

IEEE 1914 NGFI Working Group
Sponsored by the IEEE Communications Society

22-24 August 2016
Copenhagen, Denmark

Minutes

Chair: Jinri Huang
Co-Chair: Tazi Abdellah
Chief Editor: Jouni Korhonen
Chair of P1914.1: Bomin Li
Chair of P1914.3: Jouni Korhonen
Secretary: Zhou Zhen
Meeting Recorder: Zhou Zhen

Day 1, Monday, 22 August 2016

1. Call to Order

- The meeting was called to order at 9:00 am.
- All present introduced themselves and declared their affiliation.
- A sign in sheet captured attendance each day.
- **14 voting member attended meeting. Quorum was not reached.**

2. Approval of Agenda

- Chair Huang presented the agenda, [ngfi_1608_agenda_2.pdf](#).
- **Motion#1:**

*To approve the agenda for IEEE NGFI 1914 WG meeting in August 2016 as presented in
“00 201608 ver 3 Agenda for IEEE NGFI August meeting.xls”*

Moved by: Jouni Korhonen

Seconded by: Bomin Li

(procedural, required >50%)

Y: 27, N:0, A:0

(the meeting had no quorum so the motion has to be ratified later with an email motion)

3. IEEE Patent Policy

- Chair Huang displayed the patent slides. A call for potentially essential patents was made at **9:15** am. No potentially essential patent claims were declared, and no holders of potentially essential patents were identified.

4. Chair's Opening Report

- Chair Huang displayed the Chair's opening Report, [ngfi_1608_Huang_opening_1](#).

5. Incoming liaison from IEEE802.1

- Chair Huang presented the incoming liaison from IEEE802.1, [ngfi_1608_ils-ieee8021.pdf](#).
- It is suggested that given the WG just starts the work, it could send further LS when the WG has some concrete results some time in the future.

6. P1914.1 Opening Report

- Boming Li, P1914.1 Chair, presented the Task Force Opening Report, [tf1_1608_li_opening_1.pdf](#).

7. NGFI State-of-the-art Overview

- Boming Li, Comcores, presented NGFI State-of-the-art Overview, [tf1_1608_li_state-of-the-art_1.pdf](#).

8. 5G impact on FH transport & potential NGFI scenarios

- Jingri Huang, CMRI, presented 5G impact on FH transport & potential NGFI scenarios, [tf1_1608_Huang_gap-analysis-and-scenarios_2.pdf](#).

9. Transport Requirements for a 5G Broadband Use Case

- Vishwanath Ramamurthi, Verizon, presented Transport Requirements for a 5G Broadband Use Case, [tf1_082016_Ramamurthi_5GBroadbandTransportReq_3.pdf](#).

10. Practical approach to converged FH/BH network architecture and functional partitioning

- Jouni Korhonen, Broadcom Corporation, presented Practical approach to converged FH/BH network architecture and functional partitioning, [tf1_1608_korhonen_practical_approach_2](#).

11. Next Generation Fronthaul Interface Use Cases & Scenarios

- Lujing Cai, AT&T, presented Next Generation Fronthaul Interface Use Cases & Scenarios by teleconference system, [tf1_1608_cai_kapoulas_tazi_NGFI_use_cases_3.pdf](#).

12. P1914.3 Opening Report

- Jouni Korhonen, P1914.3 Chair, presented the Task Force Opening Report, [tf3_1608_opening_1.pdf](#).

13. Resolution of D1.1 comments

- Richard Maiden, P1914.3 Task Force Editor, presented Comments with Proposed Responses, [tf3_1608_comments_proposed](#).
- Most of comments were resolved. Several comments were left to discuss tomorrow

The WG recessed at 6:06pm.

Day 2, Tuesday, 23 August 2016

The WG reconvened at 9:05am. Introductions by all attendees were made.

Boming Li, P1914.1 Chair, resumed P1914.1 meeting.

14. NG Fronthaul Network Requirements and Architecture

- Tony Tam, Fujitsu Network Communications, presented NG Fronthaul Network Requirements and Architecture, [tf1_1608_Tam_NGFI-Requirements-and-Architecture_2.pdf](#).

15. Fronthaul architecture towards 5G

- Aleksandra Checko, MTI, presented Fronthaul architecture towards 5G, [tf1_1608_Checko_FronthaulConsiderations_2.pdf](#).

16. Considerations on synchronization in CRAN fronthaul architecture

- Lu Yang, RITT, presented Considerations on synchronization in CRAN fronthaul architecture, [tf1_1608_lu_Sync-in-CRAN_2.pdf](#).

17. Latency requirements and analysis

- Jian Yang, ZTE, presented Latency requirements and analysis, [tf1_1608_yang_Latency-requirements-and-analysis_1](#).

18. The impact of 5G air interfaces on converged fronthaul/backhaul

- Jens Bartelt, TU Dresden, presented The impact of 5G air interfaces on converged fronthaul/backhaul, [tf1_1608_Bartelt_5GFronthaul_2.pdf](#).

19. Towards a unified BH/FH data plane: 5G-Crosshaul

- Andres Garcia Saavedra, NEC Laboratories Europe, presented Towards a unified BH/FH data plane: 5G-Crosshaul, [tf3_1604_bross_1pps_1.pdf](#).

20. Resolution of D1.1 comments

- Richard Maiden, P1914.3 Task Force Editor, presented Comments with Proposed Responses, [tf3_1608_comments_proposed](#).
- All comments were resolved.

21. P1914.3 Closing Report

- Jouni Korhonen, Task Force 3 Chair, presented P1914.3 closing report, [tf3_1608_closing_1.pdf](#).
- **Motion#2:**

Authorize the Editor to incorporate the resolved comments from the August 2016 1914.3 TF meeting as recorded in [tf3_1608_comments_resolved.pdf](#) and produce draft IEEE P1914.3/D1.2. Editor has a license to resolve conflicts and apply editorial changes as needed.

Moved: Richard Maiden

Seconded: Boming Li

Yes: 11 No: 0 Abstain: 0 (tech. >= 2/3)

(chair did not vote)

(the meeting had no quorum so the motion has to be ratified later with an email motion)

The WG recessed at 5:45pm.

Day 3, Wednesday, 24 August 2016

The WG reconvened at 9:00am.

Boming Li, P1914.1 Chair, resumed P1914.1 meeting.

22. Flexible Ethernet Fronthaul

- Philippos Assimakopoulos, University of Kent, presented Flexible Ethernet Fronthaul, [tfl_1608_Assimakopoulos_Flexible-Ethernet-Fronthaul_2.pdf](#).

23. Proposed options for functional splits for CRAN and fronthaul

- Andres Garcia Saavedra, NEC Laboratories Europe, presented Proposed options for functional splits for CRAN and fronthaul, [tfl_1608_garcia-saavedra_RAN-split_1.pdf](#).

24. L1 offload demonstration of NGFI downlink

- Rami Al-obaidi, Comcores, presented L1 offload demonstration of NGFI downlink, [tfl_1608_al-obaidi_l1-offload_1.pdf](#).

25. Functional Split Impact on RRU Power Consumption

- Khalid Al-Mufti, CommScope, presented Functional Split Impact on RRU Power Consumption, [tfl_1608_almufti_energyEffeciencyWithNGFI_1.pptx](#).

26. P1914.1 Closing Report

- Boming Li, P1914.1 Chair, presented the Task Force Closing Report, [tfl_1608_closing_1.pdf](#).

27. Future meeting discussion

- WG planned to have next meeting on October 26-28th in San Jose, hosted by Microsecmi.
- Teleconference meeting schedule was discussed. It is decided that P1914.1 will hold bi-weekly telco meetings. And Bomin Li will set up a doodle poll to investigate the meeting date&time. The WG will have WG-level telco once per month yet the date&time is flexible, up to Chair to choose.

28. WG Closing Report

- Chair Huang presented the WG Closing Report, [ngfi_1608_closing_1.pdf](#).

29. Any other Business

- No other business was brought before the WG.

30. Adjourn

- The WG adjourned at 12:22 am.

Attendance Record

First Name	Last Name	Affiliation	Attendance		
			Monday August 22, 2016	Tuesday, August 23, 2016	Wednesday August 24, 2016
Aleksandra	Checko	MTI Radiocomp	X	X	X
Andres	ARJONA	Nokia	X	X	X
Andres	Garcia Saavedra	NEC	X	X	X
Bomin	Li	Comcores	X	X	X
Filippos	Asimakopoulos	University of Kent	X	X	X
Hans	Sjostrand	Infinera	X	X	X
Jens	Bartelt	TU Dresden	X	X	X
Jian	Yang	ZTE	X	X	X
Jinri	Huang	CMRI	X	X	X
Jonathan	Goldberg	IEEE Standards Association	X	X	X
Jouni	Korhonen	Broadcom Corporation	X	X	X
Kari	Vierimaa	Sarokal Test Systems	X	X	X
Khalid	Al-Mufti	CommScope	X	X	X
Leon	Bruckman	IP Light	X	X	X
Luca	Cominardi	InterDigital Europe	X	X	X
Massimo	Tornatore	SMOptics	X	X	
Natasha	Alvarado	IEEE	X	X	X
Ofir	Mahazri	ASOCS	X	X	X
Peter Kwangho	Cho	Actus Networks	X	X	X
Rami	Al-obaidi	Comcores	X	X	X
Sassan	Ahmadi	Xilinx	X	X	X
Stefano	Barbagallo	Xilinx	X	X	X
Steinar	Bjørnstad	Transpacket	X	X	
Stuart	Whitehead	Anritsu	X	X	X
Tien-Shou	Chang	Hon Hai Precision Ind. Co.	X	X	X
Tony (Shau-Chia)	Tam	Fujitsu Network Communications	X	X	X
Vishwanath	Ramamurthi	Verizon	X	X	X
Yang	Lu	RITT	X	X	X
Yanwei	Wu	ZTE	X	X	X
Zhen	Zhou	Fiberhome	X	X	X