



Radiocommunication Bureau (BR)

Administrative Circular
CACE/1027

6 June 2022

**To Administrations of Member States of the ITU, Radiocommunication Sector Members,
ITU-R Associates participating in the work of the Radiocommunication Study Group 6
and ITU Academia**

Subject: **Radiocommunication Study Group 6 (Broadcasting Service)**
 – **Approval of 1 new ITU-R Question**

By Administrative Circular [CACE/1023](#) dated 28 March 2022, 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 30 May 2022.

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 147/6¹

Energy Aware Broadcasting Systems

(2022)

The ITU Radiocommunication Assembly,

considering

- a) that the United Nations has defined 17 sustainable development goals, including "industries, innovation and infrastructure"² and "responsible consumption and production"³;
- b) that many nations are actively developing climate goals that include the climate impact for all their industries;
- c) that there is a proliferation of broadcasting technologies, which may have a significant energy footprint;
- d) that studies on energy consumption in broadcasting and methods for its mitigation are important, and that current global developments make it urgent for the ITU-R to carry out such studies;
- e) that broadcasters wish to maintain a high-quality level of content creation, and end-user satisfaction,

recognizing

- a) that Resolution ITU-R 60-2, Reduction of energy consumption for environmental protection and mitigating climate change by use of ICT/radiocommunication technologies and systems, encourages the consideration of environmental issues by Study Groups;
- b) that Resolution ITU-R 70, Principles for the future development of broadcasting, notes that the transition to future broadcasting systems, technologies and applications potentially presents energy saving opportunities;
- c) that Report ITU-R BT.2385, Reducing the environmental impact of terrestrial broadcasting systems, provides information related to improving environmental performance;
- d) that ISO/IEC 23001-11, Information Technology – MPEG systems technologies – Part 11: Energy-efficient media consumption (green metadata), specifies metadata for energy-efficient decoding, encoding, presentation and selection of media;

¹ This Question should be brought to the attention of ITU-T Study Groups 9 and 16, and ITU-D Study Group 2, as well as ISO and IEC.

² <https://www.un.org/sustainabledevelopment/infrastructure-industrialization/>

³ <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>

e) that Recommendation ITU-T L.1410, Methodology for environmental life cycle assessments of information and communication technology goods, networks and services, provides information on the assessment of the environmental impact of information and communication technology,

decides that the following Questions should be studied

- 1 What *direct* impact do the technologies and features used for broadcasting have on energy consumption?
- 2 What *indirect* impact does the use of external services used for broadcasting have on overall energy consumption?
- 3 What metrics should be used to quantify and report both the direct and indirect impact on energy consumption?
- 4 How can broadcasting be made more energy efficient in order to contribute to the pertinent United Nations' Sustainable Development Goals?

further decides

- 1 that co-operation with other bodies may be desirable for the development of energy-aware formats, standards and operating practices;
- 2 that the results of the above studies should be included in one or more Recommendations or/and Reports;
- 3 that the above studies should be completed by 2027.

Category: S2
