

BR IFIC 2974 – NEWS

Release of an updated GIBC/AP7 software with respect to Table 10 of Appendix 7 of the Radio Regulations

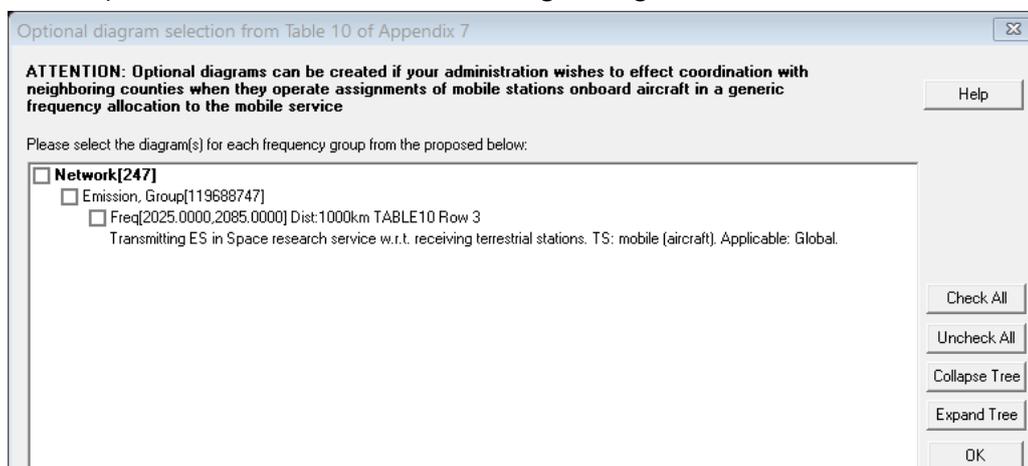
This IFIC includes an updated version of the GIBC/AP7 software implementing a more automated creation of predetermined coordination distances defined in Table 10 of Appendix 7 (See Annex 1 below) taking into account of the actual frequency allocation table in Article 5 of the Radio Regulations.

Table 10 of Appendix 7 provides the predetermined coordination distances in certain interference situations defined in the Table.

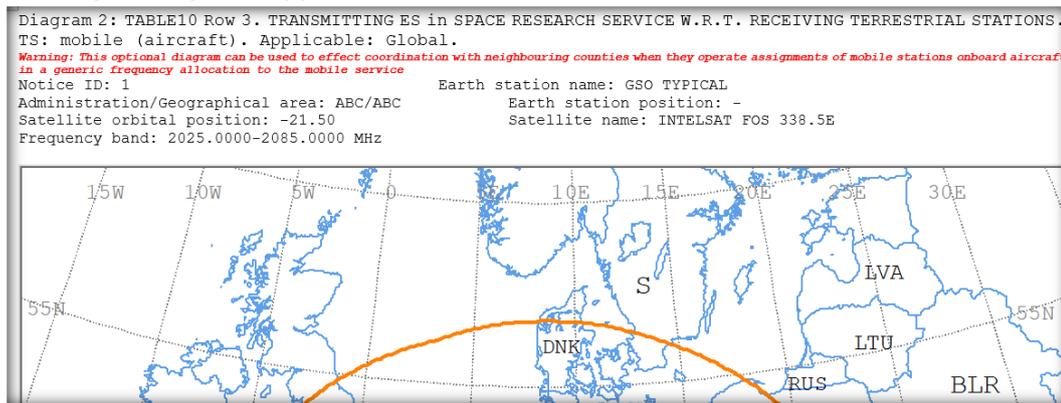
WRC-19 clarified the application of the Table by modifying the type of earth station from “Aircraft (mobile) (all bands)” to “Aircraft (all bands)” in the 2nd and 3rd rows of the Table. Taking this opportunity, the Bureau initiated an extensive analysis on the frequency allocation table and its footnotes in Article 5 and the applicability of Table 10 in each interference scenario.

The updated version includes the following enhanced capabilities to apply the appropriate predetermined coordination distances for a planned earth station (specific or typical earth station) with regards to ground-based or mobile (aircraft) terrestrial stations:

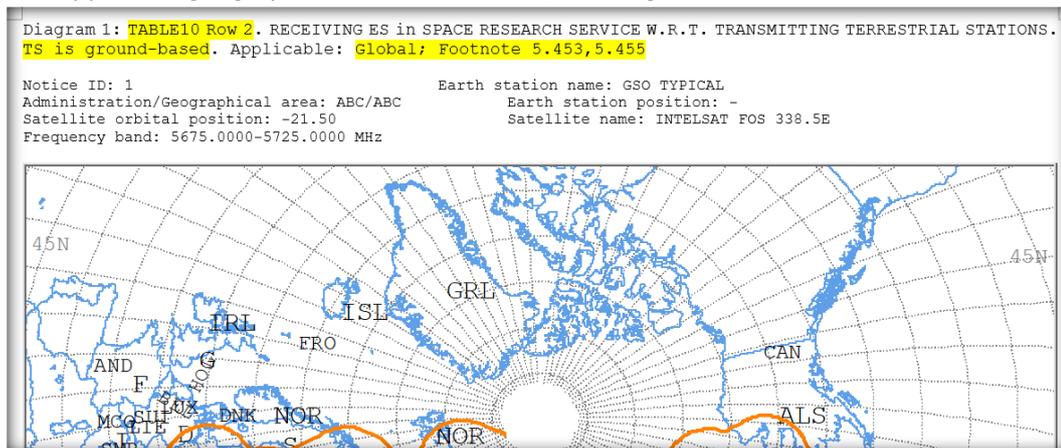
- Automatic creation of relevant predetermined coordination distances based on the frequency band and the class of station of the planned earth station using the frequency allocation table and its associated footnotes in Article 5:
 - o The AP7 program creates relevant predetermined coordination contours for the interference scenarios described in all rows of Table 10, except rows 3 and 12.
 - o For interference scenarios described in rows 3 and 12 of Table 10, the AP7 program also creates predetermined coordination contours with respect to mobile (aircraft) terrestrial stations in the aeronautical mobile service (AMS) and aeronautical radionavigation service (ARNS) when the AMS or ARNS are specifically allocated in the frequency allocation table or its associated footnotes in Article 5.
- Automatic indication of relevant options for interference scenarios in rows 3 and 12 :
 - o The AP7 program suggests optional predetermined coordination contours (500 km or 1000 km) with respect to mobile (aircraft) terrestrial stations when the terrestrial allocations for the assignments are generic in Article 5 (e.g. mobile service (MS) or radionavigation service (RNS)).
 - o In this situation, the program will show an informative window for user’s selection of optional contours. It is up to the notifying administration to create an optional contour (500 km or 1000 km) and effect coordination with its neighboring countries.



- If an optional predetermined coordination contour is created, the following red-colored warning message will appear in the header of the contour to draw user’s attention.



- The notifying administration can create an optional predetermined coordination contour (500 km or 1000 km) and effect coordination with a terrestrial radio station onboard aircraft based on this contour if it considers that its neighboring countries have or will have such airborne service (AMS/ARNS) under the generic terrestrial service (MS/RNS). If an assignment associated with such a contour is notified with agreements from countries within the contour, the coordination requirements under No. 9.18 for a terrestrial station will be established based on that coordinated area.
- Automatic identification of geographical areas in the predetermined coordination contour for which coordination shall be effected taking into account the frequency allocation table and relevant footnotes in Article 5.
- Enhanced information is provided in the header of each coordination contour:
 - Which row of Table 10 is related to the subject contour
 - Which terrestrial station (ground-based or mobile (aircraft)) is involved in this coordination
 - The applicable geographical area or footnote, with regard to the concerned terrestrial services



The new installation package can be found in the DVD starting from this BR IFIC or from the GIBC webpage (<https://www.itu.int/en/ITU-R/software/Pages/gibc.aspx>).

To report an issue or to send a suggestion, please contact brsas@itu.int

Annex 1: Table 10 of Appendix 7

TABLE 10 (Rev.WRC-19)

Predetermined coordination distances

Frequency sharing situation		Coordination distance (in sharing situations involving services allocated with equal rights) (km)
Type of earth station	Type of terrestrial station	
Ground-based in the bands below 1 GHz to which No. 9.11A applies. Ground-based mobile in the bands within the range 1-3 GHz to which No. 9.11A applies	Mobile (aircraft)	500
Aircraft (all bands)	Ground-based	500
Aircraft (all bands)	Mobile (aircraft)	1 000
Ground-based in the bands: 400.15-401 MHz 1 668.4-1 675 MHz	Station in the meteorological aids service (radiosonde)	580
Aircraft in the bands: 400.15-401 MHz 1 668.4-1 675 MHz	Station in the meteorological aids service (radiosonde)	1 080
Ground-based in the radiodetermination-satellite service (RDSS) in the bands: 1 610-1 626.5 MHz 2 483.5-2 500 MHz 2 500-2 516.5 MHz	Ground-based	100
Airborne earth station in the radiodetermination-satellite service (RDSS) in the bands: 1 610-1 626.5 MHz 2 483.5-2 500 MHz 2 500-2 516.5 MHz	Ground-based	400
Receiving earth stations in the meteorological-satellite service	Station in the meteorological aids service	The coordination distance is considered to be the visibility distance as a function of the earth station horizon elevation angle for a radiosonde at an altitude of 20 km above mean sea level, assuming 4/3 Earth radius (see Note 1)
Non-GSO MSS feeder-link earth stations (all bands)	Mobile (aircraft)	500
Non-GSO MSS feeder-link earth stations in the band 5 091-5 150 MHz	Station in the aeronautical radionavigation service	Note 2
Receiving earth stations in the space research service in the band: 2 200-2 290 MHz	Mobile (aircraft)	880
Ground-based in the bands in which the frequency sharing situation is not covered in the rows above	Mobile (aircraft)	500

Notes to Table 10:

NOTE 1 – The coordination distance, d (km), for fixed earth stations in the meteorological-satellite service vis-à-vis stations in the meteorological aids service assumes a radiosonde altitude of 20 km and is determined as a function of the physical horizon elevation angle ε_h (degrees) for each azimuth, as follows:

$$\begin{array}{ll} d = 100 & \text{for } \varepsilon_h \geq 11^\circ \\ d = 582 \left(\sqrt{1 + (0.254 \varepsilon_h)^2} - 0.254 \varepsilon_h \right) & \text{for } 0^\circ < \varepsilon_h < 11^\circ \\ d = 582 & \text{for } \varepsilon_h \leq 0^\circ \end{array}$$

The minimum and maximum coordination distances are 100 km and 582 km, and correspond to physical horizon angles greater than 11° and less than 0° . (WRC-2000)

NOTE 2 – For the coordination distance in the frequency band 5 091-5 150 MHz vis-à-vis stations in the aeronautical radionavigation service, see No. **5.444A**. (WRC-15)