

**3rd ITU INTER-REGIONAL WORKSHOP
ON WRC-15 PREPARATION
(Geneva, 1 – 3 September 2015)**

**Panel Sessions 7 & 8
WRC-15 Agenda items
7 & 9.1 issues (9.1.2,
9.1.3, 9.1.5, 9.1.8)**

Khalid Al Awadhi

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PREPARATION**

**GENEVA, SWITZERLAND
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Informing the Bureau of a suspension under RR No. 11.49 beyond six months

➤ Method A1: NOC

➤ OR

- Method A2: modification to RR No. 11.49 to provide a regulatory mechanism to clarify the issue, with two options:
- Option A: Day-for-day reduction in the suspension period after 6 months, or
 - Option B: Day-for-day reduction in the suspension period after 6 months up to 12 months* followed by two times reduction thereafter

* *The 12 months period can be changed*

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method A1: NOC					Support	
Method A2: Option A Day-for-day reduction	Support	Support	Support	Support		Support
Method A2: Option B Day-for-day reduction and then two times reduction	Oppose					

Publication of information on bringing into use of satellite networks at the ITU website

Clarifying the BR's action through one of the following:

- **Method B1-Option A:** implement amendments to RR Nos. 11.44B, 11.49 and 11.49.1
- **Method B1-Option B:** Same as previous + stating that BR publish the info as received
- **Method B2-Option A:** implement amendments to RR Nos. 11.44B, 11.49 and 11.49.1, availing the BIU info at ITU-R website, and including the information in a Special Section (Res. 49)
- **Method B2-Option B:** Same as previous + stating that BR publish the info as received
- **Method B3:** Identify the BR actions required, and include in minutes of WRC-15

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method B1 Option A				Support	Support	
Method B1 Option B	Support					
Method B2 Option A						
Method B2 Option B						
Method B3		Support				
Remarks					Additional Measures	Necessary to MOD Art. 11

Review or possible cancellation of the advance publication mechanism for satellite networks subject to coordination under section II of Article 9 of the Radio Regulations

- Method C1: NOC
- OR
- Method C2: Cancellation of the current API mechanism
 - Option A: suppress the need for API
 - Option B: Automatically generate API by BR as soon as CR/C received
- OR
- Method C3: Review of API mechanism
 - Option A: Reduce the two-year validity period for an API (without CR/C)
 - Option B: Suppress the minimum period of six months between API and CR/C

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method C1 - NOC						Oppose
Method C2 Option A						
Method C2 Option B				Support		
Method C3 Option A						
Method C3 Option B		Support	Support		Support	Support
Remarks						Consideration for other solutions

General use of modern electronic means of communications in coordination and notification procedures

- **Method D:** Conclusion towards amendments to Resolutions 907 (WRC-12) to include the use of modern electronic means, and to Resolution 908 (WRC-12) to expand its scope to all kind of satellite network filings and to request the BR to analyze whether it is possible to have a single consolidated interface for both the submission of satellite network filings and the related correspondence



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method D	Support	Support	Support	Support	Support	Support

Failure of a satellite during the bringing into use period

Different possible conclusions:

- **Method E1**: adding a footnote to RR No. 11.44B: if failure during BIU, frequency assignments brought into use
- **Method E2**: Same as previous + adding a footnote to RR No. 11.49: if failure during BBIU, frequency assignments brought into use
- **Method E3**: NOC
- **Method E4**: additional provision RR No. 11.44.3 allows to extend for 3 years the date of bringing into use from the date of the failure
- **Method E5**: consideration by the RRB on a case-by-case basis, based on BR report
- **Method E6**: If no decision from BR within three months: BR develop report and submit to the RRB

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method E1	Oppose					
Method E2	Oppose					
Method E3 - NOC	Support		Support	Support	Support	
Method E4	Oppose					Support
Method E5		Support				
Method E6						

Modifications to RR Appendix 30B in relation to the suspension of use of a frequency assignment recorded in the MIFR

- Conclusion towards aligning provisions of App 30B with Article 11, APP 30 & 30A, by extending the period allowed for suspension of the use of a frequency assignment to space station to three (3) years



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Single Method	Support	Support	Support	Support	Support	Support

Clarification of bringing into use information provided under RR Nos. 11.44/11.44B

- **Conclusion towards new regulatory provisions:**
 - enables BR to seek clarification from the notifying administrations under RR Nos. 11.44 and 11.44B
 - allow BR to validate the information provided under RR No. 11.44
 - for GSO station: ensure information provided under RR No. 11.44B correspond to the deployed space station with transmission capability



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method G	Support	Support	Support	Support	Support	Support

Using one space station to bring frequency assignments at different orbital locations into use within a short period of time

Different possible conclusions:

- **Method H1:** NOC + enquire from Admin about BIU and make info available:
 - a) Previous orbital position of satellite
 - b) satellite network BIU'ed by this satellite at previous location
 - c) The reason for its relocation.
- **Option A:** include in the minutes of the Plenary of WRC-15
- **Option B:** new WRC Resolution detailing the above
- **Method H2:** NOC

Using one space station to bring frequency assignments at different orbital locations into use within a short period of time

Different possible conclusions:

- **Method H3:** extend the period of BIU from 90 days to 12 months + use space monitoring facilities to verify
- **Method H4:** reducing the time available for suspension to the cumulative number of days that the satellite network has been in use, up to a limit of three years
- **Method H5:** Administrations include the following information as part of confirmation of the BIU of frequency assignments to a satellite network:
 - a) Previous orbital position of satellite
 - b) the date the satellite left the previous orbital position
 - c) the name of the ITU filing(s) used by the in-orbit satellite at the previous orbital position.

Using one space station to bring frequency assignments at different orbital locations into use within a short period of time

Different possible conclusions:

- **Method H6:** A new resolution based on:
 - Indicate if newly-launched satellite or in-orbit
 - Explanation of abusive “satellite hopping”
 - If in-orbit satellite: BR request clarifications
 - BR accepts the BIU or refers to RRB
 - RRB makes the decision

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method H1 Option A		Support				
Method H1 Option B						
Method H2 - NOC						
Method H3						
Method H4						
Method H5						
Method H6			Support			
Remarks						No Additional restrictions

Possible method to mitigate excessive satellite network filings issue

Possible conclusions for excessive CR/C filing issue:

- **Method I1.1:** Initial notification and due diligence information without Bureau examination
- **Method I1.2:** Initial notification and due diligence information with Bureau examination
- **Method I1.3:** Optional submission to initial notification information
- **Method I1.4:** NOC

Possible conclusions for excessive API filing issue:

- **Method I2.1:** NOC
- **Method I2.2:** Suppression of the current API mechanism
- **Method I2.3:** removal of six months requirement between API and CR/C

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Possible conclusions for excessive CR/C filing issue						
Method I1.1						
Method I1.2						
Method I1.3						
Method I1.4 – NOC	Support	Support		Support		Support
Possible conclusions for excessive API filing issue:						
Method I2.1 – NOC						Oppose
Method I2.2				Support		
Method I2.3		Support	Support			Support

Removal of the link between the date of receipt of the notification information and the date of bringing into use in RR No. 11.44B

- **Method J1:** Conclusion towards eliminating from RR No. 11.44B the only instance where the notification information for a frequency assignment to a space station in the geostationary-satellite orbit is not in conformity with RR No. 11.44B because of the requirement to confirm the notified date of BIU within 120 days of this date

OR

- **Method J2: NOC**



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method J1		Support	Support	Support		Support
Method J2 – NOC						

Addition of a regulatory provision in RR Article 11 for the case of launch failure

- **Method K1:** Conclusion towards An additional provision of RR No. 11.XX to regulate any launch failure of a satellite that such failure makes the satellite unable to start BIU or BBIU of a notified frequency assignment
- **Method K2:** An alteration of this previous regulation is to make it on a case-by-case basis by the RRB

OR

- **Method K3:** NOC

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method K1						
Method K2	Support					
Method K3 – NOC		Support	Support	Support		
Remarks						Support the extension of time-limit

Modification of certain provisions of Article 4 of RR Appendices 30 and 30A for Regions 1 and 3 namely replacement of tacit agreement with explicit agreement or alignment of those provisions of RR Appendices 30 and 30A for Regions 1 and 3 with those of Appendix 30B

- **Method L1:** Modify the corresponding provisions of RR Appendices 30 and 30A in such a manner that the notion of tacit agreement be replaced by explicit agreement.

OR

- **Method L2:** Harmonization of the provisions in Article 4 of both RR Appendices 30 and 30A with the corresponding provisions of Article 6 of Appendix 30B

OR

- **Method L3:** NOC

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Method L1			Support			
Method L2		Support				
Method L3 – NOC				Support		
Remarks						Support studies

Studies on possible reduction of the coordination arc and technical criteria used in application of No. 9.41 in respect of coordination under No. 9.7

Proposed Conclusions on Resolves 1 (technical criteria)

➤ Option 1A

- Retain RR Nos. 9.7, 9.41 and 11.32A essentially unchanged
- Change trigger criteria from $\Delta T/T$ to $C/I=C/N + X$ dB, where X is less than 12.2 dB (the value corresponding to 6% $\Delta T/T$)
- RR No. 11.32A would use the same C/I criteria as above

➤ Option 1B

- NOC to current RR App. 5 identification of coordination requirements
- Change threshold levels for application of RR No. **9.41** for some frequency bands
- Replace C/I in RR No. **11.32A** with uplink/downlink PFD masks for some frequency bands

➤ Option 1C

- Same as Option 1B, with PFD thresholds outside the Coordination Arc

➤ Option 1D: NOC

Studies on possible reduction of the coordination arc and technical criteria used in application of No. 9.41 in respect of coordination under No. 9.7

Proposed Conclusions on Resolves 2 (Coordination Arc)

- **Option 2A:** Reduce coordination arc as:
 - 6/4 GHz band $\pm 8^\circ$ reduces to $\pm 6^\circ$
 - 14/10/11/12 GHz band $\pm 7^\circ$ reduces to $\pm 5^\circ$
 - 30/20 GHz band NOC to $\pm 8^\circ$
- **Option 2B:** Reduce coordination arc as:
 - 6/4 GHz band $\pm 8^\circ$ reduces to $\pm 6^\circ$
 - 14/10/11/12 GHz band $\pm 7^\circ$ reduces to $\pm 5^\circ$
 - 30/20 GHz band $\pm 8^\circ$ reduces to $\pm 6^\circ$
- **Option 2C:** NOC

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Resolves 1 (technical criteria)						
Option 1A						Support
Option 1B			Support			
Option 1C						
Option 1D – NOC		Support				
Resolves 2 (Coordination Arc)						
Option 2A			Support	Support	Support	
Option 2B		Support				Support
Option 2C – NOC						
Remarks						Alteration

Use of satellite orbital positions and associated frequency spectrum to deliver international public telecommunication services in developing countries

Two possible conclusions:

- **Option A: NOC**
- **Option B: Revise Resolution 11 (WRC-12) in order to continue with the studies as it may be required for resolves 2 of Resolution 11 (WRC-12) to continue even after WRC-15**



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Option A - NOC	Support	Support				
Option B			Support			
Remarks		Supress Res 11 (WRC-12)		Alteration		

Consideration of technical and regulatory actions in order to support existing and future operation of fixed-satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1

- Conclusion towards modification to Resolution 154 (WRC-12), calling for relevant administrations in Region 1 to use special care in the coordination, assignment, and management of frequencies taking into consideration the potential impact on the FSS earth stations used for satellite communications related to safe operation of aircraft and reliable distribution of meteorological information in the frequency band 3 400-4 200 MHz.
- Consideration may be given to modifying RR No. 5.430A to include a reference to the modified Resolution

Regional Positions



Method	APT	ASMG	ATU	CEPT	CITEL	RCC
Single conclusion		Support	Support			Support
Remarks				Alteration		

Regulatory aspects for nanosatellites and picosatellites

- The ITU-R Study Groups have concluded that additional efforts should be undertaken by the BR, administrations, and others to help increase knowledge and raise awareness about the applicable regulatory procedures for satellite networks among those entities involved in development and launch of nanosatellites and picosatellites.
- Another relevant response to this issue could be to consider modifications to the regulatory procedures for notifying satellite networks to accommodate nanosatellite and picosatellite missions

Regional Positions



	APT	ASMG	ATU	CEPT	CITEL	RCC
views	Retention of Res 757 (Rev.WRC-12) with Modifications	new agenda item, but no additional complications	Simplified regulatory procedures	propose a new ITU-R Resolution	NOC + no need for new Agenda Item	Can have new agenda item, but no additional complications