IEEE 1914 NGFI Working Group

Sponsored by the IEEE Communications Society

19-21 April 2017
Dallas, USA

Minutes

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

Day 1, Wednesday, 19 April 2017

1. **Call to Order**
- The meeting was called to order at 9:15 am.
- All present introduced themselves and declared their affiliation.
- A sign in sheet captured attendance each day.
- **14** voting member attended meeting. Quorum was reached.

2. **Approval of Agenda**
- Chair Huang presented the agenda, *ngfi_1704_agenda_huang_2.pdf*.
- Everyone agreed the agenda.

3. **Chair's Opening Report**
- Chair Huang displayed the Chair's opening Report, *ngfi_1704_Huang_opening-report_1.pdf*.
- Chair Huang presented WG information and updates since last meeting.
- Chair Huang presented the plan for this meeting.

4. **IEEE Patent Policy**
- Chair Huang displayed the patent slides. A call for potentially essential patents was made at 9:20 am. No potentially essential patent claims were declared, and no holders of potentially essential patents were identified.

5. **Approval of Past Meeting Minutes**
- Chair Huang presented Past Meeting Minutes, *ngfi_1701_zhen_meeting-minutes_2.pdf*.
- ***Motion#1:***
  To approve the meeting minute of IEEE NGFI 1914 WG January 2017F2F meeting as in ngfi_1701_zhen_meeting-minutes_2.pdf.
  Moved: Aleksandra Checko
  Seconded: Tony Tam
  (Procedural, required>50%)
  Y: 11, N:0, A:0
  Motion passed

6. Executive Secretary Report

- Chair Huang presented executive secretary report, *ngfi_1704_zhou_secretary-report.pdf*.
- A report on working group member was provided.

7. Treasurer's Report

- Tony Tam, Treasurer, presented the treasure report, *ngfi_1704_tam_treasurer-report_1.pdf*.
- Balance of WG account and details were shown.

8. P1914.3 Opening Report

- Jouni Korhonen, P1914.3 Chair, presented the Task Force Opening Report, *tf3_1704_opening_1.pdf*.

9. Frequency domain IQ

- Richard Maiden, Intel, presented Frequency domain IQ, *tf3_1704_maiden_native-mode_2.pdf* .
- Three Straw Poll were made after discussion.
- ***Straw poll #1***

  • *Add a description of the functional split consistent with tf3_1610_maiden_native-packet-types_2.pdf*

  • *Add new de/mapper type to mapper and demapper parameter list.*

    • *.mapperType = 3 indicates time domain native mode*

    • *.mapperType = 4 indicates frequency domain native mode*

  • *Add mapper[mapperID].fftID parameters as defined in page 8 of tf3_1704_maiden_native-mode_1.pdf.*

  • *Editor has licence to update other areas to be consistent with the above. e.g., PCS*
    Voting member (From 12)
    Yes: 10 No: 0 Abstain 1
    Whole people in the Room(From 24)
    Yes: 16 No: 0 Abstain 4

- ***Straw poll #2***

  • *Add new subType for PRACH as outlined in page 11 of tf3_1704_maiden_native-mode_1.pdf.*

  • *Editor has licence to update other areas to be consistent with the above. e.g., PCS*
    Voting member (From 12)

    *Use subType: _7_ Use flowID _5__ No: _0_ Abstain: _2_*
    Whole people in the Room(From 25)

    *Use subType: _11 Use flowID _5_ No: _0__ Abstain: _9_*
    (Use subType and Use flowID can be both selected.)

- ***Straw poll #3***

  • *Add new parameters for PRACH as outlined in page 12 of tf3_1704_maiden_native-mode_1.pdf.*

  • *Editor has licence to update other areas to be consistent with the above. e.g., PCS*
    Voting member (From 12)
    Yes: 10 No: 0 Abstain 0
    Whole people in the Room(From 24)
    Yes: 23 No: 0 Abstain 0

10. RoE demo

- Aleksandra Checko, MTI, presented RoE demo, *tf3_1704_Checko_RoEDemo_1.pdf* .

11. Feasibility of Radio over Ethernet -demonstration with time synch

- Peter Cho, `Actus Networks`, presented Feasiblity of Radio over Ethernet -demonstration with time synch, *tf3_1704_Kim_PoC-of-Structure-Agnostic-RoE_2.pdf*.

12. P1914.3 Closing Report

- Jouni Korhonen, Task Force 3 Chair, presented P1914.3 closing report, *tf3_1704_closing_1.pdf*.
- ***Motion#2:***
  IEEE P1914.3 RoE needs an EthType. Grant the IEEE 1914 WG and IEEE P1914.3 TF chairs right to initiate the application process for applying an EthType from RAC.
  Moved: Jouni Korhonen
  Seconded: Kevin Bross
  (Procedural, required>50%)
  Y: 11, N:0, A:0
  Motion passed

13. P1914.1 Opening Report

  Bomin Li, P1914.1 Chair, presented the Task Force Opening Report, *tf1_1704_li_opening_1.pdf*.

14. P1914.1/D0.2 status and review

- Jouni Korhonen, Broadcom Corporation, presented IEEE P1914.1/D0.2 word version file, *Draft documents*.
- IEEE P1914.1 Draft is password protected, and the password is provided in P1904.1 meeting.

15. NGFI RMIX traffic profile

- Jouni Korhonen, Broadcom Corporation, presented NGFI RMIX traffic profile, *tf1_1704_korhonen_rmix_2.pdf*.
- ***Motion#3:***
  Agree to add an RMIX profile Annex to the IEEE P1914.1 standard using as a baseline for the content specified in tf1_1704_korhonen_rmix_1.pdf side 6.
  Moved: Jouni Korhonen
  Seconded: Richard Tse
  (Technical, Required>=2/3)
  Y: 10, N:0, A:1
  Motion passed

16. Throughput requirements

- Aleksandra Checko, MTI, presented Throughput requirements, *tf1_1704_Checko_ThroughputRequirements_3.pdf* .

- *Straw poll #4*

  Terminology: use throughput in definitions saying it is a transport throughput unless otherwise specified in IEEE 1914.1 standard.
    Yes: 19 No: 0 Abstain 2 (Whole people in the Room)

- *Straw poll #5*

  Do we need more discussion on:"Remove throughput requirements from NGFI transport class of service definition. Refer to throughput as informative"?
    Yes: 3 No: 8 Abstain 8 (Whole people in the Room)

- *Motion#4:*

  In an appendix, show formulas and parameter definitions from tf1_1704_Checko_FHDimensioning_1.xlsm as a baseline for throughput calculations. Add informative reference that LTE calculations are as in SCF 159 document and are extended with fronthaul parameters.
    Moved: Aleksandra Checko
    Seconded: Tony Tam
    (Technical, Required>=2/3)
    Y: 12, N:0, A:0
    Motion passed

- *Motion#5:*

  Remove the throughput requirement column from Table 2 in IEEE 1914.1 D0.2 page 19.
    Moved: Aleksandra Checko
    Seconded: Stuart Whitehead
    (Technical, Required>=2/3)
    Y: 11, N:0, A:0
    Motion passed

The WG recessed at 5:45pm.

Day 2, Thursday, 20 April 2017

The WG reconvened at 9:00am.

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

17. NGFI COS specification

- Lujing Cai, AT&T, presented NGFI COS specification, *tf1_1702_cai-tazi_NGFI-COS-specification_1.pdf*.

- *Motion#6:*

  Agree as base line to class of service priority levels according to rank of the latency requirements, i.e., tighter latency data traffic will be assigned to class of service with more strict priority level.
    Moved: Lujing Cai
    Seconded: Aleksandra Checko
    (Technical, Required>=2/3)
    Y: 11, N:0, A:0
    Motion passed

- *Motion#7:*

  Agree to amend the class of service table 2 in draft D0.2 on page 19 to have total 4 subclasses in

the data-plane class of service, and the latency values of those subclasses, as referenced in slide 5 of tf1_1704_cai-tazi_NGFI-motion-proposal_1.pdf.
  Moved: Lujing Cai
  Seconded: Aleksandra Checko
  (Technical, Required>=2/3)
  Y: 11, N:0, A:0
  Motion passed

18. 5G transport latency requirement analysis

- Lujing Cai, AT&T, presented 5G transport latency requirement analysis, tf1_1704_cai-tazi_5G-transport-latency-requirement-analysis_1.pdf.

19. Network slicing

- Tony Tam, Fujitsu, presented Network slicing, tf1_1704_Tam_Transport-Network-Slicing_2.pdf.

20. OAM Asymmetric latency

- Leon Bruckman, IP Sight, presented OAM Asymmetric latency, tf1_1704_bruckman_asymmetric-latency_1.pdf.

21. NGFI line rates

- Leon Bruckman, IP Sight, presented NGFI line rates, tf1_1704_bruckman_NGFI-line-rates_1.pdf.

The WG recessed at 5:45pm.

Day 3, Friday, 21 April 2017

The WG reconvened at 9:00am.

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

22. NGFI node refernce model

- Leon Bruckman, IP Sight, NGFI node refernce model, tf1_1704_bruckman_node-reference-model_1.pdf.
- ***Motion#8:***
  Agree as a base line the reference model on page 6 in tf1_1704_bruckman_node-reference-model_2.pdf.
  Moved: Leon Bruckman
  Seconded: Richard Tse
  (Technical, Required>=2/3)
  Y: 11, N:0, A:0
  Motion passed

23. Discussion on future teleconferences and way forward

- Bomin Li, P1914.1 Chair, made discussion on future teleconferences.
- Chair Huang made discussion on way forward, *ngfi_1704_Huang_way-forward_1.pdf*.

24. P1914.1 Closing Report
- Bomin Li, P1914.1 Chair, presented the Task Force Closing Report, *tf1_1704_li_closing_1.pdf*.

25. 2017 meeting plan discussion
- 2017 meeting schedule was discussed. It was decided that NGFI would have 5 meetings in 2017.
- WG planned to have next meeting on June 28-30, Oulu, Finland, hosted by Sarokal.
- WG planned to have meeting in September and December, the prefer date was written in WG closing report.
- Host of future meetings were needed.

26. WG Closing Report
- Chair Huang presented the WG Closing Report, *ngfi-1704_Huang-closing-report_1.pdf*.

27. Any other Business
- No other business was brought before the WG.

28. Adjourn
- The WG adjourned at 11:45 am.

Attendance Record

First Name	Last Name	Affiliation	Attendance		
			Wednesday April 19, 2017	Thursday April 20, 2017	Friday April 21, 2017
Abdellah	Tazi	AT&T	X	X	X
Aleksandra	Checko	MTI Radiocomp	X	X	X
Andres	ARJONA	Nokia	X	X	X
Bob	Cai	Fujitsu	X	X	X
David	Sdencen	Qulsar	X	X	X
Bomin	Li	Comcores	X	X	X
Harri	Valasma	Sarokal Test Systems	X	X	
Jinri	Huang	CMRI	X	X	X
John	Govert	Viavi Solutions	X	X	
Jouni	Korhonen	Broadcom Corporation	X		X
Ju Bin	Song	Kyung Hee University	X	X	
Kevin	Bross	Intel	X	X	X
Leon	Bruckman	IP Light	X	X	X
Lujing	Cai	AT&T	X	X	X
Mohammad	Akhter	IDT Canada Inc.	X	X	X
Mika	Castren	Sarokal Test Systems	X	X	
Peter Kwangho	Cho	Actus Networks	X	X	X
Richard	Maiden	Altera	X	X	X
Richard	Tse	Microsemi	X	X	X
Robert*	Deletto	Keysight		X	
Sivasubramaniam	Ramanan	NEC	X	X	X
Sridhar	Rajagopal	MAVENIR	X	X	X
Santosh	Kar	EXFO		X	X
Stuart	Whitehead	Anritsu	X	X	X
Tony (Shau-Chia)	Tam	Fujitsu Network Communications	X	X	X
Vincenzo	Sestito	SM Optics.	X	X	X
Vishwanath	Ramamurthi	VERIZON	X	X	X
Wei	Cheng	Centec Networks (Suzhou) Co.,Ltd.	X	X	X
Yanwei	Wu	ZTE	X	X	X
Yasuaki	Kawatsu	APRESIA Systems	X	X	X

* The meeting attendance threshold was not met. The meeting attendance is only credited for those who attended at least 50% of meeting duration.