



### Radiocommunication Bureau (BR)

Administrative Circular CACE/832

22 September 2017

To Administrations of Member States of the ITU, Radiocommunication Sector Members, ITU-R Associates participating in the work of Radiocommunication Study Group 3 and ITU Academia

Subject: Radiocommunication Study Group 3 (Radiowave propagation)

- Proposed approval of 1 draft new ITU-R Question
- Proposed suppression of 1 ITU-R Question

At the meeting of Radiocommunication Study Group 3 held on 1 September 2017, 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 Annex 1. 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.

Furthermore, the Study Group proposed the suppression of 1 ITU-R Question in accordance with Resolution ITU-R 1-7 (§A2.5.3). The ITU-R Question proposed for suppression is indicated in Annex 2. Any Member State who objects to the suppression of an ITU-R 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 (<a href="mailto:brsgd@itu.int">brsgd@itu.int</a>) by 22 November 2017, whether they approve or do not approve the proposals 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: <a href="http://www.itu.int/ITU-R/go/que-rsg3/en">http://www.itu.int/ITU-R/go/que-rsg3/en</a>).

François Rancy Director

#### Annexes: 2

- 1 draft new ITU-R Question
- Proposed suppression of 1 ITU-R Question

#### Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 3
- ITU-R Associates participating in the work of Radiocommunication Study Group 3
- 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 1

(Document 3/79)

## DRAFT NEW QUESTION ITU-R [SCINT\_INDICES]/3

## **Computation of ionospheric scintillation indices**

The ITU Radiocommunication Assembly,

considering

- a) that, in the case of some high-performance systems involving satellites, ionospheric scintillation effect should be considered for signals up to below 3 GHz and may occasionally be observed up to 10 GHz;
- b) that various satellite systems, including mobile- and navigation-satellite services, are employing non-geostationary satellite networks;
- c) that, in case of a scintillation event, rapid amplitude and phase fluctuations are observed with modifications to signal time coherence properties;
- d) that, in case navigation satellite services, scintillation can cause cycle slips, degrade the positioning accuracy and, in case of a strong event, can lead to a complete loss of signal lock,

decides that the following Question should be studied

for the computation of S4 and  $\sigma_{\phi}$  ionospheric indices, what is the impact of factors such as:

- the detrending process;
- the cut-off frequencies of the signal power spectral density;
- the sampling rate of the signal power spectral density;
- the signal duration;
- the GNSS receiver,

*further decides* 

- that the available information should be prepared as new Recommendations, or as revisions to existing Recommendations;
- 2 that the above studies should be completed by 2019.

Category: S3

## Annex 2

(Document <u>3/72</u>)

# Proposed suppression of ITU-R Question

Question ITU-R	Title
232-1/3	The effect of nanostructure materials on propagation