



Семинар для стран СНГ *“Тенденции развития радиосвязи по результатам ВКР-15 и АР-15”*
Ереван, Армения, 27 – 29 июня 2016

Decisions of RA-15 and WRC-15 with Special Relevance to Developing Countries

Решения АР-15 и ВКР-15 в особенности касающиеся развивающихся стран

Иштван Божоки

Бюро развития

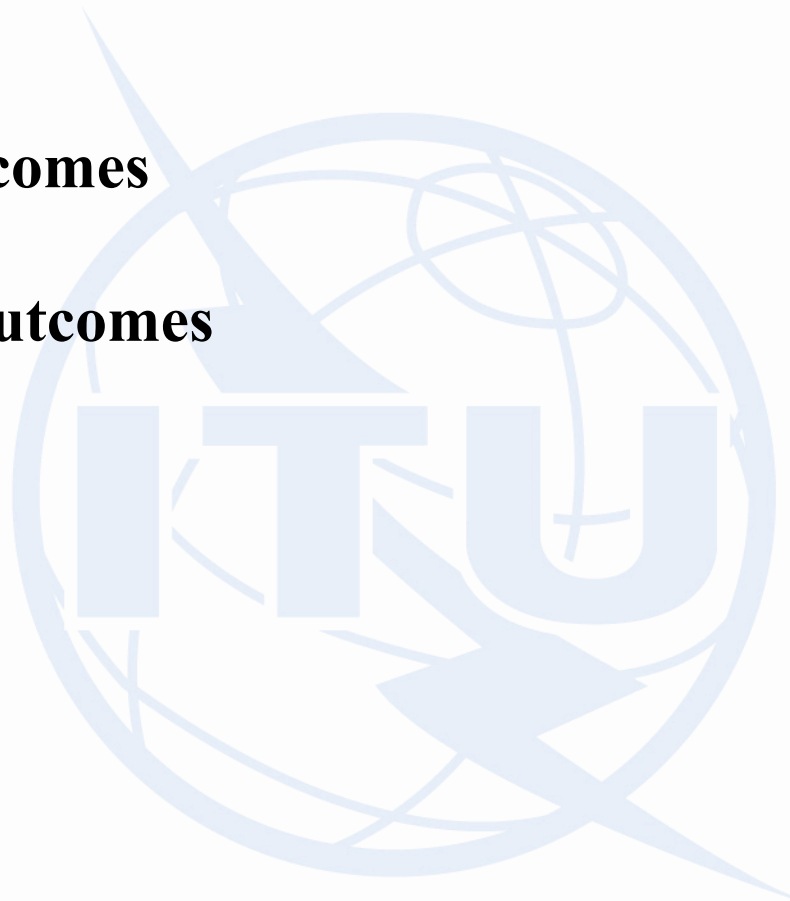
Международный Союз Электросвязи



Content



- **RA-15 outcomes**
- **WRC-15 outcomes**





RA-15 Outcomes

- **6** new, **30** mod and **5** suppressed Resolutions.
- Several Resolutions and Recommendations agreed during the RA-15 which are relevant to the future work of the BDT.



RA-15 Resolutions/1



The Resolutions and Recommendations may be categorized as follows:

- **Collaboration with BR:**

- *Revision of Resolution ITU-R 7-2: Mutual areas of interest of BDT and BR include BDT SG1 Res.9, BDT Questions (Q 2/1, Q 5/1, Q 8/1, Q 5/2, Q 6/2, Q 7/2) and Telecom infrastructure sharing and Cognitive Radio Systems (CRS) assisting Licensed Shared Access (LSA) or Dynamic Spectrum Access (DSA)*
- **The cooperation of BR with BDT and the ITU regional and area offices** has been highlighted in the [report from Director of the BR](#) to the RA-15 with special mention of activities including GSR, ICT surveys and ICT eye and SMTP. It was further noted during plenary that the role of academia has been considered most relevant in SG3 and SG7 of ITU-R

- **Bridging Digital Divide:** *New Resolution ITU-R 69: Development and deployment of international public telecommunications via satellite in developing countries*



RA-15 Resolutions/2



- **Spectrum Management:**
 - Revision of Resolution ITU-R 40-3 - Worldwide databases of terrain height and surface features
 - Revision of Res ITU-R 11-4: Further development of the spectrum management system for developing countries
 - Revision of Res. ITU-R 22-3: Improvement of national radio spectrum management practices and techniques
- **Wireless Broadband:** Res. ITU-R 56-1: Naming for International Mobile Telecommunications (IMT)
- **Accessibility for persons with disabilities:** New Resolution ITU-R 67: Telecommunication/ICT accessibility for persons with disabilities and persons with specific needs
- **Emergency Telecommunication, Disaster response and relief**
 - Suppression of Res. ITU-R 53-1: The use of radio-communications in disaster response and relief
 - Revision of Res. ITU-R 55-1: ITU studies of disaster prediction, detection, mitigation and relief
- **Climate change and green ICTs:** Revision to Resolution ITU-R 60 - Reduction of energy consumption for environmental protection and mitigating climate change by use of ICT/radiocommunication technologies and systems



RA-15 Resolutions/3



- **Other resolutions and recommendations relevant to work of BDT but do not explicitly require involvement of BDT**
 - New Resolution ITU-R 66: Studies related to wireless systems and applications for the development of the Internet of Things (IoT)
 - Revision of Recommendation ITU-R M.1036-4: Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications (IMT) in the bands identified for IMT in the Radio Regulations (RR)
 - New Recommendation ITU-R M.[BSMS700] - Specific unwanted emission limit of IMT mobile stations operating in the frequency band 694-790 MHz to facilitate protection of existing services in Region 1 in the frequency band 470-694 MHz



WRC-15 Outcomes



- WRC-15 addressed over 40 topics related to frequency allocation and frequency sharing for the efficient use of spectrum and orbital resources.
- The outcomes ensure high quality radiocommunication services for mobile and satellite communications, maritime and aeronautical transport, air and road safety as well as for scientific purposes related to the environment, meteorology and climatology, disaster prediction, mitigation and relief.
- Some Resolutions request actions also from ITU-D/ Director of BDT.
- There are Resolutions which can have special interests of the developing countries



WRC-15 Resolutions which request actions from the Director of BDT or ITU-D



Interference in HF bands



- **Resolution 207:** Measures to address unauthorized use of and interference to frequencies in the bands allocated to the maritime mobile service and to the aeronautical mobile (R) service
- *resolves to invite ITU-R and ITU-D, as appropriate* to increase regional awareness of appropriate practices in order to help mitigate interference in the HF bands, especially on distress and safety channels



IMT below 1 GHz



- **Resolution 224:** Frequency bands for the terrestrial component of International Mobile Telecommunications below 1 GHz
- *invites the Director of the Telecommunication Development Bureau* to draw the attention of the ITU Telecommunication Development Sector to this resolution



Emergency and disaster



- **Resolution 647:** Radiocommunication aspects, including spectrum management guidelines, for early warning, disaster prediction, detection, mitigation and relief operations relating to emergencies and disasters
- *invites the Director of the Telecommunication Standardization Bureau and the*
- *Director of the Telecommunication Development Bureau to collaborate closely with the Director of BR to ensure that a consistent and coherent approach*



694-790 MHz in Region 1 - mobile



- **Resolution 760 (COM4/4)**: Provisions relating to the use of the frequency band 694-790 MHz in Region 1 by the mobile, except aeronautical mobile, service and by other services
- *invites the Director of the Radiocommunication Bureau to work, in cooperation with the Director of the Telecommunication Development Bureau, to bring assistance to developing countries wishing to implement the new mobile allocation in order to help these administrations to determine the modifications of the GE06 entries according to their needs*



Spectrum use in 470-960 MHz



- **Resolution 235 (COM4/6)**: Review of the spectrum use of the frequency band 470-960 MHz in Region 1
- *further invites ITU-R* to ensure intersectoral collaboration with the ITU Telecommunication Development Sector (ITU-D) in the implementation of this resolution.



Time scale



- **Resolution 655 (COM5/1):** Definition of time scale and dissemination of time signals via radiocommunication systems
- *invites the Director of the Telecommunication Development Bureau*
- to assist the participation of developing countries in meetings, within approved budgetary resources



WRC-15 Recommendation and Resolutions
which can have special interests of the
developing countries
(list)



Resolutions which can have special interests of the developing countries/1



*RECOMMENDATION 207 (REV.WRC-15):
Future IMT systems*

RESOLUTION 5 (REV.WRC-15)

Technical cooperation with the developing countries in the study of propagation in tropical and similar areas

RESOLUTION 12 (WRC-15)

Assistance and support to Palestine

RESOLUTION 49 (REV.WRC 15)

Administrative due diligence applicable to some satellite radiocommunication services

RESOLUTION 55 (REV.WRC 15)

Electronic submission of notice forms for satellite networks, earth stations and radio astronomy stations

RESOLUTION 81 (REV.WRC-15)

Evaluation of the administrative due diligence procedure for satellite networks

RESOLUTION 144 (REV.WRC-15)

Special requirements of geographically small or narrow countries operating earth stations in the fixed-satellite service in the band 13.75-14 GHz

RESOLUTION 207 (REV.WRC-15)

Measures to address unauthorized use of and interference to frequencies in the bands allocated to the maritime mobile service and to the aeronautical mobile (R) service

RESOLUTION 212 (REV.WRC 15)

Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz



Resolutions which can have special interests of the developing countries/2



RESOLUTION 223 (REV.WRC 15)

Additional frequency bands identified for International Mobile Telecommunications

RESOLUTION 224 (REV.WRC 15)

Frequency bands for the terrestrial component of International Mobile Telecommunications below 1 GHz

RESOLUTION 535 (REV.WRC-15)

Information needed for the application of Article 12 of the Radio Regulations

RESOLUTION 552 (REV.WRC 15)

Long-term access to and development in the frequency band 21.4-22 GHz in Regions 1 and 3

RESOLUTION 553 (REV.WRC 15)

Additional regulatory measures for broadcasting-satellite networks in the frequency band and 21.4-22 GHz in Regions 1 and 3 for the enhancement of equitable access to this frequency band

RESOLUTION 555 (REV.WRC 15)

Additional regulatory provisions for broadcasting-satellite service networks in the frequency band 21.4-22 GHz in Regions 1 and 3 for the enhancement of equitable access to this frequency band

RESOLUTION 646 (REV.WRC 15)

Public protection and disaster relief

RESOLUTION 647 (REV.WRC 15)

Radiocommunication aspects, including spectrum management guidelines, for early warning, disaster prediction, detection, mitigation and relief operations relating to emergencies and disasters

RESOLUTION 906 (REV.WRC-15)

Electronic submission of notices for terrestrial services to the Radiocommunication Bureau and exchange of data between administrations



Resolutions which can have special interests of the developing countries/3



RESOLUTION 760 (COM4/4) (WRC 15)

Provisions relating to the use of the frequency band 694-790 MHz in Region 1 by the mobile, except aeronautical mobile, service and by other services

RESOLUTION 235 (COM4/6) (WRC-15)

Review of the spectrum use of the frequency band 470-960 MHz in Region 1

RESOLUTION 655 (COM5/1) (WRC-15)

Definition of time scale and dissemination of time signals via radiocommunication systems

RESOLUTION 810 (COM6/2) (WRC 15)

Preliminary agenda for the 2023 World Radiocommunication Conference

RESOLUTION 236 (COM6/12) (WRC-15)

Railway radiocommunication systems between train and trackside

RESOLUTION 809 (COM6/16) (WRC 15)

Agenda for the 2019 World Radiocommunication Conference

RESOLUTION 238 (COM6/20) (WRC 15)

Studies on frequency-related matters for International Mobile Telecommunications identification including possible additional allocations to the mobile services on a primary basis in portion(s) of the frequency range between 24.25 and 86 GHz for the future development of International Mobile Telecommunications for 2020 and beyond

RESOLUTION 160 (COM6/21) (WRC 15)

Facilitating access to broadband applications delivered by high-altitude platform stations



DSO Database

<https://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Pages/DSO/Default.aspx>



Thank you - Большое спасибо