xHE-AAC Encoding of Live Programs at CES 2023

Fraunhofer IIS debuts xHE-AAC encoding for live events and broadcasts in Las Vegas at booth 15915

xHE-AAC, the latest generation of the AAC audio codec family, can encode live events and broadcasts, just as prior generations of AAC have done, but now with the consistent loudness, wide bitrate scalability, and improved quality and intelligibility of xHE-AAC. Fraunhofer has enhanced its xHE-AAC encoder software to extend xHE-AAC use beyond the file-based encoding used by Netflix and other major streaming providers to live use cases such as radio and TV broadcasts. Now, news reports, sports events, and live performances can be streamed as they happen with the high quality and consistent loudness provided by xHE-AAC.

At the CES 2023 show in Las Vegas, Fraunhofer will demonstrate the encoding of a simulated live program with commercial inserts using a Qbit Q8V cloud-based real-time encoder. The live xHE-AAC stream will be sent from Qbit's cloud server to Android and iOS phones and tablets on display at Fraunhofer's CES booth 15915 in the Central Hall. Fraunhofer has collaborated with Qbit GmbH on the testing and integration of the new software into Qbit's encoder, including a test with Antenne Bayern, a prominent German commercial broadcaster.

The xHE-AAC live encoding is made possible through new automatic loudness processing for live signals which overcomes the need to measure the loudness of the entire program before it is encoded and transmitted. The new live mode is compatible with all existing xHE-AAC decoders, including those integrated in the Android, Apple, iOS, and Microsoft operating systems. All content encoded live will play at an overall loudness level consistent with other xHE-AAC content.

About Qbit

Qbit GmbH specializes in the development and manufacture of professional audio and broadcasting products. With Qbit´s founder Michael Bläsi being one of the pacemakers of digital audio transport as developer of the trendsetting DIALOG4 MusicTaxi back in the early 1990s, experience in this field goes way beyond this period.