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| **Radiocommunication Bureau (BR)** |
| Administrative Circular**CACE/878** | 28 November 2018 |
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| **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** |
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| Subject: | **Radiocommunication Study Group 5 (Terrestrial Services)** **– Proposed approval of 1 draft new ITU-R Question** |
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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.

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](https://www.itu.int/md/R15-SG05-C-0119/en))

draft new QUESTION ITU-R [FOD\_COMPAT]/5[[1]](#footnote-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,

*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

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1. This Question should be brought to the attention of the International Civil Aviation Organization and the World Meteorological Organization. [↑](#footnote-ref-1)