IEEE 802 EC
ITU standing committee

Glenn Parsons – Ericsson

glenn.parsons@ericsson.com
+1 613 963 8141

July 15, 2020

Mentor DCN: EC-20-0121-01-INTL

July meeting agenda

- Role of this standing committee
- IEEE membership in ITU
- Update on IEEE-SA BOG activities with ITU
- Review outcome of past meetings
  - ITU-R RAG – May 2020
  - ITU-D TDAG – June 2020
  - ITU Council – June 2020 *virtual consultation*
- Review future meetings
  - ITU-T TSAG – Sept 2020
  - ITU GSR – Sept 2020
  - ITU WSIS+15 – Sept 2020
  - ITU-T WTSA – Nov 2020 *(or Feb 2021)*

Role of the ITU standing committee

Objective

- Provide IEEE 802 input into IEEE-SA engagements with ITU
- Receive updates on IEEE-SA engagements with ITU
- Do not interfere with existing technical liaisons to ITU-T (e.g., in 802.1, 802.3)
- Do not interfere with existing regulatory and technical liaisons with ITU-R (e.g., in 802.18)

LMSC P&P section 5.6, item #2

http://standards.ieee.org/about/sasb/audcom/pnp/LMSC.pdf

- The subgroup is responsible for assisting the Sponsor (e.g., drafting all or a portion of a document, drafting responses to comments, drafting public statements on standards, or other purely advisory functions).

Operating practice

- **Consensus**
  - Any voting, approvals will be done by the EC
- **Reciprocal attendance rights for 802 WGs**
  - policy is per home WG
- **Preparatory meetings for upcoming ITU events for IEEE**
  - Formalize current volunteer engagement
  - Summarize issues to de discussed per ITU event
    - IEEE-SA staff will indicate targeted ITU events to guide the agenda
  - Review proposed positions/contributions
    - IEEE-SA staff or volunteers may propose
  - Hold conference calls as needed between plenaries
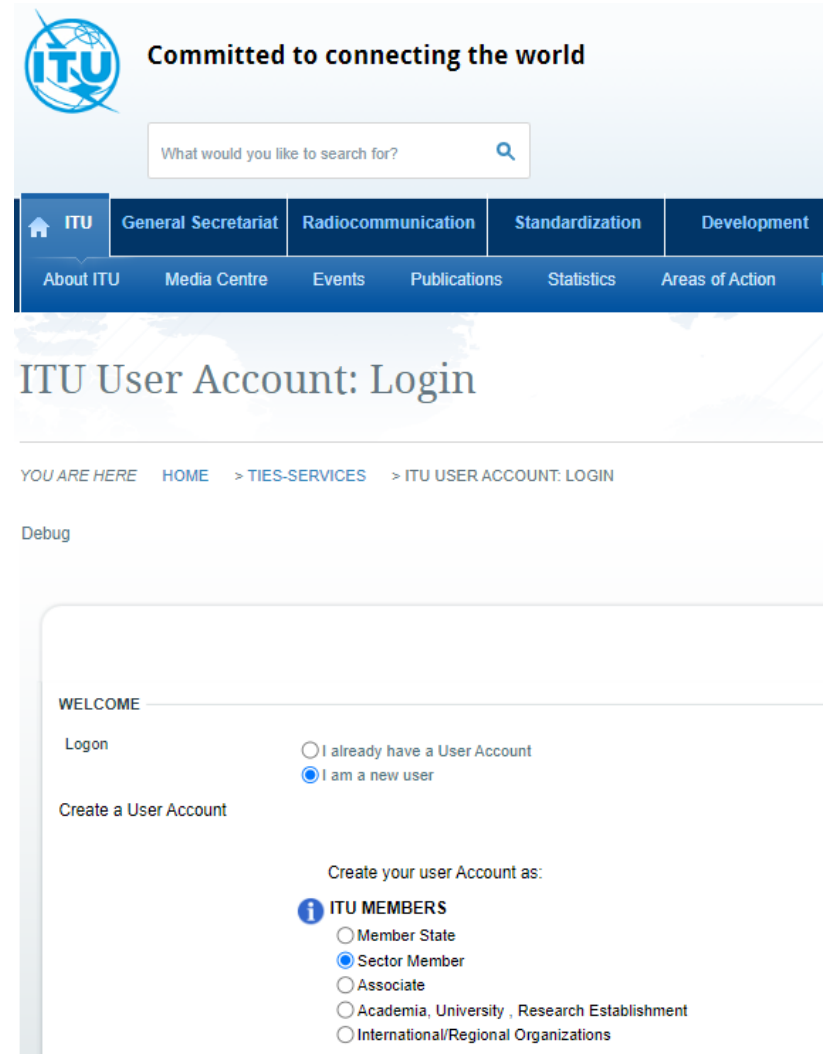
IEEE membership in ITU

IEEE and ITU

- **IEEE is a Sector Member of ITU-T, ITU-R and ITU-D**
  - Participate in the work of ITU-T Study Groups, Working Parties and expert groups, seminars, round tables, colloquia and workshops
  - Attend ITU and ITU-T decision-making bodies (e.g., ITU Plenipotentiary Conference, World Telecommunication Standardization Assembly)
  - ITU Council granted no fee sector membership ~2002
- **IEEE is classified as a "regional or other international organization"**
- **IEEE is qualified as**
  - ITU-T A.6 - Cooperation and exchange of information with national and regional SDOs
  - ITU-T A.5 - Making reference to documents from other organizations.

Register for a TIES Account

- **Typically, volunteers get access under their company's membership**
- **Any IEEE 802 WG member may apply for a TIES Account under IEEE**
  - ▫ **Provides access to ITU-T documents**
  - ▫ **https://www.itu.int/en/ties-services/Pages/login.aspx**

Attendance at ITU

- **Typically, volunteers attend under their company's membership**
- **Volunteer attendance at ITU meetings as an IEEE representative requires IEEE-SA approval**
  - ITU-R liaison (Mike Lynch) has been approved

Contact

Karen McCabe
Senior Director, Public Affairs and Marketing
k.mccabe@ieee.org

IEEE-SA BOG SDO Engagement ad hoc

Organization

- **Reports to Standards and Standards Innovations SMDC of the IEEE-SA BOG**
- **Membership**
  - Chair – Glenn Parsons
  - Paul Nikolich
  - Other BOG members

- **Scope**
  - Provide strategic guidance to the IEEE SA BoG with respect to the relationship between IEEE SA and IEC, ISO, ITU, and regional Standards Development Organizations including a comparative assessment of the strengths and weaknesses of IEEE SA with respect to these organizations.

ITU conferences - policy & governance

- **Preparation underway**
  - ITU-T engagement including analysis of WTSA resolutions
  - Coordination with ISOC

- **Future conferences**
  - ITU-T TSAG – September 2020
  - ITU-T WTSA – November 2020 or
                    February 2021

New IP

- **Future Network 2030 Focus Group (FG-NET 2030)**
  - Presented to ITU-T TSAG - see TD 757
  - New IP is positioned as a top-down architecture to solve a number of use cases in the FG.
  - SG13 is gaining the attention of many Member States by including the topic in its proposed work plan
    - This is seen as a threat to the underlying protocols, naming/number, and architecture of the Internet
- **IEEE-SA working with ISOC on assessment**
  - IETF sent a liaison to TSAG in March
  - Internet Society issued a discussion paper, "An analysis of the 'New IP' proposal to the ITU-T." in April

What is New IP?

FG-2030 Use Cases	New IP solution

FG-2030 Use Cases

- Holographic type communications (HTC)
- Tactile Internet for remote operations (TIRO)
- Intelligent operation network (ION)
- Network and computing convergence (NCC)
- Digital twins (DT)
- Space-terrestrial integrated network (STIN)
- Industrial IoT (IIoT) with cloudification

New IP solution

- Advanced IP Backhaul Transport for 5G, B5G, and even 6G
- Requirements and New Capabilities from Network 2030
- Emerging industry verticals, for example, remote driving and operation, cloudified PLC, industrial IoT, industrial control and intelligent operation network
- Technical Aspects of Privacy, Trust and Intrinsic Security

Interconnecting ManyNets
(Connect Heterogeneous Networks)

Robustness

Global Reachability

New IP

Deterministic Forwarding

Intrinsic Security

Best Efforts

Recent ITU conferences

Radiocommunication Advisory Group (RAG)

- **advisory body to the study groups, membership and staff of ITU-R**
  - review the priorities and strategies adopted in the Sector;
  - provide guidance for the work of the Study Groups
  - recommend measures to foster cooperation and coordination with other organizations and with the other ITU Sectors
- **Responsible for the work programme between RA**

ITU-R RAG May 2020

- **External references**
  - Japan proposed that when no ITU-R Recommendation can be used for normative references, specific versions of external standards may be used instead
  - Japan also noted that ITU-R may consider a drafting common texts jointly, not only with ISO/IEC but also with other SDOs.
  - BR Director invited to improve the guidelines in preparing Recommendations, and will provide a report to the 2021 session of RAG.

Telecommunication Development Advisory Group (TDAG)

- Reviews priorities, strategies, operations and financial matters of the ITU-D.
- It meets in the interval between WTDCs to advise on the implementation of the WTDC Action Plan, including issues relating to the budget and the operational plan of the Sector.

ITU-D TDAG – June 2020

- BDT secretariat focused on new RBM process
  - enhanced transparency and accountability
  - revised work programme based on thematic priorities
- WTDC reform process
  - improve the Conference preparatory methodologies, on content and structure and on stakeholder engagement.
- New TDAG working groups
  - WTDC reform implementation
  - Review of resolutions (streamlining), and the draft Declaration,
  - Strategic Planning based in part on the revised Results Based Management implementation process.

ITU Council

- The Council acts as the Union's governing body in the interval between Plenipotentiary Conferences.
- Its role is to consider broad telecommunication policy issues to ensure that the Union's activities, policies and strategies fully respond to today's dynamic, rapidly changing telecommunications environment.

ITU Council – June 2020 virtual

- India proposed to postpone WTSA-20
  - February 23 to March 3, 2021
  - Urgent consultation with Member States by correspondence should be organized to approve the new dates.
    - A simple majority of the Member States consulted, i.e. 97 of 193 must approve the change in dates. If the ½ threshold is not achieved, a further consultation is undertaken).
    - Circumstances may require a further postponement of the Assembly and/or a change in venue to Geneva.
- Proposal to postpone the World Telecommunication Policy Forum to 2022
  - Consultation with Council Member States on the new dates requested
- Postpone request for additional financial resources by WRC-19 to next Council
  - additional work, studies and development for the implementation of decisions by the Conference (estimated to be CHF 1,721,000),
- Note the expression of interest by the UAE to host WRC-23.
- The secretariat was urged to continue addressing the technical, legal and logistical issues to facilitate remote participation in ITU meetings in the future.

Future ITU conferences

Telecommunication Standardization Advisory Group (TSAG)

- **advisory body to the study groups, membership and staff of ITU-T**
  - responsible for the working procedures defined in the A-series Recommendations and the organization of the ITU-T work programme.
  - Responsible for the work programme between WTSA
- Attendees ~150 participants.

ITU-T TSAG – September 2020

- **Key expected issues**
  - Restructuring of ITU-T study groups
  - New IP
- **Virtual arrangement**
  - time limitations of 3 hours per day
  - Plenary Monday, Thursday, Friday
  - TSAG Rapporteur Groups allocated time on Tuesday to Thursday morning.
- **Inter-regional meeting**
  - exchange of information on the status of preparations for the WTSA.

Global Symposium for Regulators

- Leadership Debate
  - "Resilient and secure digital connectivity for all – COVID-19 recovery and lessons learned for better preparedness and response".
- Special Regulatory Roundtable
  - addressing a number of themes including Institutional governance and regulatory independence in a digital world; and post-COVID-19 preparedness and Digital Development Joint Action Plan.
- Regional Regulatory Associations
- Core sessions of GSR
  - 1 to 3 September 2020 in short sessions over 3 hours each day

WSIS+15 - Virtual WSIS Forum 2020

- **World Summit on the Information Society**
  - ▫ discuss the role of ICTs to implement the UN Sustainable Development Goals
- 'ICT for development' community
  - ▫ co-organized by ITU, UNESCO, UNDP and UNCTAD
- 12 week virtual agenda
  - ▫ Final week 7-10 September 2020

ITU-T WTSA

- **World Telecommunication Standardization Assembly**
  - held every four years
  - defines the next period of study for ITU-T
    - Including structure of Study Groups, work program of questions and direction from resolutions
  - elects leadership of Study Groups
- **WTSA-20 will take place in Hyderabad, India,**
  - Originally 17-27 November 2020
  - Proposed February 23 to March 3, 2021
- **Global Standards Symposium**
  - Originally 16 November 2020.
  - Proposed 22 February 2021

ITU Regional Preparations

<u>CITEL</u>: Inter-American Telecommunication Commission – North, Central and South America, and the Caribbean – 34 Member States except Cuba

<u>CEPT</u>: European Conference of Postal and Telecommunications Administrations – 48 countries of the European region

<u>ATU</u>: African Telecommunications Union – 46 Member States of the African region

<u>APT</u>: Asia-Pacific Telecommunity – 38 Member States of the Asia-Pacific region

<u>RCC</u>: Regional Commonwealth in the field of Communications – 17 Member States comprising the Russian Federation and former Soviet republics .

<u>League of Arab States</u> – 21 Arab States in and around North Africa, the Horn of Africa and Arabia

IEEE 802 summary

- Regarding ITU-T and proposals made in the context of their next study period, there are topics of interest/concern for IEEE 802.
  - IEEE 802 standards are a building block of the Internet and many other Private Networks, so any SDO that is working at L2 or L1 should (at least) coordinate with IEEE 802.
- The details should be communicated with IEEE 802 WGs for discussion, and IEEE-SA should indicate this to ITU-T on our behalf.
  - Inform SA BOG SDO adhoc through Glenn & Paul's participation
  - Encourage an IEEE-SA statement

IEEE 802 proposed view

The IEEE 802 LAN/MAN Standards Committee (LMSC) develops and maintains networking standards and recommended practices for local, metropolitan, and other area networks, using an open and accredited process, and advocates them on a global basis. In order to ensure consistent global impact of standardization and increase awareness of the ecosystem related to network implementation and operation, IEEE 802 maintains liaison relationships with other groups. Communication is key to a healthy working relationship fostering an understanding of the working methods of the different groups which aids efficient and non-duplicative standards development. IEEE 802 is engaged in standardization efforts that are integral building blocks of the Internet and Private Networks. Any standardization efforts that are investigating the evolution or a revolution related to the Internet, Internet Protocol, or how the Internet or Internet Protocols leverage the published IEEE 802 standards is of interest to the IEEE 802 LMSC.