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RESOLUTION 664 (WRC-19)

Use of the frequency band 22.55-23.15 GHz by the Earth exploration-satellite service (Earth-to-space)

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

considering

- a) that the frequency band 25.5-27 GHz is allocated worldwide on a primary basis to the Earth exploration-satellite service (EESS) (space-to-Earth);
- b) that an EESS (Earth-to-space) allocation in the frequency range 22.55-23.15 GHz would allow its use for satellite tracking, telemetry and control (TT&C) in combination with the existing EESS (space-to-Earth) allocation referred to in *considering a)*;
- c) that an EESS (Earth-to-space) allocation in the 23 GHz frequency range would allow for uplinks and downlinks on the same transponder, increasing efficiency and reducing satellite complexity,

recognizing

- a) that the frequency band 22.55-23.55 GHz is allocated to the fixed, inter-satellite and mobile services;
- b) that the frequency band 22.55-23.15 GHz is also allocated to the space research service (SRS) (Earth-to-space);
- c) that the SRS (Earth-to-space) allocation in the frequency band 22.55-23.15 GHz is paired with the SRS (space-to-Earth) allocation in the frequency band 25.5-27 GHz;
- d) that the possible development of the EESS (Earth-to-space) in the frequency band 22.55-23.15 GHz should not constrain the use and development of the SRS (Earth-to-space) in this frequency band,

resolves to invite the ITU Radiocommunication Sector

1 to conduct sharing and compatibility studies between EESS (Earth-to-space) systems and the existing services mentioned in *recognizing a)* and *b)*, while ensuring the protection of, and not imposing undue constraints on, all services and future development of existing services, in the frequency band 22.55-23.15 GHz;

2 to complete the studies, taking into account the present use of the allocated frequency band, with a view to presenting, at the appropriate time, the technical basis for the work of WRC-27,

invites the 2027 World Radiocommunication Conference

to review the results of these studies with a view to providing a worldwide primary allocation to the EESS (Earth-to-space) in the frequency band 22.55-23.15 GHz,

invites administrations

to participate actively in the studies by submitting contributions to the ITU Radiocommunication Sector,

invites the Secretary-General

to bring this Resolution to the attention of the international and regional organizations concerned.