

RESOLUTION 177 (WRC-19)

Studies relating to spectrum needs and possible allocation of the frequency band 43.5-45.5 GHz to the fixed-satellite service

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

considering

- a) that satellite systems are increasingly being used to deliver broadband services and can help enable universal broadband access;
- b) that next-generation fixed-satellite service (FSS) technologies for broadband will increase speeds (45 Mbit/s is already available), with faster rates expected in the near future;
- c) that technological developments such as advances in spot-beam technologies and frequency reuse are used by the FSS in spectrum above 30 GHz to increase the efficient use of spectrum;
- d) that fixed-satellite applications in spectrum above 30 GHz, such as gateways, should be easier to share with other radiocommunication services than high-density fixed-satellite service applications;
- e) that FSS systems based on the use of new technologies above 30 GHz and associated with both geostationary and non-geostationary satellite constellations are capable of providing high-capacity and economically feasible communications even to the most isolated regions of the world,

noting

that the frequency band 43.5-45.5 GHz is allocated to the mobile, mobile-satellite, radionavigation and radionavigation-satellite services on a primary basis,

recognizing

the need to protect existing services when considering frequency bands for possible additional allocations to any service,

resolves to invite the ITU Radiocommunication Sector

to conduct, and complete in time for WRC-27:

1 studies considering additional spectrum needs for development of the FSS, taking into account the frequency bands currently allocated to the FSS, the technical conditions of their use and the possibility of optimizing the use of these frequency bands with a view to increasing spectrum efficiency;

2 sharing and compatibility studies with existing services allocated on a primary basis, to determine the suitability of new primary allocations to the FSS in the frequency band 43.5-45.5 GHz,

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invites the 2027 World Radiocommunication Conference

to consider the results of studies in *resolves to invite the ITU Radiocommunication Sector 1* above and take appropriate actions, if necessary,

invites administrations

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