

CPG PTA 7**Prague, 17th - 21st June 2019****Date issued: 4th June 2019****Source: IARU Region 1****Subject: RNSS Proposal WRC-19 AI 10**

Group membership required to read? (Y/N)

Summary:

CPG meeting # 8 considered a WRC-23 agenda item proposal in document CPG(19)088 (RNSS and Amateur service in 1240-1300 MHz) and tasked PTA to consider the matter further. The proposal invites a review and ITU-R studies "...leading to technical, regulatory and operational recommendations to the Conference, enabling that Conference to decide on effective measures to ensure the protection without undue constraints of RNSS (space-to-Earth) receivers by the amateur and amateur-satellite services".

At its last meeting PT44 in WG-FM also considered reports and preliminary studies (previously presented in PTA) on the susceptibility of RNSS receivers in the band 1240-1300 MHz to interference from the amateur service in the same range. Since the CPG meeting the IARU has continued to express support for a proposal made to WG-FM meeting #94 (FM(19)081-A6) following which WG-FM asked PT44 to continue to work on the topic in conjunction with WG-SE. IARU believes that the preliminary studies presented to CEPT (WG-FM, PTA and FM PT44) already offer good potential for developing opportunities for effective protection of the RNSS receivers.

At this time the IARU believes that WRC action would be premature and requests that it is not supported as a proposal for the WRC-23 agenda.

Proposal:

For now, the IARU believes that WRC action on this topic is premature. The documentation provided to date reports only one interference issue with a specific amateur application experienced at a Galileo control centre rather than in user devices. There is little knowledge about the characteristics of realistic deployment scenarios for user devices, how susceptible they might be to transmissions from other services in the field and how likely they are to experience interference from the Amateur service in the field. Proper account needs to be taken of the operational characteristics of the Amateur service in order to develop sensible and proportionate measures that will facilitate the continued utility of the band for amateur experimentation whilst respecting the primary status of the RNSS service.

The IARU respectfully requests that administrations do not support a WRC AI proposal at this time to allow:

- a) Technical and regulatory studies in ECC WG-FM and SE to be finalised that can take into account a more complete understanding of the real likelihood for interference to user RNSS receivers in the field considering the propagation environments and operational characteristics of both services.
- b) Time for gaining operational experience in the effectiveness of any regulatory measures that may be developed.

Background:

The International Amateur Radio Union (IARU) represents the interests of amateur radio experimenters and operators worldwide. Amateur radio provides the possibility for people of all ages, gender and nationalities to gain practical hands on experience through the nationally regulated use of radio spectrum for the study and understanding of terrestrial and space wireless communications. Indeed many radio amateurs who experienced amateur radio communications in their youth have used the skills gained for their technical and/or scientific careers in later life. (See: <https://www.iaru-r1.org/index.php/web-links-sp-999616743>).

The international amateur radio community has followed with great interest the successful implementation of European GNSS systems, in particular GALILEO. The IARU understands and recognises the great opportunities that the system offers to Europe and the World at large. According to recent information one of Galileo's next major steps is the active utilisation of the GALILEO E6B/C signal offering dual-frequency accuracies (E1/E6) and a commercial service in the frequency range 1 260-1 300 MHz. This range sits within the global 1 240 – 1 300 MHz Amateur Service allocation in the international Radio Regulations (as well as other services).

This frequency range has been used for many years for technical investigations and experimental use by amateur stations for a range of applications. It is an important band for the Amateur Service as it sits at the boundary between lower frequency UHF and VHF bands for which there is a good supply of commercial equipment and the higher frequency microwave bands that require a greater degree of self-provision and experimentation. It is the technical challenge of this latter requirement that drives the interest and self-training in the use of these frequencies.

As a consequence of the importance of the band for the Amateur Service and the opportunities for coexistence suggested by the technical measurement campaigns reported by the German administration and the European Commission JRC, the IARU has spoken against the WRC-23 agenda item proposals made in the European WRC preparatory process (taking place in CPG PTA). IARU believes that a WRC agenda item is not the most efficient means to develop the solutions and guidance to solve any coexistence issue between the GNSS and the Amateur Service. In modern times the limited radio spectrum resource has become more apparent as new applications and technologies make use of ever higher frequencies and there has been a growing emphasis on increased spectrum sharing to facilitate opportunities for all spectrum users where possible. The European Commission itself supports this approach in several cases through measures adopted under the Radio Spectrum Decision (Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community).

IARU is ready and willing to participate and contribute towards the development of appropriate and proportionate measures within the CEPT working groups that can facilitate successful coexistence that build upon the good work reported in the studies mentioned above.