Radiocommunication Bureau (BR)

Administrative Circular
CACE/878

28 November 2018

To Administrations of Member States of the ITU, Radiocommunication Sector Members, ITU-R Associates participating in the work of Radiocommunication Study Group 5 and ITU Academia

Subject: **Radiocommunication Study Group 5 (Terrestrial Services)**

– **Proposed approval of 1 draft new ITU-R Question**

At the meeting of Radiocommunication Study Group 5 held on 19 November 2018, 1 draft new ITU-R Question was adopted according to Resolution ITU-R 1-7 (§ A2.5.2.2) and it was agreed to apply the procedure of Resolution ITU-R 1-7 (see § A2.5.2.3) for approval of Questions in the interval between Radiocommunication Assemblies. The text of the draft ITU-R Question is attached for your reference in the Annex to this letter. Any Member State who objects to the approval of a draft Question is requested to inform the Director and the Chairman of the Study Group of the reasons for the objection.

Having regard to the provisions of § A2.5.2.3 of Resolution ITU-R 1-7, Member States are requested to inform the Secretariat (brsgd@itu.int) by 28 January 2019, whether they approve or do not approve the proposal above.

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After the above-mentioned deadline, the results of this consultation will be announced in an Administrative Circular and the approved Question will be published as soon as practicable (see: http://www.itu.int/ITU-R/go/que-rsg5/en).

François Rancy
Director

Annex: 1

– 1 draft new ITU-R Question

Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 5
- ITU-R Associates participating in the work of Radiocommunication Study Group 5
- ITU Academia
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

Annex

(Document 5/119)

DRAFT NEW QUESTION ITU-R [FOD_COMPAT]/5[1]

Coexistence analysis between foreign object debris detection systems operating in the frequency range 92 to 100 GHz and earth exploration satellite service sensors in-band and in adjacent bands

The ITU Radiocommunication Assembly,

considering

a) that foreign object debris (FOD) can severely injure airport or airline personnel and damage equipment;

b) that FOD can originate from personnel, airport infrastructure, the environment and the equipment operating on the airfield;

c) that an airport study showed that in one year, over 60% of the FOD items were made of metal, followed by 18% of the items being made of rubber;

d) that there is a need to detect FOD on airport surfaces to maintain safe airport operations;

e) that advanced technologies such as millimetre-wave radars are now available for improved FOD detection, including capabilities for continuous detection on runways and other aircraft movement areas;

f) that FOD radars must be able to detect an object whose size is as small as 3.1 cm high and 3.8 cm in diameter;

g) that aviation authorities provide guidance and specifications for procuring airport FOD detection equipment;

h) that sufficient contiguous bandwidth is available for radiolocation services in the frequency range 92-100 GHz;

i) that the technical and operational characteristics of FOD detection system need to be documented,

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1 This Question should be brought to the attention of the International Civil Aviation Organization and the World Meteorological Organization.

recognizing

a) that there is no regulatory priority between co-primary services without additional specific regulatory provisions contained in the RR;

b) that, in frequency bands above 71 GHz, in order to accommodate the emerging requirements of active services, sharing with passive services should be studied in accordance with Resolution **731 (Rev.WRC-12)**;

c) that appropriate measure and sharing criteria between co-primary active services should be also studied in accordance with Resolution **732 (Rev.WRC-12)**;

d) that for sharing and compatibility scenarios the protection criteria for the EESS (passive) is contained in Recommendation ITU-R RS.2017 and the protection criteria for EESS (active) is contained in Recommendation ITU-R RS.1166;

e) that the unwanted emission levels for the fixed service to protect Earth exploration-satellite service (EESS) (passive) operating in the band 88-92 GHz is specified in accordance with Resolution **750 (Rev.WRC-15)**,

decides that the following Question should be studied

what technical conditions are necessary for FOD detection and EESS (active)/EESS (passive) systems to ensure their coexistence when using a common frequency band or adjacent frequency bands?

further decides

1 that the technical and operational characteristics for FOD detection systems should be included in an ITU-R Recommendation;

2 that the results of the studies should also be included in an ITU-R Report;

3 that the work should be completed by 2023.

Category: S2