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RESOLUTION 774 (WRC-19)

**Studies on technical and operational measures to be applied in the
frequency band 1 240-1 300 MHz to ensure the protection
of the radionavigation-satellite service (space-to-Earth)**

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

- a) that the frequency band 1 240-1 300 MHz is allocated worldwide to the amateur service on a secondary basis;
- b) that the amateur-satellite service (Earth-to-space) may operate in the frequency band 1 260-1 270 MHz under No. **5.282**;
- c) that the frequency band 1 240-1 300 MHz is important for the amateur community and has been used for many years for a range of applications;
- d) that the frequency band 1 240-1 300 MHz is also allocated worldwide to the radionavigation-satellite service (RNSS) in the space-to-Earth direction on a primary basis;
- e) that RNSS systems using the frequency band 1 240-1 300 MHz are operational, or becoming operational, in various parts of the world, with the aim of supporting a wide range of new satellite positioning services, for example enhanced accuracy and position authentication,

noting

- a) that Recommendation ITU-R M.1732 contains the characteristics of systems operating in the amateur and amateur-satellite services for use in sharing studies;
- b) that Recommendation ITU-R M.1044 should be used as a guide in studies of compatibility between systems operating in the amateur and amateur-satellite services and systems operating in other services;
- c) that Recommendation ITU-R M.1787 contains the description of RNSS systems and the technical characteristics of space stations operating in the frequency band 1 240-1 300 MHz;
- d) that Recommendation ITU-R M.1902 contains the characteristics and protection criteria for RNSS (space-to-Earth) receivers operating in the frequency band 1 240-1 300 MHz,

recognizing

- a) that some cases of harmful interference caused by emissions in the amateur service into RNSS (space-to-Earth) receivers have occurred, and resulted in investigations and in instructions to the operator of the interfering station to cease transmissions;
- b) that the number of RNSS receivers in the frequency band 1 240-1 300 MHz is currently limited in certain regions, but will increase dramatically in the near future with the ubiquitous deployment of receivers used in mass-market applications;

c) that, in accordance with No. 5.29, stations of a secondary service shall not cause harmful interference to stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date;

d) that administrations will benefit from the availability of studies and guidelines on protection of the RNSS (space-to-Earth) by the amateur and amateur-satellite services in the frequency band 1 240-1 300 MHz;

e) that some RNSS receivers in the frequency band 1 240-1 300 MHz may be equipped with pulse-blanking, which may facilitate sharing with certain amateur-service applications;

f) that the amateur service in the frequency band 1 240-1 300 MHz is currently used for amateur voice, data and image transmission in several countries in Europe and around the globe, and may transmit a variety of emission types including wideband, continuous and/or high equivalent isotropically radiated power (e.i.r.p.) transmissions,

resolves to invite the ITU Radiocommunication Sector

1 to perform a detailed review of the different systems and applications used in the amateur service and amateur-satellite service allocations in the frequency band 1 240-1 300 MHz;

2 taking into account the results of the above review, to study possible technical and operational measures to ensure the protection of RNSS (space-to-Earth) receivers from the amateur and amateur-satellite services in the frequency band 1 240-1 300 MHz, without considering the removal of these amateur and amateur-satellite service allocations,

instructs the Director of the Radiocommunication Bureau

to include the results of these studies in his Report to WRC-23 for the purpose of considering appropriate actions in response to *resolves to invite the ITU Radiocommunication Sector* above.