	51	52	56	70	BR/MIFR
	Number of countries having earth stations recorded in the MIFR	82	82	76	77	120	
R.1-2: Increased number of countries having terrestrial frequency assignments recorded in the MIFR	Number of countries having terrestrial frequency assignments recorded in the MIFR	188	188	190	190	193	BR/MIFR
	Number of countries which registered terrestrial assignments in the MIFR within the last 4-year period	74	78	84	79	90	
R.1-3: Increased percentage of assignments recorded in the MIFR with favourable finding	Subject to Coordination (Terrestrial)	99.86%	99.86%	99.87%	99.88%	99.99%	BR/MIFR
	Subject to a Plan (Terrestrial)	92.66%	92.81%	74.46%	74.32%	75%	
	Others	98.29%	98.34%	98.37%	98.46%	98%	
R.1-4: Increased percentage of countries which have completed the transition to digital terrestrial television broadcasting	Percentage of countries which have completed the transition to digital terrestrial television	3.6%	17%	27%	42%	70%	BR & BDT

Outcome	Outcome Indicator	2013	2014	2015	2016	2020 target	Source
R.1-5: Increased percentage of spectrum assigned to satellite networks which is free from harmful interference	% of spectrum assigned to satellite networks which is free from harmful interference	99.97%	99.97%	99.96%	99.96%	99.99%	BR/MIFR
R.1-6: Increased percentage of assignments to terrestrial services recorded in the MIFR which are free from harmful interference	Percentage of assignments to terrestrial services recorded in the Master Register which are free from harmful interference (based on the number of cases reported to the ITU within the last four years)	99.99%	99.99%	99.99%	99.90%	99.99%	BR/MIFR

Output	Financial resources ³ (in k CHF)			
	2018	2019	2020	2021
R.1-1: Final acts of world radiocommunication conferences, updated Radio Regulations	1,762	9,367	1,009	1,021
R.1-2: Final acts of regional radiocommunication conferences, regional agreements	242	333	308	309
R.1-3: Rules of Procedure adopted by the Radio Regulations Board (RRB)	1,268	1,213	1,238	1,226
R.1-4: Results of the processing of space notices and other related activities	14,641	14,577	15,259	15,388
R.1-5: Results of the processing of terrestrial notices and other related activities	7,475	7,339	7,371	7,383
R.1-6: RRB decisions other than the adoption of Rules of Procedure	1,186	951	1,422	1,435
R.1-7: Improvement of ITU-R software	7,725	7,562	7,453	7,505
Cost allocation to Plenipotentiary Conference and Council activities (PP, Council/CWGs)	2,028	1,229	1,050	1,204
Total for Objective R.1	36,327	42,571	35,110	35,471

³ Estimates, especially for 2018-2019. Allocation of resources for the subsequent years is subject to change upon Senior Management decisions.

5.2 R.2 Provide for worldwide connectivity and interoperability, improved performance, quality, affordability, and timeliness of service and overall system economy in radiocommunications, including through the development of international standards

Outcome	Outcome Indicator ⁴	2012	2013	2014	2015	2016	2020 target	Source
R.2-1: Increased mobile-broadband access, including in frequency bands identified for international mobile telecommunications (IMT)	Number of subscriptions/subscribers (bn)	6.23/ 4.30	6.67/ 4.60	7.01/ 4.83	7.22 /4.98	7.38/ 5.09*	9.20	The State of Broadband 2016: A Report by the Broadband Commission for Digital Development
	% of mobile broadband subscriptions	25%	29%	38%	45%	50%*	83.7%	
R.2-2: Reduced mobile-broadband price basket, as a percentage of gross national income (GNI) per capita	Mobile broadband price basket as percentage of GNI per capita (prepaid, handset 500 MB) World		8.72	5.50	3.88		4.00	ITU, Measuring the Information Society (MIS) Report, Ed. 2016
	<i>Developed Countries</i>		1.02	0.75	0.57			
	<i>Developing Countries</i>		11.6	7.2	5.1			
	<i>Least Developed Countries</i>		30.3	17.0	11.4			
	Number of countries with a price basket below 5%	81	101	117	135		193	
R.2-3: Increased number of fixed links and increased amount of traffic handled by the fixed service (Tbit/s)	Number of fixed links			n/a	n/a	n/a	n/a	To be obtained via BDT/ICT Survey
	Total capacity (in Tbps)			n/a	n/a	n/a	n/a	To be obtained via BDT/ICT Survey
R.2-4: Number of households with digital terrestrial television reception	Number of households with DTT (millions)	130.1	164.7	203.3	252.0		453	Digital TV World Databook report, June 2015; Digital TV Research Ltd Databook report
	<i>Number of households with ATT (millions)</i>	419.5	364.6	319.8	261.9			

⁴ "n/a" specifies that indicator values are not yet available.

* Estimates.

Outcome	Outcome Indicator ⁴	2012	2013	2014	2015	2016	2020 target	Source
	Total number of households DTT + ATT (millions)	549.6	529.3	514.1	513.9			
	% of households with DTT	6.8%	8.5%	10.3%	12.7%		22.7%	
	% of households with ATT	21.8%	18.7%	16.3%	13.2%			
	% of households with Terrestrial TV	28.6%	27.2%	26.6%	25.8%			
R.2-5: Number of satellite transponders (equivalent 36 MHz) in operation and corresponding capacity (Tbit/s); Number of VSAT terminals; Number of households with satellite television reception	Number of satellite transponders (equivalent 36 MHz) in operation		15878	15997	17953	19772	n/a	Euroconsult (http://www.euroconsult-ec.com)
	Corresponding capacity (in Tbit/s)		0.999	1.095	1.269	1.491	n/a	Euroconsult (http://www.euroconsult-ec.com)
	Number of VSATs (millions)		3.480	3.786	3.891	3.838	n/a	Global VSAT Forum (https://gvf.org)
	Number of DTH (millions)	319.3	337.3	359.2	396.3		439	Digital TV World Databook report, June 2015; Digital TV Research Ltd
R.2-6: Increased number of devices with radionavigation-satellite reception	Number of operational GNSS constellations/satellites	2/48	2/48	2/48	4/75	5/90	6/144	BR/MIFR
	Number of devices with GNSS embedded Rx (billions)		2.9	3.6	4.5*	5.4*	8	European GNSS Agency: GNSS Report 2015 (https://www.gsa.europa.eu)
R.2-7: Number of Earth exploration satellites in operation, corresponding quantity and resolution of transmitted images and data volume downloaded (Tbytes)	Number of ERS satellites			180	215	219	440	BR/MIFR
	Quantity of transmitted images (million)	55	60	62	68	71	n/a	Various COPUOS stakeholders
	Size of downloaded images (Terabytes)	18,000	22,000	27,000	35,000	37,000	n/a	Various COPUOS stakeholders

* Estimates.

Output	Financial resources ⁵ (in k CHF)			
	2018	2019	2020	2021
R.2-1 Decisions of the Radiocommunication Assembly, ITU-R resolutions	1,012	2,142	1,370	1,387
R.2-2 ITU-R recommendations, reports (including the CPM report) and handbooks	5,022	6,060	5,517	5,660
R.2-3 Advice from the Radiocommunication Advisory Group	1,242	1,270	995	1,006
Cost allocation to Plenipotentiary Conference and Council activities (PP, Council/CWGs)	433	283	243	283
Total for Objective R.2	7,709	9,755	8,125	8,336

5.3 R.3 Foster the acquisition and sharing of knowledge and know-how on radiocommunications

Outcome	Outcome Indicator	2014	2015	2016	2020 target	Source
R.3-1: Increased knowledge and know-how on the Radio Regulations, Rules of Procedures, regional agreements, recommendations and best practices on spectrum use	Number of ITU-R free online publication downloads (millions) ⁶	0.9	0.9	1.0	4.0	ITU Events Registration Database
	Number of capacity-building events organized/supported by BR (presence & virtual)	30	25	38	36	
	Number of participants on capacity building events organized/supported by ITU/BR (intra WRC period)	1,261	1,518	737	2,000	
R.3-2: Increased participation in ITU-R activities (including through remote participation), in particular by developing countries	Number of technical assistances/events with BR participation	78	93	100	100	ITU Events Registration Database
	Number of countries receiving BR technical assistance/events	57	78	61	80	ITU Events Registration Database
	Number of participants/events in ITU-R conferences, assemblies and Study Group-related meetings (presence & virtual)	6,385/52	8972/38	6042/48		ITU Events Registration Database
	Number of countries participating in ITU-R seminars and workshops, SG and WP meetings and events (presence & virtual)	103	161	130	193	ITU Events Registration Database

⁵ Estimates, especially for 2018-2019. Allocation of resources for the subsequent years is subject to change upon Senior Management decisions.

⁶ This number is appropriate for comparison purposes only, as the download of a single document/publication might count as several downloads.

Output	Financial resources ⁷ (in k CHF)			
	2018	2019	2020	2021
R.3-1 ITU-R publications	7,737	5,985	8,328	8,283
R.3-2 Assistance to members, in particular developing countries and LDCs	2,565	2,392	2,336	2,353
R.3-3 Liaison/support to development activities	1,484	1,554	1,281	1,290
R.3-4 Seminars, workshops and other events	3,552	3,420	3,282	3,290
Cost allocation to Plenipotentiary Conference and Council activities (PP, Council/CWGs)	911	398	470	535
Total for Objective R.3	16,249	13,749	15,697	15,751

⁷ Estimates, especially for 2018-2019. Allocation of resources for the subsequent years is subject to change upon Senior Management decisions.

6 Implementation of the Operational Plan

The outputs defined in this Operational Plan will be coordinated by the responsible Departments of the Radiocommunication Bureau, implementing the activities of the internal work plans of the Bureau and each department; the regional offices will participate in the implementation of this operational plan. The administrative support services are delivered partly by the Radiocommunication Bureau and principally by the General Secretariat, subject to predefined and agreed annual Service Level Agreements (for the provision of internal services) between the two parties. The Support Services delivered by the General Secretariat are described in the General Secretariat Operational Plan. The delivery of the outputs and support services is planned, monitored and evaluated by ITU management based on the objectives of the ITU as outlined in the strategic plan. The annual report on the implementation of the strategic plan will emphasize on the progress made towards achieving these objectives and the overall goals. With regard to risk management, in addition to the risks analysis included in this Operational Plan for periodical review by senior management, each Bureau/Department will continue systematic identification, assessment and management of risks associated with the delivery of the respective outputs and support services, based on a multi-level risk management approach.

Annex 1: Allocation of resources to intersectoral objectives and ITU Strategic Goals

CHF 000

ITU Strategic Objectives for 2018		Total Cost	Cost of BR/Direct Cost	Cost Reallocated from GS	Cost allocated by TSB/BDT
R1	ITU-R Objective 1	36,329	19,354	16,953	22
R2	ITU-R Objective 2	7,709	4,709	2,995	5
R3	ITU-R Objective 3	16,249	9,949	6,290	10
Total Cost		60,287	34,012	26,238	37

Goal 1 Growth	Goal 2 Inclusiveness	Goal 3 Sustainability	Goal 4 Innovation & partnership
50%	30%	10%	10%
50%	30%	10%	10%
0%	100%	0%	0%

Goal 1 Growth	Goal 2 Inclusiveness	Goal 3 Sustainability	Goal 4 Innovation & partnership
18,165	10,899	3,633	3,633
3,855	2,313	771	771
0	16,249	0	0
22,020	29,461	4,404	4,404
36.5%	48.9%	7.3%	7.3%

ITU Strategic Objectives for 2019		Total Cost	Cost of BR/Direct Cost	Cost Reallocated from GS	Cost allocated by TSB/BDT
R1	ITU-R Objective 1	42,570	25,521	17,024	26
R2	ITU-R Objective 2	9,755	6,712	3,038	6
R3	ITU-R Objective 3	13,749	7,779	5,962	8
Total Cost		66,074	40,012	26,024	40

Goal 1 Growth	Goal 2 Inclusiveness	Goal 3 Sustainability	Goal 4 Innovation & partnership
50%	30%	10%	10%
50%	30%	10%	10%
0%	100%	0%	0%

Goal 1 Growth	Goal 2 Inclusiveness	Goal 3 Sustainability	Goal 4 Innovation & partnership
21,285	12,771	4,257	4,257
4,877	2,926	975	975
0	13,749	0	
26,162	29,446	5,232	5,232
39.6%	44.6%	7.9%	7.9%