



Radiocommunication Bureau (BR)

Circular Letter
CR/407

5 July 2016

To the Administrations of ITU Member States

Subject: **Implementation of decisions of the World Radiocommunication Conference (Geneva, 2015) (WRC-15) related to earth stations on board unmanned aircraft (Resolution 155 (WRC-15))**

The World Radiocommunication Conference (Geneva, 2015) (WRC-15) adopted a partial revision of the Radio Regulations, including **Resolution 155 (WRC-15)** on regulatory provisions related to earth stations on board unmanned aircraft (UA) which operate with geostationary-satellite networks in the fixed-satellite service (FSS) in certain frequency bands not subject to a Plan of Appendices 30, 30A and 30B for the control and non-payload communications of unmanned aircraft systems (UAS) in non-segregated airspaces*.

The purpose of this circular letter is to provide information and guidance to administrations on different aspects of **Resolution 155 (WRC-15)**, in accordance with its *instructs the Director of the Radiocommunication Bureau 1* “to examine the relevant part of this resolution requiring actions to be taken by administrations to implement this resolution, with a view to sending it to administrations and posting it on the ITU website”.

New class of station for earth stations providing unmanned aircraft system control and non-payload communication (UAS CNPC) links

In response to *instructs the Director of the Radiocommunication Bureau 3* – “to define a new class of station in order to be able to process satellite network filings submitted by administrations for earth stations providing UA CNPC links, after the resolution is implemented, in accordance with this resolution, and publish the information as referred in *resolves 4*” – of **Resolution 155 (WRC-15)**, the Bureau has identified a new class of station for Table 3 in the Preface to the BR IFIC (Space Services) in order to distinguish the CNPC links between space stations and earth stations on board UA from other earth station links communicating with geostationary-satellite networks in the FSS, as follows:

UG - Earth station on board unmanned aircraft communicating with a space station of a geostationary-satellite network in the fixed-satellite service for the control and non-payload

* May also be used consistent with international standards and practices approved by the responsible civil aviation authority.

communications of unmanned aircraft systems in non-segregated airspaces in the frequency bands listed under *resolves* 1 of **Resolution 155 (WRC-15)** *.

Administrations are invited to use the new class-of-station symbol UG when submitting to the Bureau a notice for an FSS satellite network providing UA CNPC links or for an earth station on board UA communicating with GSO FSS space stations in the frequency bands and under the conditions specified in *resolves* 1-12 and 14-19 of **Resolution 155 (WRC-15)**.

The updated **Table 3** for the Preface will be available for online consultation at <http://www.itu.int/ITU-R/space/preface/index.html> and also in BR IFIC (Space Services) 2824/19.07.2016 and thereafter.

The updated BR software package for the electronic notification, validation and querying of satellite networks (SpaceCap, SpaceVal and SpaceQry), with a new symbol **UG**, will be available for download at <http://www.itu.int/ITU-R/go/space-software/en> and also in BR IFIC (Space Services) 2827/30.08.2016 and thereafter.

Submission by administrations of information on satellite network filings including earth stations providing UAS CNPC links

In order to assist ITU-R studies, and in line with *resolves to encourage administrations* 1 – “to provide the relevant information where available in order to facilitate the application of *resolves* 6” – of **Resolution 155 (WRC-15)**, the Bureau is pleased to provide administrations with a web-based platform for the posting, for information only, of “as received” notices under Articles **9** or **11** of the Radio Regulations for FSS networks for UAS CNPC links or an earth station on board UA communicating with a GSO FSS space station at:

<https://www.itu.int/net4/ITU-R/space/UAS-submissions>

The platform will include all relevant WRC decisions and ITU-R reports and recommendations, information regarding the submission of notices to the BR e-mail address (brmail@itu.int) and the format (Annex 2 to Appendix 4 in electronic format compatible with the BR electronic notice form capture software (SpaceCap)), as well as the list of “as received” notices. Such notices made available for information only could include information on the space stations on board a geostationary-satellite, including associated “UG” earth stations or information on typical “UG” earth stations including the identity of the associated space station with UAS CNPC links.

In accordance with *instructs the Director of the Radiocommunication Bureau* 4 of **Resolution 155 (WRC-15)**, the Bureau is not to process satellite network filing submissions by administrations with a new class of station for earth stations providing UA CNPC links before *resolves* 1-12 and 14-19 of that resolution are implemented.

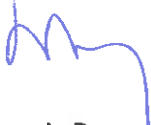
Studies in relation to the application of Resolution 155 (WRC-15)

Resolution 155 (WRC-15) includes both an invitation and encouragement, inasmuch as it *invites* ITU-R “to conduct, as a matter of urgency, relevant studies of technical, operational and regulatory aspects in relation to the implementation of this resolution”, and *resolves to encourage administrations* 2 “to participate actively in the studies referred to in *invites ITU-R* by submitting contributions to ITU-R”. *Resolves* 16 also provides “that the power flux-density hard limits provided in Annex 2 shall be reviewed and, if necessary, revised by the next conference”.

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In this regard, the Bureau trusts that administrations and ITU-R Sector Members will exercise the utmost goodwill in terms of their active participation in and submission of contributions to the forthcoming meetings of the relevant ITU-R study groups, such that the Director of the Radiocommunication Bureau will be able to present to the next WRC a progress report relating to the implementation of **Resolution 155 (WRC-15)**, in accordance with its *instructs the Director of the Radiocommunication Bureau 2*.

The Bureau remains at the disposal of your Administration via the brmail@itu.int address for any clarification you may require with respect to the matters addressed in this circular letter.



François Rancy
Director

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