

## Liaison Statement

To: ITU-T SG 16 – Q8, 9, 10/16

For Information

Source: IETF RAI Area

Date: November 2, 2009

### **Speech and audio coding standardization**

The IETF appreciates the ITU-T liaison COM 16 - LS 71 - E, dated 10 July 2009 titled "LS to IESG and IETF-RAI on information on ITU-T Speech and audio coding standardisation". This liaison provides a report on the status of this activity within the IETF. This liaison follows a coordination call on this same topic held 5 September 2009 which was attended by involved leaders of both ITU-T and IETF.

This liaison is early information to ITU-T on the current state of the codec discussions in the IETF. It is not, and does not replace, communication as laid out in bullet 3.1.2 of RFC2436 (<http://www.ietf.org/rfc/rfc2436.txt>) that is also available as Appendix A of ITU-T Recommendation A.5. Information about potential new work items for the IETF will be announced on the new-work mailing list as agreed upon between ITU-T and IETF.

The IETF community will hold a second investigative session, called a "birds of a feather" meeting, or "BoF", on codec specification during the upcoming IETF76 meeting in Hiroshima, Japan, the week of November 09, 2009. More information on that meeting may be found at: <http://www.ietf.org/meeting/76/>

A description of the CODEC BoF may be found at <http://trac.tools.ietf.org/bof/trac/wiki/BifIETF76> , under the "RAI" section of that page, including the proposed charter for an IETF Working Group, individual submission draft documents, and an open mailing list.

There are a few different goals for this BoF. First, we believe the technical processes of ITU-T Study Group 16 are excellent for CODEC work. However, we understand from those requesting the CODEC BoF that they have brought this work to the IETF because they do not believe the existing processes of other SDOs allow them to accomplish what they want to accomplish: to create a high quality codec that is (1) optimized for use over the Internet and (2) easily distributable with no royalty fees.

The work process envisioned for a CODEC Working Group at the IETF is to define technical requirements and then collaboratively work together on one (or a very small number) codec rather than choose one "winner" from among a number of different codecs. This approach of mixing the best aspects and ideas from a number of different codecs appears to be different from the process followed by ITU-T SG 16.

It is likely, if a Working Group were formed, that it would prefer technologies that distribute easily over the Internet. For IPR

encumbered technology, they are easiest to distribute when a commitment to royalty-free terms exists (see RFC 2026, section 10.3.2). Multiple drafts for codecs have already been submitted with statements of such royalty-free terms, and with source code in the text (e.g., SILK, CELT, etc.). This approach also appears to differ from the processes followed by ITU-T SG 16.

The IETF is clear that should a Working Group be formed, no guarantee exists that the resulting specification would be either unencumbered or carry royalty-free terms, only that those who participate in the effort must disclose IPR up front, and that royalty-free terms may be a criteria for open evaluation, as determined by the Working Group.

The main questions under investigation at the upcoming BoF are:

- 1) Are the goals and charter of the Working Group proposal well defined?
- 2) If the charter is clearly defined, will the appropriate levels of technical talent participate? On this point, if a Working Group were to be formed, the IETF would welcome the ITU-T's offer of participation and contribution to the effort.
- 3) Does another SDO's process have a higher probability than the IETF of achieving the stated goals -- both licensing and technical goals -- of the proposed charter? If so, which ones and why?

If the CODEC Working Group were to be formed, it would most likely include a working item to finalize the requirements, (the current individual draft, draft-valin-codec-requirements-02, is located at <http://tools.ietf.org/html/draft-valin-codec-requirements> ) and a working item to review the existing codecs provided in ITU-T liaison "COM 16 - LS 71 - E" to see if any of those codecs meet those requirements. Parties with IPR on existing codecs would be welcomed and encouraged to submit those codecs with royalty-free licensing terms.

If possible, I would prefer to co-publish with the ITU-T any codec produced by the proposed Working Group, either at the same time as the codec becomes an RFC or at some time after RFC publication.

The IETF welcomes the ITU-T or any of its members to join the discussions occurring on this topic on the following mailing list: <https://www.ietf.org/mailman/listinfo/codec>

And we welcome participation either remotely or in person at the upcoming BoF at IETF76 in Hiroshima.

Sincerely,  
Cullen Jennings,  
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