

RESOLUTION 676 (WRC-23)

Prevention and mitigation of harmful interference to the radionavigation-satellite service in the frequency bands 1 164-1 215 MHz and 1 559-1 610 MHz

The World Radiocommunication Conference (Dubai, 2023),

considering

- a)* that the radionavigation-satellite service (RNSS) in the frequency bands 1 164-1 215 MHz and 1 559-1 610 MHz is used in several aeronautical and maritime communication, navigation and surveillance safety-of-life systems;
- b)* that the RNSS is used for safety-of-life applications, for scientific applications and in many applications and devices around the world and across all sectors of the global economy, as described in Report ITU-R M.2458;
- c)* that harmful interference to the RNSS has potential consequences for safety systems used by aeronautical and maritime applications, and for the regularity and efficiency of civil aviation operations;
- d)* that the International Civil Aviation Organization (ICAO) has taken action to reinforce the resilience to interference of aeronautical positioning, navigation and timing (PNT) systems (see ICAO Assembly Resolution 41-8, Appendix C);
- e)* that ICAO has established a strategy for retaining essential conventional PNT infrastructure for contingency support in the case of RNSS outages, and for developing mitigation techniques for loss of services (see Convention on International Civil Aviation, Annex 10, Vol. I, Att. H); however, such infrastructure and mitigation techniques may not be available in some areas (e.g. over the high seas);
- f)* that the International Maritime Organization (IMO) through its Maritime Safety Committee (MSC), despite actions taken to mitigate the impact of harmful interference on the RNSS and its applications, has recognized that harmful interference impacting the RNSS poses a substantial risk to the safety of navigation, the safety of life and property, and the protection of the marine environment (see MSC.1/Circ. 1644);
- g)* that harmful interference to the RNSS may be difficult to detect and trace to origin,

recognizing

- a)* that disruption to the RNSS has been identified globally by the aeronautical community and the maritime community;
- b)* that there are different types of activities, notably the use of unauthorized transmitters, which may cause disruption;

c) that ICAO decided at its 40th Assembly in October 2019 to take measures to prevent and avoid interference to the RNSS;

d) that the Radiocommunication Bureau, in response to a decision of the Radio Regulations Board, issued Circular Letter CR/488, containing recommendations to Member States concerning mitigation of harmful interference to the RNSS;

e) that Article 45 of the ITU Constitution states that “All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Member States or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations”;

f) that Article 47 of the Constitution states that “Member States agree to take the steps required to prevent the transmission or circulation of false or deceptive distress, urgency, safety or identification signals, and to collaborate in locating and identifying stations under their jurisdiction transmitting such signals”;

g) that No. **4.10** states that “the safety aspects of radionavigation and other safety services require special measures to ensure their freedom from harmful interference”;

h) that No. **5.328A** states that “Stations in the radionavigation-satellite service in the band 1 164-1 215 MHz shall operate in accordance with the provisions of Resolution **609 (Rev.WRC-07)** and shall not claim protection from stations in the aeronautical radionavigation service in the band 960-1 215 MHz. No. **5.43A** does not apply. The provisions of No. **21.18** shall apply”;

i) that prevention, identification, reporting and handling of cases of harmful interference, are subject to the provisions of Article **15**;

j) that there are other RNSS applications in the frequency bands 1 164-1 215 MHz and 1 559-1 610 MHz and that there are other RNSS applications operating in other frequency bands that need to be protected and that are not within the scope of this Resolution,

resolves to urge administrations

1 to apply necessary measures to avoid the proliferation, circulation and operation of unauthorized transmitters that cause, or have the potential to cause, harmful interference to RNSS systems and networks operating in the frequency bands 1 164-1 215 MHz and 1 559-1 610 MHz, including possible measures that might need to be taken with respect to *recognizing j*);

2 to take the following actions to prevent and mitigate harmful interference affecting the RNSS operating in the frequency bands 1 164-1 215 MHz and 1 559-1 610 MHz without prejudice to the right of administrations to deny access to the RNSS, for security or defence purposes:

2.1 to encourage collaboration between spectrum regulators, enforcement authorities and RNSS stakeholders, in particular in the aeronautical and maritime domains;

2.2 to encourage cooperation between aeronautical, maritime and security authorities, as well as spectrum regulators, as appropriate, to address interference risks to RNSS systems that may stem from the activities of these security authorities;

3 to report cases, as the affected administration deems appropriate, of harmful interference to the RNSS, in accordance with Article 15,

instructs the Director of the Radiocommunication Bureau

to provide, on request, assistance to administrations in accordance with No. 13.2,

instructs the Secretary-General

to bring this Resolution to the attention of ICAO and IMO.