

IEEE 1914 NGFI

IEEE 1914.3 RoE TF – General Discussion on P1914.3v2

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IEEE 1914
Next Generation Fronthaul Interface
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IEEE 1914.3 RoE TF – General Discussion on P1914.3v2

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Technical Considerations

- P1914.3v2 has been discussed since P1914.3v1 started sponsor balloting, resulting in the following:
 - Ideas for v2 gathered from previous meetings were assembled and discussed in July teleconference [tf3_1807_tse_P1914.3v2_discussion_and_scope_2.pdf](#)
 - Schedule for v2 was proposed in August teleconference [tf3_1808_tse_P1914.3v2_schedule_estimate_1.pdf](#)
 - Draft PAR for v2 was presented in August teleconference [tf3_1808_tse_P1914.3v2_draft_PAR_1.pdf](#)
- To proceed, we need to agree on the features list and the schedule for the project

Technical Considerations

- Should we just add control messages that can work alongside xRAN/ORAN's messages?
 - Message formats with RoE header are already defined by xRAN for beamforming
 - Message formats with RoE header are already defined xRAN for compressed data
 - Why should we define new message formats for the same thing?

Technical Considerations

- Eliminating the radio data mapping items removes the most difficult topics, leaving the following items:
 - Control messages:
 - Delay measurement
 - Loopback
 - Post-RoE demapper delays
 - Flow set-up and tear-down
 - Defect notification (as part of OAM)
 - Definition of UDP/IPvX/Ethernet encapsulation
 - OAM:
 - PMON counters at RoE mapper and demapper (e.g. total, late, and missing packets)
 - Event notification events (e.g. buffer overrun/underrun)
 - Consequential actions (e.g. CPRI replacement data at buffer underrun event)

Technical Considerations

- The following items were also suggested:
 - Define how forwarding priority is determined
 - Create Annex that shows relationships between parameters
 - Define a MIB or YANG model

Big Non-Technical Questions

- Will P1914.3v2 bring value to O-RAN Alliance or others?
- Will P1914.3v2's schedule be suitable for O-RAN Alliance or others?
- What will happen to the P1914 WG after P1914.1 finishes?
 - P1914.3 continues on its own?
 - Do we need a new set of WG officers?
- How many individuals will participate in P1914.3v2?
 - Do we have or can we get the right skill set to deliver the desired features?
 - Do we have enough participants to meet the target deadline?

Motion #N

- The WG agrees to defining the P1914.3v2 project with the following scope:
 1. The header and payload for the encapsulation of radio related IQ data, ~~coded or modulated bits, MIMO streams, beamforming information~~ and control data channels/flows into an encapsulating Ethernet frame or UDP/IP/Ethernet frame
 2. ~~The assignment, control, and algorithms for the compression and decompression of payload information between CU, DU and RU~~
 3. The control, protocols, mechanisms and structures to enable the initial establishment and continued operation, administration and maintenance of RAN equipment
- Mover:
- Seconder:
- Yes: ____ No: ____ Abstain: ____

Motion #N

- The WG agrees to proceed with P1914.3v2 by notifying our sponsor (IEEE Com/SDB) and then finalizing and submitting a PAR for this project.

- Mover:

- Seconder:

- Yes: ____ No: ____ Abstain: ____