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|  | ASIA-PACIFIC TELECOMMUNITY | **Document No:** |
| **The 5th Meeting of the APT Conference Preparatory**  **Group for WRC-19 (APG19-5)** | **APG19-5/OUT-04**  **(Rev.1)** |
| 31 July – 6 August 2019, Tokyo, Japan | 5 August 2019 |

Working Party 5

**APT VIEW AND PRELIMINARY APT COMMON PROPOSAL**

**on WRC-19 agenda item 9.1.4**

**Agenda Item 9.1.4:**

*To consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention;*

*Issue 9.1.4* ***Resolution 763(WRC-15)*** *– Stations on board sub-orbital vehicles*

**1. Background**

Resolution 763 (WRC-15) resolved to invite ITU-R to identify any required technical and operational measures, in relation to stations on board sub-orbital vehicles, that could assist in avoiding harmful interference between radiocommunication services and to determine spectrum requirements and, based on the outcome of those studies, to consider a possible future agenda item for WRC-23.

A sub-orbital vehicle could travel from ground zero to an altitude beyond 100 km, which is generally taken as the boundary between the Earth’s atmosphere and outer space, but not remain operational in outer space for an extended period of time. Hence, radiocommunication stations on board sub-orbital vehicles cannot necessarily be regarded as terrestrial stations. However, since the sub-orbital vehicles are also not envisaged to establish an orbital trajectory or remain operational in outer space, those stations on board cannot necessarily be considered as space stations. As a result, it is not clear what radio service(s) would be appropriate.

WP 5B, as the responsible group, has finalised the Draft new Report ITU-R M.[SUBORBITAL VEHICLES] “*Radiocommunications for suborbital vehicles*” , as contained in Document [5/136](https://www.itu.int/md/R15-SG05-C-0136/en). The studies include the definitions of suborbital flight phases based on various types of applications. Based on these definitions, the services under which radiocommunication applications for suborbital vehicles operate need to be analysed, in particular the terrestrial services, satellite services or new services in regard to the phase of the sub-orbital flight. However, in May 2019 meeting of WP 5B, agreement was not reached on sending the PDNR to Study Group 5 for approval.

In February 2019, ITU has finalized CPM Report for this Agenda Item, as contained in [Report of the CPM to WRC-19](https://www.itu.int/md/R15-CPM19.02-R-0001/en). It concludes that there is no requirement for any change to the Radio Regulations at WRC-19. Further operational, technical and regulatory issues may need to be addressed, which require continuing studies, on the status of the station aboard sub-orbital vehicles and type of applications, through the appropriate mechanism and on the potential interference to be considered with regards to radiocommunication systems operating on sub-orbital vehicles. Resolution **763 (WRC-15)** could be revised, or a new resolution could be developed to support these further studies by considering a future agenda item.

**2. Documents**

* + - Input Documents: APG19-5/INP-20 (NZL), INP-46 (AUS), INP-53 (INS), INP-85 (JPN), INP-114 (MLA)
    - Information Documents: APG19-5/INF-02 (ICAO), INF-03 (IARU), INF-18 (CEPT), INF-19 (ATU), INF-20 (CITEL), INF-22 (RCC)

**3. Summary of discussions**

**3.1 Summary of APT Members’ views**

**3.1.1 New Zealand** - **Document APG19-5/INP-20**

Although no change to the Radio Regulations has been identified by the ITU-R studies thus far, New Zealand supports further work to be continued on the definition of stations on board sub-orbital vehicles and the applicable service(s) that would be considered for this use.

**3.1.2 Australia - Document APG19-5/INP-46**

Australia supports no change to the Radio Regulations for WRC-19, as per the conclusions provided in the CPM Report. Australia notes that additional operational, technical and regulatory studies may be required on sub-orbital vehicles, in accordance with Resolution **763 (WRC-15)**.

Australia proposes a Preliminary APT Common Proposal as follows:



**3.1.3 Indonesia - Document APG19-5/INP-53**

Indonesia supports the conclusion in the CPM Report that there is no requirement for any change to the Radio Regulations at WRC-19.

Further operational, technical and regulatory issues may need to be addressed, which require continuing studies, on the status of the station aboard sub-orbital vehicles and type of applications, through the appropriate mechanism and on the potential interference to be considered with regards to radiocommunication systems operating on sub-orbital vehicles.

Resolution **763 (WRC-15)** could be revised, or a new resolution could be developed to support these further studies by considering a future agenda item.

**3.1.4 Japan - Document APG19-5/INP-85**

Japan supports ITU-R studies for stations on board SOVs, and such studies to be an agenda item for WRC-23 in accordance with Resolution **763(WRC-15)**. Japan considers that protection of existing services is important and would like to closely observe the discussions on additional frequencies for stations on board sub-orbital vehicles.

**3.1.5 Malaysia - Document APG19-5/INP-114**

Malaysia supports no change to the Radio Regulations as concluded in the CPM Report.

**3.2 Summary of issues raised during the meeting**

* + - APT Members recognize the CPM Report which concludes No Change to the Radio Regulation is proposed for WRC-19
    - APT Members support further study by considering future Agenda Item in WRC-23

**4. APT View(s)**

* APT Members are of the view that no changes to the Radio Regulations (RR) are required at WRC-19
* APT Members support the on going ITU-R studies through revised Resolution **763 (WRC-15)** or under new Resolution
* APT Members support to suppress Resolution 763

**5. Preliminary APT Common Proposal(s)**

