

RESOLUTION 686 (WRC-23)

Possible secondary allocation to the Earth exploration-satellite service (active) in the frequency bands [3 000-3 100 MHz] and [3 300-3 400 MHz]*

The World Radiocommunication Conference (Dubai, 2023),

considering

- a)* that spaceborne active radio-frequency sensors can provide unique information on the physical properties of the Earth;
- b)* that spaceborne active remote sensing requires specific frequency ranges, depending on the physical phenomena to be observed;
- c)* that there is an interest in using active spaceborne sensors in the 3 GHz frequency range primarily for measurement of ice boundaries, type and age, ocean wave structure, ocean wind speed and direction and mapping of ocean circulation (currents and eddies);
- d)* that the frequency band 3 100-3 300 MHz is already allocated to the Earth exploration-satellite service (EESS) (active) on a secondary basis and is currently being used for altimeters and synthetic aperture radars (SARs);
- e)* that a frequency band of at least 400 MHz is preferable to satisfy the requirements for high-resolution SARs;
- f)* that SARs in the 3 GHz frequency range are not intended to be operated in populated areas of the globe, but primarily over oceans and seas,

recognizing

- a)* that the frequency band 3 000-3 100 MHz is allocated to the radiolocation service (RLS) and radionavigation service on a primary basis;
- b)* that the frequency band 3 300-3 400 MHz is allocated to the RLS on a primary basis;
- c)* that the frequency band 3 300-3 400 MHz is also allocated to the amateur service on a secondary basis in Regions 2 and 3;
- d)* that the frequency band 3 300-3 400 MHz is also allocated to the fixed and mobile services on a secondary basis in Region 2;
- e)* that the frequency band 3 300-3 400 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis in certain countries under Nos. **5.429A**, **5.429C** and **5.429E**;

* The appearance of square brackets around certain frequency bands in this Resolution is understood to mean that WRC-27 will consider and review the inclusion of these frequency bands with square brackets and decide, as appropriate.

f) that the frequency band 3 300-3 400 MHz is identified for the implementation of International Mobile Telecommunications in certain countries in Regions 1 and 2 under Nos. **5.429B** and **5.429D**;

g) that, in accordance with No. **5.149**, administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference in the frequency bands 3 332-3 339 MHz and 3 345.8-3 352.5 MHz,

resolves to invite the ITU Radiocommunication Sector to complete in time for the 2031 world radiocommunication conference

studies on spectrum needs and studies on the possibility of sharing between the EESS (active) and incumbent radio services in the frequency bands [3 000-3 100 MHz] and [3 300-3 400 MHz],

invites the 2031 world radiocommunication conference

to consider the results of studies for a possible new secondary allocation to the EESS (active) for spaceborne SARs in the frequency bands [3 000-3 100 MHz] and [3 300-3 400 MHz], taking into account the protection of incumbent services, and take appropriate action,

invites administrations

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