



Radiocommunication Bureau (BR)

Administrative Circular
CACE/1132

4 February 2025

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

Subject: **Radiocommunication Study Group 6 (Broadcasting Service)**

- **Approval of 1 new ITU-R Question**
- **Suppression of 2 ITU-R Questions**

By Administrative Circular [CACE/1121](#) dated 28 November 2024, 1 draft new ITU-R Question was submitted for approval by correspondence in accordance with Resolution ITU-R 1-9 (§ A2.5.2.3). In addition, the Study Group proposed the suppression of 2 ITU-R Questions.

The conditions governing this procedure were met on 28 January 2025.

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

Mario Maniewicz
Director

Annexes: 2

Annex 1

QUESTION ITU-R 148/6

Evolution of sound systems for broadcasting

(2024)

The ITU Radiocommunication Assembly,

considering

- a)* that the advanced sound system provides more spatial and interactive experiences than the 3/2 multichannel sound system;
- b)* that sound systems for broadcasting are expected to evolve and provide new use cases, including virtual or augmented reality (VR/AR), remote or virtual production, adaptation of reproduction device/environment, user-interaction and personalization;
- c)* that VR/AR environments will require a sound image position that tracks and matches the user's point of view in a three-dimensional space;
- d)* that sound systems for these new use cases will require additional audio-related metadata and advanced rendering methods;
- e)* that these new use cases may require different production workflows, including creation of audio-related metadata and use of production tools based on Artificial Intelligence technologies;
- f)* that conversion of audio signals and/or audio-related metadata may be required for existing and future workflows, infrastructure and distribution platforms;
- g)* that guidelines of workflows and best practices for sound systems, including new use-cases such as VR/AR, help with their implementation and adoption,

recognizing

- a)* that the 3/2 multichannel sound system and the advanced sound system are specified in Recommendations ITU-R BS.775 and ITU-R BS.2051, respectively;
- b)* that audio-related metadata including the Audio Definition Model (ADM), common definitions of the ADM and the serial representation of ADM (S-ADM) are specified in Recommendations ITU-R BS.2076, ITU-R BS.2094 and ITU-R BS.2125;
- c)* that the ADM renderer is specified in Recommendation ITU-R BS.2127;
- d)* that usage guidelines for the ADM, practical implementation of audio codecs for advanced sound systems, and collection of usage scenarios of advanced immersive sensory media systems are described in Reports ITU-R BS.2388, ITU-R BS.2493 and ITU-R BT.2420;
- e)* that a framework for the future of broadcasting is presented in Reports ITU-R BS/BT.2522 and ITU-R BS/BT.2524,

decides that the following Questions should be studied

- 1 What are the requirements for individual use cases of sound systems for broadcasting, including VR/AR, remote or virtual production, adaptation of reproduction device/environment, user-interaction and personalization?
- 2 What are the appropriate audio parameters and reproduction conditions for individual use cases of sound systems for broadcasting, including VR/AR, remote or virtual production, exchange, quality control and monitoring of sound systems?
- 3 What are the requirements and specifications of renderers including conversion method of audio signals and/or audio-related metadata sets for use in the production, monitoring and quality evaluation of audio content?
- 4 Which methods should be employed to control and maintain audio quality in different listening environments?
- 5 What guidance for operational practices and workflows should be provided to help ensure an optimum and consistent user experience for individual use cases of sound systems for broadcasting?

further decides

- 1 that the results of the above studies should be included in (a) Recommendation(s) and/or (a) Report(s);
- 2 that the above studies should be completed by 2031.

Category: S2

Annex 2

Suppressed ITU-R Questions

Question ITU-R	Title
135-2/6	System parameters for and management of digital sound systems with and without accompanying picture
139-2/6	Methods for rendering of advanced audio formats
