QUESTION ITU-R 143-2/6[[1]](#footnote-1)

Advanced Immersive[[2]](#footnote-2) Sensory Media Systems for Programme Production, Exchange and Presentation for Broadcasting

(2017-2019-2020)

The ITU Radiocommunication Assembly,

considering

*a)* that Virtual Reality, Augmented Reality, 360° video, three-dimensional (3D) video and audio and other immersive sensory media technologies have caught the attention of the content providers, audiences, and the associated consumer technology vendors;

*b)* that television and radio programme makers and others are exploring such advanced immersive systems to enhance the audiences experience of their content;

*c)* that systems to further enhance immersive sensory media by employing haptic technologies are being developed;

*d)* that currently immersive sensory media content is usually acquired and produced to the requirements of specific delivery or distribution technologies;

*e)* that there are no agreed measures or means to assess the quality of the images, associated audio and haptic reproduction of advanced immersive sensory media content;

*f)* that there are no criteria for assessing if the “Quality of Experience” expectations of the intended audience of advanced immersive sensory media content, are being met;

*g)* that broadcasters are distributing programme content to audiences via an increasing number of interactive delivery platforms;

*h)* that some viewers have documented experience of eye fatigue, dizziness, or nausea in viewing some Virtual Reality or Augmented Reality content, and device performance parameters, viewing time, and content type may all influence these undesired reactions,

decides that the following Questions should be studied

1 What are the appropriate audio, video and haptic parameters for production, exchange and presentation of advanced immersive sensory media content?

2 What audio, video, data, and metadata is required for representing immersive sensory media scenes?

3 What conditions including audio-visual and haptic reproduction devices should be assumed for viewing of advanced immersive sensory media content in production and consumer viewing?

4 What metadata is required to allow accurate exchange and reproduction of advanced immersive sensory media content?

5 How do device performance parameters interact with production decisions to avoid or minimize eye fatigue, dizziness, or nausea in audiences when viewing advanced immersive sensory media content?

further decides

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

2 that the above studies should be completed by 2027.

Category: S2

1. In the year 2023, Radiocommunication Study Group 6 extended the completion date of studies for this Question. [↑](#footnote-ref-1)
2. The term “immersive” is deemed to include any format or medium or platform that offers or engages an audience by employing sensory based technologies such as audio, video and haptic and enables any form of interaction or control of the content presentation. [↑](#footnote-ref-2)