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Radiocommunication Bureau (BR)

Circular Letter
CR/420

Geneva, 31 August 2017

To Administrations of Member States of the ITU

Subject: **Application of No. 9.3 of the Radio Regulations in the bands 2 025-2 110 MHz (Earth-to-space) and 2 200-2 290 MHz (space-to-Earth)**

The Radiocommunication Bureau has noticed an increasing number of submissions for Advance Publication under No. **9.1** of the Radio Regulations containing generic information. This Circular Letter addresses the difficulties arising from this evolution in the consultation process under No**. 9.3**.

The Bureau would like to emphasize that the goal of the cooperation process under No.**9.3** and **9.4** is to provide opportunities for administrations to adjust the characteristics of their frequency assignments taking into account the comments received from other administrations before notifying them under Article 11 and bringing them into use, with the purpose of avoiding harmful interference during their operation. The lack of specific information in the Advance Publication Information (API) published under **9.2B** makes this cooperation process longer and more difficult.

The frequency bands 2 025-2 110 MHz (Earth-to-space) and 2 200-2 290 MHz (space-to-Earth) are not subject to a coordination procedure under section II of Article 9 when they are used by non-GSO satellites. These bands are in fact the most common bands for space operation of non-GSO satellites networks. Taking into account that such operation is, in general, limited in duration and requires a limited amount of bandwidth (typically a few megahertz) and a limited number of earth stations, the process under Nos. **9.3** and **9.4** could be facilitated if specific information was provided at the API stage. In that case, comments under No. **9.3** might not be necessary and even though the number of satellites operating in these bands is high, the number of comments sent by administrations in relation to new API's could be relatively limited and focused on critical cases.

This scenario is based on the assumption that an administration analyzing a new API may find enough specific and detailed information. This would allow in most cases to directly discard any risk of interference and therefore the administrative burden of generating a comment to the API and interacting with the notifying administration would be reduced.

This simplification of the coordination activity does not work however, if the new API includes the whole allocated space operation band (2 025-2 110 MHz and 2 200-2 290 MHz), a trend that the Bureau has noted with numerous recent API submissions.

Other trends of generic parameters received in recent API submissions include:

- The orbital parameters include a large range of orbits each one with large numbers of satellites;
- The service area is defined as the whole Earth surface;
- No specific earth stations are provided (only typical stations); and,
- The power/e.i.r.p. levels and signal bandwidths cover large ranges.

Faced with generic API's, administrations/operators can either optionally, make equally generic comments stating that unacceptable interference may be caused to all their existing or planned satellite networks operating in these bands or consider any comment useless in view of the lack of information in the API. In both cases the main objective of RR Nos. **9.3** and **9.4** will not be achieved.

The Bureau understands that, for some projects, it may be necessary to submit a wider frequency range in the API due to anticipated difficulties in arriving at final operating frequencies during the coordination phase. However, as mentioned above, submitting a more realistic frequency band for the API will very much facilitate the process.

In addition, the Bureau suggests to the operators to submit realistic planned carrier frequencies in the API, with the possibility to modify them within the submitted frequency band during the cooperation process under **Nos. 9.3** and **9.4**. The carrier frequencies resulting from the process can then be submitted as assigned frequencies with a corresponding assigned bandwidth at the time of notification for recording in the Master International Frequency Register.

Given that the above-mentioned situation may raise concerns regarding the viability of the space operation service in the bands 2 025-2 110 MHz (Earth-to-space) and 2 200-2 290 MHz (space-to-Earth), I would like to invite administrations to pay more attention to the information provided at the API stage for such operation and refrain, whenever possible, to use generic parameters in this context.

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