**IEEE Communications Society Standards Development Board (COM/SDB)**

**Approved Minutes**

Wednesday, September 21, 2016, 10:00 AM EDT – 12:00 PM EDT

**Teleconference via WebEx**

1. **Call to Order**

Prof. Mehmet (Chair) called the meeting to order at 10:05 AM EDT and reminded participants about IEEE Standards and the Law <http://standards.ieee.org/develop/policies/stdslaw.pdf>, and to declare or update their affiliations and standards activities listed in the Roll Call.

1. **Roll Call and Establish Quorum**

Chair conducted the roll call with 7 voting members present: Quorum is achieved.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Voting Members** | **Attendance** | **Voting Status** | **Affiliations** | **Standards Participation** |
| Mehmet Ulema (Chair) | X | X | * Professor, Manhattan College * Director, Standards Development Board, IEEE ComSoc * Chair, IEEE COM/SDB * Advisory Member, IEEE COM/SPDB * Member, IEEE SASB * Member, IEEE-SA RevCom * Member, IEEE-SA AudCom | * Chair, IEEE P1903.1, P1903.2, P1903.3 * Chair, IEEE 1903 WG |
| Glen Kramer (Vice-Chair, Treasurer) | X | X | * Technical Director, Broadcom Ltd. * Vice-Chair & Treasurer, IEEE COM/SDB | * Chair, IEEE 1904 WG |
| Niranth Amogh (Secretary) | X | X | * Principal Researcher, Huawei * Secretary, IEEE COM/SDB | * IEEE P1903.1, P1903.2, P1903.3 * Vice-Chair, GISFI CSeON WG * TSDSI * 3GPP SA6 |
| Brian Daly | X | X | * Director, AT&T * Member, IEEE COM/SDB | * 3GPP * ATIS * 4G Americas * Next Gen Mobile Network Alliance * IEEE 802 |
| Jean-Philippe Faure “JP” | X | X | * CEO, Progilon (Representing Panasonic in IEEE activities) * Chair, IEEE-SA SASB * Member, IEEE COM/SDB * Chair, IEEE COM/PLC | * Chair, IEEE P1901 * IEEE P1905.1 |
| Hiroshi Harada |  | X | * Director, Smart Wireless Laboratory, NICT * Co-Founder, Wi-SUN Alliance   + Co-Chair, Board   + Chair, ECHONET WG * Board, WhiteSpace Alliance * Board of Directors, Wireless Innovation Forum (SDR Forum) * Visiting Professor, University of Electro-Communications * Chair, IEEE COM/DySPAN-SC * Member, IEEE COM/SDB * Professor, Kyoto University | * Vice Chair, IEEE 1900.4, 802.15.4g, 802.15.4m * Vice Chair, TIA TR-51 * Chair, Public Broadband Mobile Communication Development Committee, ARIB |
| Chih-Lin I |  | X | * Chief Scientist, Wireless, CMCC * Member, IEEE COM/SDB * Member, IEEE ComSoc SPC | * IEEE P1914 * 3GPP |
| Jon Rosdahl | X | X | * Engineer, Senior Staff, Qualcomm Technologies, Inc. * Member, IEEE COM/SDB | * Executive Secretary, IEEE 802 * Vice Chair & Treasurer, IEEE 802.11 * Vice Chair/Secretary, IEEE 802.11 REVmc TG |
| Ariel Sobelman | X |  | * Valens Semiconductor * HDBaseT Alliance * Member, IEEE COM/SDB * Member, IEEE CAG | * Chair, IEEE 1911 |
| **Advisory Members** | | |  |  |
| Alex Gelman | X | - | * CTO, NETovations Group, LLC * Director and Chair, Standardization Programs Development Board, IEEE ComSoc * Advisory Member, IEEE COM/SDB * Member, IEEE SCC42 Transportation * Member, IEEE Sensors Council Standards Committee | * No standards participation |
| Kevin Lu | X | - | * Adjunct Professor, Stevens * Advisory Member, IEEE COM/SDB * Vice-Chair, IEEE COM/SPDB * Member, IEEE-SA NesCom * Member, IEEE SASB * Member , IEEE-SA ICCom * Member, IEEE SCC42 Transportation | * No standards participation |
| Curtis Siller |  | - | * Enginnovation * Advisory Member, IEEE COM/SDB * Member, IEEE ComSoc Governance Committee * Member, IEEE ComSoc ad hoc Fellow Evaluation Committee * Director, IEEE ComSoc Sister and Related Societies * Corresponding member to IEEE History Committee, on behalf of (but NOT member of) PSPB | * No standards participation |
| **Ex Officio Member** | | |  |  |
| Rob Fish |  | - | * President, NETovations Group, LLC * VP, Industry and Standards, IEEE ComSoc * Princeton University * Ex-Officio Member, IEEE COM/SDB * Member, IEEE Conferences Committee | * No standards participation |
| **IEEE SA Staff Support** | | |  |  |
| Brenda Mancuso |  | - | * Client Services Manager, IEEE-SA | * No standards participation |
| Jonathan Goldberg | X | - | * Manager, IEEE-SA, Operational Program Management | * No standards participation |
| Natasha Alvarado |  | - | * Project Associate, IEEE SA | * No standards participation |
| Soo Kim | X | - | * Client Services Manager, IEEE-SA | * No standards participation |
| **Other Participants** | | |  |  |
| Abhay Karandikar | X | - | * IIT-Bombay | * Vice-Chair & DG, TSDSI |
| Peter Thermos | X | - | * Palindrome Technologies | * Chair, IEEE 1917.1 RVE |
| Wilbert Adams | X | - | * Huawei | * IEEE 2413 |
| Prof. Jaafar Elmirghani | X | - | * Univ. of Leeds, UK * Co-Chair, IEEE Green ICT Initiative | * No standards participation |
| Thomas Dandres | X | - | * CIRAIG & Synchromedia Lab.) * IEEE Green ICT Initiative | * No standards participation |
| Andrew Hughes | X | - | * Program Director for the IEEE Green ICT Initiative. | * No standards participation |
| Mohamed Cheriet | X | - | * Synchromedia Lab | * No standards participation |
| Ana Carolina Riekstin | X | - | * Synchromedia Lab | * No standards participation |
| Kim Nguyen | X | - | * Synchromedia Lab | * No standards participation |
| Taisir El-Gorashi | X | - | * Univ. of Leeds, UK | * No standards participation |
| Earl McCune | X | - | * MTT, Eridan Communications | * No standards participation |
| **ComSoc TC Liaisons** | | |  |  |
| Aman Singh | X | - | * Palindrome Technologies Inc | * IEEE P1915 * IEEE P1916 |

Appendix A provides a list of Liaisons (or Chair if there is no designated standards liaison) from ComSoc Technical Committees and Emerging Technical Subcommittees.

1. **[DECISION] Approval of Agenda**

* Chair presented the Agenda for the meeting.
* **[Motion]** “Approve the Agenda” - Niranth moved and Jon seconded.

**[Result] APPROVED** by acclamation as there were no objections.

1. **[DECISION] Approval of the COM/SDB Minutes of the last meeting**

* **[Motion]** “Approve the COM/SDB 22-Jul’16 minutes” - Niranth moved and Brian Daly seconded.

**[Result] APPROVED** by acclamation as there were no objections.

1. **Old and Unfinished Business**
   1. **None**
2. **New Business**
   1. **P1930.1 SDN based Middleware for Control and Management of IEEE Wireless Networks.**

* **[Motion] “Approve P1930.1 PAR and create a SDN-MCM Working Group with Pranav Jha appointed as WG chair” Jon moved and Alex Gelman seconded.**

**[Result] APPROVED by general acclamation as there are no objections**

**Prof. Mehmet moved the chairmanship to Glen Kramer**

* 1. **P1903.1, P1903.2, P1903 .3 Extensions for another year.**

**PAR extension form is required.**

**Postpone to next meeting.**

**1903 WG should bring the result of the motion to COM/SDB.**

**Glen Kramer moved the chairmanship to Prof. Mehmet**

* 1. **P1922.1 for GICT 1 Standard for a method for calculating anticipated emissions caused by virtual machine migration and placement**
* **[Motion] “Approve P1922.1 PAR and create a GICT Emissions Working Group with Mohamed Cheriet appointed as WG chair” Alex Gelman moved and Ariel Sobelman seconded.**

**[Result] APPROVED by general acclamation as there are no objections**

* 1. **P1922.2 for GICT 2 Standard for a method to calculate near real-time emissions of ICT infrastructure**
* **[Motion] “Approve P1922.2 PAR and assign the project to GICT Emissions WG” Alex Gelman moved and Jon seconded.**

**[Result] APPROVED by general acclamation as there are no objections**

* 1. **P1923.1 for GICT 9 PAR Standard for computation of energy efficiency upper bound for apparatus processing communication signal waveforms**
* **[Motion] “Approve P1923.1 PAR and create a GICT Energy Efficient Comm Hardware Working Group with Earl McCune appointed as WG chair” Alex Gelman moved and Brian Daly seconded.**

**[Result] APPROVED by general acclamation as there are no objections**

* 1. **P1924.1 for GICT 6 PAR Recommended practice for developing energy efficient power-proportional digital architectures**
* **[Motion] “Approve P1924.1 PAR and assign the project to GICT Energy Efficient Comm Hardware WG” Alex Gelman moved and Ariel seconded.**

**[Result] APPROVED by general acclamation as there are no objections**

* 1. **P1925.1 for GICT 4 PAR Standard for Energy Efficient Dynamic Line Rate Transmission System**
* **[Motion] “Approve P1925.1 PAR and create a Energy Efficient ICT Working Group with Jaafar Elmirghani appointed as WG chair” Alex Gelman moved and Jon seconded.**

**[Result] APPROVED by general acclamation as there are no objections**

* 1. **P1926.1 for GICT 7 PAR Standard for a Functional Architecture of Distributed Energy Efficient Big Data Processing**
* **Postponed to next meeting**
  1. **P1927.1 for GICT 5 PAR Standard for Services Provided by the Energy-efficient Orchestration and Management of Virtualized Distributed Data Centers Interconnected by a Virtualized Network**
* **Postponed to next meeting**
  1. **P1928.1 for GICT 10 PAR Standard for a Mechanism for Energy Efficient Virtual Machine Placement**
* **Postponed to next meeting**
  1. **P1929.1 for GICT 8 PAR An Architectural Framework for Energy Efficient Content Distribution**
* **Postponed to next meeting**

1. **[INFORMATION] Reports // Postponed to next meeting**
   1. **Chair**
      1. Membership and Voting status of the members

* Reminder to adhere to COM/SDB policies and procedures.
  + 1. Report on IEEE SASB meetings
* PAR 1914.3 and PAR 2410rev were approved.
  + 1. Report on Ad hoc groups
* No update. (OPS manual draft to be available by 15-Jul’16.)
  + 1. Others
* New PAR proposals and Rapid reaction standardization meetings are expected. (e.g. Green ICT, 5G)
  1. **Financial Report**
* No update.
  1. **Reports from Working Group Chairs**
* **1652 Communication Electroacoustics:**

Final P1652a is approved by RevCom

* **1903 NGSON - P1903.1/P1903.2/P1903.3:**

WG completed its draft standards (P1903.1, P1903.2 and P1903.3) that are available for sponsor ballot.

Sponsor ballot to be initiated in last week of Sep’16

* **1904 Access Networks – P1904.1 rev, P1904.2, P1904.3:**

P1904.1 rev – comments are received and sponsor ballot will be created soon.

P1904.2 – Scope will be narrowed..

P1904.3 – Has been transferred to 1914 WG as P1914.3. Approved by SASB

* **1908.1 Indic Virtual Keyboards:**

Group has not been providing any updates, even upon request.

The group seems to have been contributing to the related work in TSDSI (Indian local standards body).

AI: Soo Kim, Prof. Mehmet, Niranth and Sri Chandra to have further discussion and arrive at a suitable arrangement with TSDSI.

* **1910 Loop-Free Switching and Routing - 1910.1**

No update.

(Last meeting held during Feb’16. Next meeting during Aug’16. F2F to be co-located with GLOBECOM 2016

WG is making technical progress)

* **1911 HDBT5 – 1911.1, 1911.2, 1911.3**

P1911.1 and P1911.2 – There is intent to withdraw the PARs.

P1911.3 – There is intent to modify the PAR.

AI: The PAR withdrawal procedure needs to be adhered to. Prof. Mehmet to remind the WG about the related procedure.

* **1912 Privacy and Security Architecture for Consumer Wireless Devices**

No update

Outline is in progress

Meetings are being conducted periodically.

Next F2F in Jan 2017.

* **1913 Software Defined Quantum Communications**

Report was received.

Regular monthly meetings are conducted.

WG is making technical progress and the P&Ps are being prepared.

Liaison with ONF is in progress.

* **NGFI – P1914.1**

Report was received.

1904.3 is transferred to 1914.3

Appointed new WG officers:

• Tazi Abdellah from AT&T as WG co-chair;

• Jouni Korhonen from Broadcom as Chief Editor, editor of 1914.1 and chair of 1914.3

• Bomin Li from Comcores Aps. as chair of 1914.1 project;

• Zhen Zhou from Fiberhome as WG secretary.

• Richard Maiden as 1914.3 editor

(COM/SDB needs to approve these appointments)

F2F meeting will be organized in Denmark during August 2016.

* **SVE – P1915.1**

No update

Next meeting in planned in Jul’16

* **PVE – P1916.1**

No update

P&P was approved. Officers were appointed.

Technical work is in progress. Debate going on modeling.

* **RVE – P1917.1**

New Chair is appointed.

First meeting is being planned.

* **1918.1 Tactile Internet**

P&P was approved by Sponsor.

1918.1.1 PAR was approved by Sponsor.

* **1920 Aerial Communications**

Preparing for the meeting in Sep’16

* **2410 BOP**

Revised PAR was approved by SASB.

COM/SDB remains as the sponsor for this WG.

* **2413 IoT Framework**

There is a quarterly report sent to CAG (primary sponsor) which should be shared to COM/SDB (co-sponsor).

Requirement of liaison to be further discussed.

* 1. **Reports from ComSoc Standards Committee**
* DySPAN
* No update.
* PLC

- No update

* 1. **CAG Report**
* Open Source Ad Hoc is making slow progress. Not clear when a plan will be produced. Licensing models are being discussed.

1. **Adjournment**
2. **[Motion] “Adjourn the meeting” Jon moved and Ariel seconded.**

**[Result] APPROVED by general acclamation as there are no objections**

* Next meeting – Chair to run a doodle poll.
* Chair thanked everyone for participating in the meeting and adjourned the meeting at 12:02 PM EDT.

**Appendix A: ComSoc Technical Committee and Subcommittee Liaisons**

|  |  |  |
| --- | --- | --- |
| **Technical Committee** | **Liaison** | **Affiliation** |
| Ad Hoc & Sensor Networks | R. Venkatesha Prasad | TU Delft |
| Cognitive Networks | Mouli Chandramouli | Stevens |
| Communications & Information Security | Neeli Prasad | Aalborg University |
| Communications Quality & Reliability | Hideaki Yoshino | NTT |
| Communications Software | Jaime Lloret Mauri | Polytechnic University of Valencia |
| Communications Switching & Routing | Henry Suthon | Barrios Technology |
| Communications Systems Integration & Modeling | Harry (Charalabos) Skianis | U Aegean |
| Communication Theory | Sana Sfar | HKUST |
| Computer Communications | R. Venkatesha Prasad | TU Delft |
| Data Storage | Tiffany Jing Li | Lehigh |
| e-Health | Hsi-Pin Ma | National Tsing Hua University |
| High-Speed Networking | Gumaste Ashwin | IIT/MIT |
| Information Infrastructure & Networking | Yacine Ghamri-Doudane | ENSIIE |
| Internet | Periklis Chatzimisios | ATEITHE |
| Multimedia Communications | Ali Begen | Cisco |
| Network Operations & Management | Marcus Brunner | NEC Europe |
| Optical Networking | Josué Kuri | Infinera |
| Power Line Communications | Haniph Latchman | U Florida |
| Radio Communications | George Chrisikos | Qualcomm |
| Satellite & Space Communications | Igor Bisio | University of Genoa |
| Signal Processing & Communications Electronics | Rath Vannithamby | Intel |
| Transmission, Access, & Optical Systems | Frank Effenberger | Huawei |
| Wireless Communications | Sumei Sun | Institute for Infocomm Research |
| **Emerging Technical Subcommittee** |  |  |
| Applications of Nanotechnologies in Communications | Dilip Krishnaswamy | Qualcomm |
| Autonomic Communications | Spyros Denazis | University of Patras |
| Cable Networks & Services | Mehmet Toy | Comcast |
| Cloud Communications & Networking | Masum Z. Hasan | Cisco |
| Green Communications and Computing | Jinsong Wu  Shengjie Zhao | Alcatel-Lucent  Tongji University, China |
| Human Centric Communications | John Buford | Avaya |
| Innovation and Standards in Information and Communication Technologies (ISICT) | SM Hasan | GE |
| Integrated Fiber & Wireless Technologies | Steve Weinstein | CTTC |
| Internet of Things | Latif Ladid | IPv6 Forum |
| Nano-Scale, Molecular, and Quantum Networking | Andrew Eckford | York University |
| Peer-to-Peer Networking | John Buford | Avaya |
| Situation Management | Gabe Jakobson | Altusys |
| Smart Grid Communications | Petar Popovski | Aalborg University |
| Social Networks | Kwang-Cheng Chen | National Taiwan University |
| Vehicular Networks & Telematics Applications (VNTA) | T. Russell Hsing | National Chiao Tung University |