## Conference Preparatory Meeting for WRC-15 Geneva, 23 March - 2 April 2015



#### INTERNATIONAL TELECOMMUNICATION UNION

#### **PLENARY MEETING**

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### Working Group 5

### PROPOSED MODIFICATIONS TO THE DRAFT CPM REPORT

# CHAPTER 5, AGENDA ITEM 7, ISSUE K

#### AGENDA ITEM 7

to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev. WRC-07) to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;

Resolution **86** (**Rev.WRC-07**): Implementation of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference

# 5/7/11 Issue K – Addition of a regulatory provision in RR Article 11 for the case of launch failure

### 5/7/11.1 Executive summary

WRC-03 and WRC-12 introduced regulatory provisions to address launch failure under RR Appendices **30** and **30A**, as well as under RR Appendix **30B**, respectively. These regulatory provisions only cover a launch failure that such failure makes a space station unable to enter the stage of BIU of a planned band. The provisions adopted by WRC-03 and WRC-12 did not cover the situation of BBIU after a suspension.

Furthermore, RR does not currently contain specific regulations regarding any launch failure that makes a space station unable to BIU or BBIU non-planned frequency assignments.

### 5/7/11.2 Background

In order to comply with the RR Nos. **11.44B** and **11.49**, the frequency assignment shall be brought (and brought back) into use no later than its regulatory time limit. For the Bureau and Administrations, the BIU and BBIU means deployment of a space station in GSO orbit at the notified orbital position for a continous period of ninety days.

The case of launch failure before entering the BIU or BBIU period, where such failure renders the satellite technically incapable of transmitting or receiving in a given frequency band at the intended orbital position, is categorized as an extraordinary event as such a situation happens accidentally. If this event happened before entering the BIU or BBIU period, the remaining time left before the end of the 7-year regulatory period or the end of the suspension period may not be sufficient to acquire an in-orbit satellite with the proper characteristics or build a new satellite to BIU or BBIU the frequency assignment.

It should be noted that prior to WRC-03, there were provisions in the regulations for a potential 2-year extension of the regulatory period of 5 years under certain circumstances including but not limited to launch failure. These provisions were suppressed by WRC-03 and replaced by a flat 7-year regulatory period that was supposed to provide some margin for satellite failure.

It should be considered that the Radio Regulations Board released a draft Report (Document RRB14-3/INFO/1(Rev.1) and Document RRB15-1/1) to WRC-15 on Resolution **80** (Rev.WRC-07), which is provided for the consideration and comments from administrations, including the situation of "force majeure". It is reported that, periodically, the Board received requests from administrations to extend the regulatory deadline for bringing the frequency assignments associated with a satellite network into use because of force majeure. WRC-03 and WRC-12 addressed the issue of force majeure in the planned bands by adopting changes to Appendices **30**, **30A**, and **30B** that define the circumstances which must exist, the action required by the administration, and the deadlines. WRC-15 may wish to consider adopting similar conditions for the non-planned bands.

# 5/7/11.3 Summary of technical and operational studies, including a list of relevant ITU-R Recommendations

The satellite network operator may have a limited possibility to replace satellite in case of a launch failure that occurs just before the satellite was to enter the BIU or BBIU period. Usually, the options include relocating a satellite from its existing fleet, purchasing or leasing a satellite already in orbit, or procuring and launching a new satellite.

However, the current situation that the notifying administration and the satellite network operator await a WRC decision on the status of the frequency assignments not BIU'd or BBIU'd due to a launch failure, has not been mentioned explicitly in the RR. Therefore, it may be important to have an RR provision that would define a clear applicable approach in a case of a launch failure that occurs just before the satellite was to enter the period of BIU or BBIU.

#### 5/7/11.4 Analysis of the results of studies

In view of the summary of technical and operational studies above, one possible way to address this issue is to allow a frequency assignment to be considered as having been brought into use in case of a frequency assignment that could not be brought into use due to a launch failure. Another view is to treat such launch failure on case-by-case basis at the RRB. The third possibility is to make no change (NOC) to the Radio Regulations. Studies to date have not addressed all potential issues including those relating to application of launch failure provisions to non-geostationary orbit systems, whether launch failure provisions should apply in case of BBIU, or whether the provisions should be aligned with those already existing in RR Appendices 30, 30A and 30B.

#### 5/7/11.5 Methods to satisfy issue K

#### 5/7/11.5.1 Method K1

This method introduces 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.

#### 5/7/11.5.2 Method K2

This method introduces an additional provision of RR No. 11.XX to regulate any launch failure on a case-by-case basis that such failure makes the satellite unable to start BIU or BBIU of a notified frequency assignment.

#### 5/7/11.5.3 Method K3

NOC to the RR as the current practices are sufficient to address this issue and studies to date have not addressed all potential issues.

#### 5/7/11.6 Regulatory and procedural considerations for issue K

#### 5/7/11.6.1 Method K1

#### **ARTICLE 11**

# Notification and recording of frequency assignments<sup>1, 2, 3, 4, 5, 6, 7, 7bis</sup> (WRC-12)

# Section II – Examination of notices and recording of frequency assignments in the Master Register

#### **ADD**

- **11.XX** The regulatory time-limit for bringing frequency assignments into use or back into use may be extended once by not more than three years from the date of a launch failure in the following case:
- the destruction of the satellite launched intended to bring or bring back the assignment into use.

For this extension to be granted, the launch failure must have occurred at least four years after the date of receipt of the complete information under No. **9.1** or occurred during the suspension period under No. **11.49**, as appropriate. In no case shall the period of the extension of the regulatory timelimit exceed the difference in time between the three-year period and the period remaining from the date of the launch failure to the end of the regulatory time-limit. In order to take advantage of this extension, the administration shall have, within one month of the launch failure, notified the Bureau in writing of such failure, and shall also provide the following information to the Bureau before the end of the regulatory time-limit:

- date of launch failure;
- due diligence information, as required in Resolution **49** (**Rev.WRC-12**) for the relevant assignments with respect to the satellite that suffered the launch failure, if that information has not already been provided.

#### 4 CPM15-2/231-E

For satellite networks or satellite systems to which Resolution **49** (**Rev.WRC-12**) applies, if, within one year of the request for extension, the administration has not provided to the Bureau updated Resolution **49** (**Rev.WRC-12**) information for the new satellite under procurement, the related frequency assignments shall lapse. (WRC-15)

Note: This provision would need to be made applicable to satellite networks and satellite systems not subject to Resolution 49.

Note: The inclusion of additional cases of lauch failure is a topic for further discussions at WRC-15.

5/7/11.6.2 Method K2

#### **ARTICLE 11**

# Notification and recording of frequency assignments<sup>1</sup>, 2, 3, 4, 5, 6, 7, 7bis (WRC-12)

# Section II – Examination of notices and recording of frequency assignments in the Master Register

#### **ADD**

**11.XX** In case of a newly launched satellite failure, before entering the ninety-day bringing into use or bringing back into use period, in the following case:

- the destruction of the satellite launched intended to bring or bring back the assignment into use,

the notifying administration may submit the case to the Board, within one month of the launch failure, for its consideration and careful investigation, taking into account all supporting materials, including details on the satellite that failed, to enable the Board to decide on the matter, as appropriate.

For any extension to be granted by the Board, the launch failure must have occurred at least four years after the date of receipt of the complete information under No. **9.1** or occurred during the suspension period under No. **11.49**, as appropriate. In no case shall the period of the extension of the regulatory time-limit exceed three years or the difference in time between the three-year period and the period remaining from the date of the launch failure to the end of the regulatory time-limit.

In considering such a matter, the Board may determine on a case-by-case basis whether it is appropriate to apply the provisions of No. **11.44B** or No. **11.49** to the relevant frequency assignments in this case. (WRC-15)

Note: The inclusion of additional cases of launch failure is a topic for further discussions at WRC-15.

## 5/7/11.6.3 Method K3

NOC

# **ARTICLE 11**

Notification and recording of frequency assignments<sup>1, 2, 3, 4, 5, 6, 7, 7bis</sup> (WRC-12)