Source: **IEEE 1914 Next Generation Fronthaul Interface (NGFI) Working Group**[1]

To: Scott Mansfield, Ericsson
Email: scott.mansfield@ericsson.com

Ying Cheng, China Unicom
Email: chengying10@chinaunicom.cn

From: Jinri Huang, Chair, IEEE 1914 Next Generation Fronthaul Interface Working Group
Email: huangjinri@chinamobile.com

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Subject: **Liaison to ITU-T JCA-IMT2020 in response to request on 5G-related activity update**

Dear Colleagues,

Many thanks for reaching us with your liaison "JCA-IMT2020-LS1.pdf".

IEEE 1914 Next Generation Fronthaul Interface (NGFI) Working Group is devoting to specifying the architecture, requirements and solutions to 5G Fronthaul transport networks. There are currently two projects under 1914 WG, namely, 1914.1 and 1914.3 respectively. While the 1914.1 project is to develop the NGFI transport architecture and requirements, the 1914.3 is defining the specification of radio signal encapsulation into Ethernet packets.

The 1914.1 project is supposed to have its draft specification by the end of this year. We would be happy to share it with you when it comes out. As for the 1914.3 project, it has finished the draft specification of D2.0 and is now under WG-level review.

More details on our WG could be found on: http://sites.ieee.org/sagroups-1914/

Below is our response to your survey request.

Activity domain	Stage (topic)	Area	Entity	Title of deliverable
5G	Use cases, Architecture, Requirements	Fronthaul transport	IEEE 1914 WG-1914.1 project	Standard for Packet-based Fronthaul Transport Networks
5G	Protocol	Fronthaul transport	IEEE 1914 WG-1914.3 project	Standard for Radio over Ethernet Encapsulations and Mappings

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[1] This document solely represents the views of the IEEE 1914 Working Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE Communications Society.

Scope of deliverable	Current status	Starting date	Target date
This standard specifies: 1) Architecture for the transport of mobile fronthaul traffic (e.g., Ethernet-based). 2) Requirements and definitions for the fronthaul networks, including data rates, timing and synchronization, and quality of service and so on. The standard also analyzes functional partitioning schemes between Remote Radio Units (RRUs) and Base-Band Units (BBUs) that improve fronthaul link efficiency and interoperability on the transport level, and that facilitate the realization of cooperative radio functions, such as massive Multiple-Input-Multiple-Output (massive MIMO) operational modes, Coordinated Multi-Point (CoMP) transmission and reception.	ongoing	2016.02	2018.4
This document defines the encapsulation and mapping of radio protocols to be transported over Ethernet packets using Radio over Ethernet (RoE). Furthermore, both structure-agnostic and structure-aware definitions are provided for the most common and current radio protocol, Common Public Radio Interface (CPRI); as well as a native mode.	Comment resolution on the WG level; Soon to go for Sponsor ballot	2015.01	2017.12

We look forward to more communication and collaboration in the future.

Truly yours,

Jinri Huang, Chair, IEEE 1914 Next Generation Fronthaul Interface Working Group