



Radiocommunication Bureau (BR)

Administrative Circular
CACE/991

19 August 2021

**To Administrations of Member States of the ITU, Radiocommunication Sector Members,
ITU-R Associates participating in the work of the Radiocommunication Study Group 1
and ITU Academia**

Subject: **Radiocommunication Study Group 1 (Spectrum management)**
 – **Approval of 1 new ITU-R Question**

By Administrative Circular [CACE/982](#) dated 11 June 2021, 1 draft new ITU-R Question was submitted for approval by correspondence in accordance with Resolution ITU-R 1-8 (§ A2.5.2.3).

The conditions governing this procedure were met on 11 August 2021.

The text of the approved Question is attached for your reference in the Annex to this letter and will be published by the ITU.

Mario Maniewicz
Director

Annex: 1

Annex

QUESTION ITU-R 242/1

Spectrum management framework for the introduction of Ground- and Wall- Penetrating Radar (GPR/WPR) imaging systems

(2021)

The ITU Radiocommunication Assembly,

considering

- a)* that Ground- and Wall- Penetrating Radar (GPR/WPR) imaging systems have been used by professionals for over 30 years globally in investigation and detection applications;
- b)* that GPR/WPR emissions spread over a very large frequency range and the frequency bands used by GPR/WPR tends to expand gradually;
- c)* that GPR/WPR devices may be integrated into the scope of Ultra-wideband (UWB), but it may differ with characteristics, technical requirements and the impact on other radiocommunication services of generic UWB devices;
- d)* that the emissions from GPR/WPR devices have not been studied in detail on the current complex electromagnetic environment;
- e)* that GPR/WPR imaging systems present a potential to transmit in bands allocated to passive services that are covered by footnote No. **5.340** of the Radio Regulations (RR) that prohibits all emissions;
- f)* that the licensing regime for imaging systems varies between administrations, with most handling the issue with experimental or short time licenses,

considering further

- a)* that a report on the status of GPR/WPR system by administrations would support ITU membership, in particular developing countries which plan to introduce a system for the use of GPR/WPR;
- b)* that the sharing of experiences and case studies of countries that have already introduced and used GPR/WPR within their institutions will greatly contribute to the efficient spectrum use and promotion,

noting

a) that [ECC Decision \(06\)08](#) shows the conditions for use of the radio spectrum by GPR/WPR imaging system;

b) that [FCC Title 47 Part 15.509](#) presents Technical requirements for GPR/WPR systems,

decides that the following Questions should be studied

1 What technologies and what range of frequencies are used in GPR/WPR systems?

2 What are the conditions and measures to ensure that GPR/WPR devices do not cause harmful interference to any radiocommunication service, in particular those services operating in accordance with RR No. **5.340**?

3 What are the current spectrum management policies and future plans of the national authorities for management and authorization of the use of GPR/WPR?

further decides

1 that the results of the above studies should be included in Recommendation(s) and/or Report(s), as appropriate;

2 that the above studies should be completed by 2023.

Category: S3
