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| **Radiocommunication Bureau (BR)** |
| Administrative Circular**CACE/846** | 29 November 2017 |
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| **To Administrations of Member States of the ITU, Radiocommunication Sector Members, ITU-R Associates participating in the work of the Radiocommunication Study Group 3 and ITU Academia** |
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| Subject: | **Radiocommunication Study Group 3 (Radiowave propagation)** **– Approval of 1 new ITU-R Question****– Suppression of 1 ITU-R Question** |
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By Administrative Circular CACE/832 of 22 September 2017, 1 draft new ITU-R Question was submitted for approval by correspondence in accordance with Resolution ITU‑R 1‑7 (§ A2.5.2.3). In addition, the Study Group proposed the suppression of 1 ITU-R Question.

The conditions governing this procedure were met on 22 November 2017.

The text of the approved Question is attached for your reference in Annex 1 and will be published by the ITU. The suppressed ITU-R Question is indicated in Annex 2.

François Rancy

Director

**Annexes:** 2

**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

QUESTION ITU-R 234/3

Computation of ionospheric scintillation indices

(2017)

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 radionavigation-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 radionavigation 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 σφ 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

1 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

Suppressed ITU-R Question

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

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