Question ITU-R 226-5/3

Ionospheric and tropospheric characteristics along satellite-to-satellite paths

(1997-2000-2000-2007-2012)

The ITU Radiocommunication Assembly,

considering

*a)* that techniques exist for monitoring tropospheric and ionospheric characteristics by means of low orbiting satellites observing GNSS satellites near the Earth’s limb;

*b)* that ionospheric effects along these paths may dominate over tropospheric effects in some situations and, for extrapolation to other scenarios, separation of these two components is necessary;

*c)* that inter-satellite links and compatibility may be affected by the ionosphere and the troposphere,

decides that the following Questions should be studied

1How does the ionospheric content along satellite-to-satellite radio paths vary with slant path, location, height, time and solar activity?

2 How does space weather affect satellite-to-satellite radio paths?

3How are inter-satellite links affected by the ionosphere and troposphere?

4How can the ionospheric and tropospheric effects be separated in the results of measurements on such paths?

further decides

that the results of these studies should be developed as a new Recommendation by 2027.

Category: S3