

Liaison Statement

To: 3GPP SA WG4

For Information

Source: IETF CODEC Working Group, Real-Time Applications and Infrastructure Area (RAI)

Date: 21 September 2012

## Speech and Audio Coding Standardization

The IETF CODEC working group would like to inform 3GPP that the CODEC group has completed its work on the Opus codec, the Internet Engineering Steering Group (IESG) has approved the document, and it has now issued as an RFC - [RFC 6716](#)..

The codec working group completed its work on March 20, 2012, at which point it officially asked the IESG to consider the document for approval. An extensive review was conducted by the area director (Robert Sparks), and the review was posted to the working group on April 18. The authors submitted a revision on April 23 based on these comments, and on April 26 the document was sent to the broad IETF community for a two week last-call period. Numerous comments were received from both the community and from the IESG during the evaluation period, resulting in several revisions of the document, none of them altering the codec in any substantive way. The final revision of the document - [draft-ietf-codec-opus-16](#) - was approved by the IESG on July 2nd. The document then issued as an RFC on September 10, 2012.

The codec working group will continue to work on its test results document ([draft-ietf-codec-results](#)), and incorporate testing results done by the community on the published RFC. This will allow us to have a more complete view of the quality of the actual published codec. The current testing results document contains results from prior iterations of the specification which may not exactly match the performance of the final codec. The current date for this deliverable is December 2012, but given that the spec was just recently issued this is likely to happen in 2013.

We do expect that as the codec sees implementation and deployment, errors in the specification will be identified. The existing RFC errata process will be used to address these, until such time in a few years when we will consider taking the specification to the next level of maturity - Internet standard. However there are no specific timelines for that move and it will depend on industry adoption.

The codec working group has also added another milestone for its deliverables - a file container format for the Opus codec. This is currently scheduled for January 2013. Though the group has not formally adopted a document for this deliverable, it is likely to move forward with [draft-terriberly-oggopus](#) as the only proposal on the table.

The Opus codec has been selected by the [rtcweb](#) working group as a mandatory to implement codec for real-time communications in web browsers.

The CODEC working group wishes to thank 3GPP for their input on the Opus specification. Many of the comments and feedback were incorporated, leading to an overall better document.

Thanks,

Jonathan Rosenberg  
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