Title: Liaison letter to 3GPP RAN3
From: IEEE 802.1
For: Action
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To: 3GPP RAN Working Group 3 (RAN3)
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Dear Colleagues,

The IEEE 802.1 Working Group would like to update you on the ongoing IEEE P802.1CM Time-Sensitive Networking for Fronthaul project of the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group. This liaison letter is a follow up on our previous liaison letter: http://www.ieee802.org/1/files/public/docs2016/liaison-3GPP-RAN3-0716-v01.pdf.

In collaboration with the Common Public Radio Interface (CPRI) Cooperation, the P802.1CM effort is to specify bridged transport networking over IEEE Std 802.3 Ethernet for the transport of fronthaul traffic, including user data, control and management (C&M) data traffic. The work so far has been focusing on the fronthaul interface where the functional decomposition of the radio base station to Radio Equipment (RE) and Radio Equipment Control (REC) is according to the Common Public Radio Interface (CPRI 7.0) specification. The soon available eCPRI fronthaul interface, which specifies low layer splits, will be addressed as the next step in P802.1CM. User and C&M data requirements have been provided by the CPRI Technical Working Group together with synchronization requirements. The eCPRI requirements will be provided soon.

With input from ITU-T Q13/15, the P802.1CM text was developed on how the synchronization requirements can be met. Furthermore, P802.1CM defines profiles to meet the requirements of fronthaul user and C&M data traffic, where a profile specifies capabilities and configurations of a fronthaul bridged network. The current profiles address functional decomposition according to CPRI 7.0 so that the different CPRI information flows are supported separately from each other in the fronthaul network. Profiles to support eCPRI will be added as soon as the requirements become available. The web page of the project is http://www.ieee802.org/1/pages/802.1cm.html.

IEEE 802.1 may address future new functional decompositions and fronthaul architectures, e.g., in an amendment to 802.1CM. Therefore, we are interested in new functional decompositions and corresponding requirements. We would appreciate if 3GPP RAN3 would take P802.1CM and its potential future amendments into consideration. We would be grateful if 3GPP RAN3 would inform us of relevant ongoing work in the RAN3 Working Group, for potential input to P802.1CM or any future amendment, e.g., transport network requirements on high layer splits. We look forward to cooperation between our organizations. IEEE 802.1 face-to-face meeting details are available at: http://www.ieee802.org/1/meetings. The next face-to-face meeting is from September 5 to 8 in Newfoundland, Canada. Details on TSN calls, including P802.1CM calls, are available at http://www.ieee802.org/1/pages/tsn.html.

Respectfully submitted,
Glenn Parsons
Chair, IEEE 802.1 WG