Report on ITU-T Industry Engagement Workshop

Hiroshi Yamamoto

Abstract

Strengthening the relationship between the International Telecommunication Union - Telecommunication Standardization Sector (ITU-T) and industry is one of the top priority pledges of Seizo Onoe, Director of the ITU Telecommunication Standardization Bureau. The first Industry Engagement Workshop was held on April 19, 2024 in Geneva, Switzerland. The author was involved in the workshop as a member of its steering committee. The workshop details are introduced.

Keywords: ITU-T, Industry Engagement Workshop, industry engagement metrics

1. Background of the workshop

Strengthening the relationship between the International Telecommunication Union - Telecommunication Standardization Sector (ITU-T) and industry is one of the top priority pledges of Seizo Onoe, Director of the ITU Telecommunication Standardization Bureau, and the first Industry Engagement Workshop was held on April 19, 2024 in Geneva, Switzerland as an in-person event to allow for frank discussions.

At the Telecommunication Standardization Advisory Group (TSAG) meeting held in June 2023, a workshop was approved to be held, and a steering committee consisting of the leader Didier Berthomieux (Nokia, Finland) and two members appointed from each region was organized to set the goals of the workshop and consider a specific program. The author and Dao Tian (ZTE, China) were selected from the Asia-Pacific region to participate in the committee.

The goals of the workshop, as agreed in the Terms of Reference, were to

- attract relevant industry decision makers in regard to standardization where the ITU-T can provide value,
- contribute to the dialogue between all the parties,
- provide valuable feedback on the industry engagement action plan, and
- inform the World Telecommunication Standardization Assembly 2024 (WTSA-24) preparations.

TSAG also approved an industry engagement action plan to attract intensive industry participation to take account of the latest technical trends and market needs.

The steering committee considered the above goals of the workshop, proceeded with the work of listing experts from each industry in each topic field, and finalized the presentation program shown in **Table 1**.

2. Workshop details

The keynote addresses and Session 2 (Metrics and Industry Engagement), which the author chaired, are only described below due to space constraints.

2.1 Keynote addresses

2.1.1 Seize Onoe, Director, ITU Telecommunication Standardization Bureau

Mr. Onoe highlighted the significant gap of up to 10 years in deployment of mobile networks between developed and developing countries. He stated that ITU-T is the best place to help bridge this gap and mentioned a series of webinars with chief technology officers (CTOs), CxO meetings, and this Industry Engagement Workshop. He introduced the new Bridging the Standardization Gap program (**Fig. 1**).

Table 1. Workshop program.

Welcome • Glenn Parsons, ITU-T Rapporteur on Industry Engagement and Metrics; Principal Standards Advisor, Ericsson Canada: *Opportunity Statement and Goals of the Workshop*
Keynote Address • Seizo Onoe, Director, ITU Telecommunication Standardization Bureau
Keynote Address • Ulrich Dropmann, Head of Standardization and Industry Environment, Nokia, Finland
Current Perspectives on Industry Engagement The purpose of this session was to provide the background necessary to understand the scope of the opportunity available to increase industry engagement in the ITU-T. Session Chair: Didier Berthoumieux, Chair of Workshop Steering Committee; Head of Standardization Office, Nokia, Finland Presentations: • Bruce Gracie, Chair, WTSA-20: *Scene Setter on How Industry Can Engage in ITU-T* • Xin Chang, VP Standardization and Industry Engagement, Huawei, China • Stephen Palm, Senior Technical Director, Broadcom, United States* • Eliot Lear, Principal Engineer, Cisco Systems, United States • Jun Shan Wey, Distinguished Engineer, Verizon Communications, United States Followed by a panel discussion with Uwe Baeder, Director Public Affairs, Rohde & Schwarz, Germany and the presenters (on site).
Metrics and Industry Engagement The purpose of this session was to understand how to measure the impact of industry engagement. Session Chair: Hiroshi Yamamoto, Director, Head of Standardization Office, NTT Corporation, Japan Presentations: • Christopher Clark, Head, Marketing and Partner Relations Division, ITU • Hideyuki Iwata, President, Telecommunication Technology Committee (TTC), Japan • David Law, Chair, Standards Board, IEEE Standards Association, United States; Distinguished Technologist, Hewlett Packard Enterprise, United States Followed by a panel discussion.
Value Proposition for Industry Engagement This session reviewed the current ITU-T value proposition and explored ideas to enhance the ITU-T brand to attract Industry to lead/participate/grow standardization work in the ITU-T. Session Chair: Arnaud Taddei (Global Security Strategist, Broadcom Europe, United Kingdom) Presentations: • Bilel Jamoussi, Deputy to the Director, ITU Telecommunication Standardization Bureau • Per Beming, Head of Standards & Industry Initiatives, Ericsson, Sweden • Graeme Burns, Partner - Tech, Media & Telecom (TMT) and Digital, Boston Consulting Group, Switzerland • Judy Zhu, VP Standardization, Alibaba, China* • Xiaojia Song, Researcher, Artificial Intelligence and Intelligent Operations Center, China Mobile Research Institute, China • Debora Comparin, Standardization Expert, Thales Group, France Followed by a panel discussion with Ulrich Dropmann (Head of Standardization and Industry Environment, Nokia, Finland), Bret Jordan (Chief Security Strategist, Afero, United States) and the presenters (on site).
Standardization Process and Industry Engagement This session was focused on the processes used to start, progress, approve, and publish Recommendations. Session Chair: Scott Mansfield, Standards Researcher, Ericsson Canada Presentations: • Malcolm Betts, Consultant, ZTE Corporation, China • Kam Lam, Senior Director, China Information Communication Technologies Group (CICT) • Paul Doolan, Infinera Corporation, United States Followed by a panel discussion.
Workshop Summary, Outcomes and Next Steps Workshop Session Chairs summarized the discussions and provided outcomes of their sessions. Highlights of the draft workshop report were reviewed and discussed. An outlook on next steps was provided. Session Chair: Glenn Parsons, ITU-T Rapporteur on Industry Engagement and Metrics; Principal Standards Advisor, Ericsson Canada
Close of workshop

Fig. 1. Keynote address: Seizo Onoe.

2.1.2 Ulrich Dropmann, Head of Standardization and Industry Environment, Nokia

Dr. Dropmann highlighted the importance of having global standards amid geopolitical tensions and the United Nations organization ITU as one of the best platforms to keep global coordination of standardization. ITU-T is only one among many standards organizations, and we need to better define its role in this landscape. The market has clearly recognized the excellence of ITU-T in the domains of transport and access and video codec but observed a limited market adoption and limited regional diversity in the work on cloud, protocols, and security. The importance of FRAND (fair, reasonable, and non-discriminatory) intellectual property rights rules is key to fuel a virtuous cycle of innovation. ITU should coordinate and leverage technical work in other specialized forums, maintain and improve the technical excellence acquired in certain domains, address issues in domains with limited success, and improve the decision process and metrics to assess efficiency.

2.2 Session 2 on Metrics and Industry Engagement

This session was moderated by the author.

2.2.1 Christopher Clark, Head, Marketing and Partner Relations Division, ITU

"Industry Participation Trends and Internal Tracking"

This presentation first provided an overview of the initiative of ITU-T's internal tracking/metrics for engagement. This initiative calculates an engagement index on the basis of information such as attributes of participants and participation statistics in recent events and makes tracking possible by creating a dashboard. The presentation then introduced the following member participation trends. 1) ITU-T industry participation is the highest it has ever been. 2) More diversity in membership regarding small and medium enterprises and regional and developing/developed nation balance is being achieved. Participation and contributions are also rising overall, especially in Asia/Pacific.

2.2.2 Hideyuki Iwata, President, Telecommunication Technology Committee (TTC), Japan

"Proposing Metrics and Industry Engagement through Standardization Activities at TTC"

This presentation provided the ITU standards localization efforts and its utilization status at TTC, a Japanese standards developing organization (SDO). Quantitative information was provided on how many localized standards have been downloaded and proposals up-streamed to ITU-T. Through these analyses, it was shown that localization trends among domestic organizations and the number of downloads can be effective measures of understanding the interest of the industry. It was also mentioned that TTC is holding various workshops and the participation trends in these workshops can be an effective means of learning about industry interests.

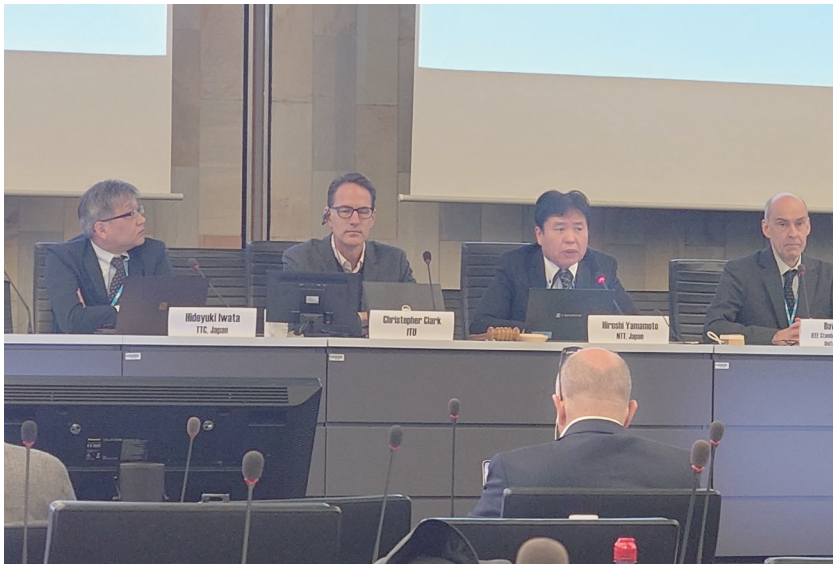

Fig. 2. Session 2.

2.2.3 David Law, Chair, Standards Board, IEEE Standards Association, United States; Distinguished Technologist, Hewlett Packard Enterprise, United States

"Industry Metrics"

This presentation provided the latest trends in standardization activities at the Institute of Electrical and Electronics Engineers (IEEE) and considerations based on case studies regarding industry engagement metrics. Examples of recent activities are the IEEE 7000 series, which is an artificial intelligence (AI) series, addressing ways to protect personal data and safety in AI systems and IEEE 11073 for health informatics, enabling communications between medical devices and computer systems to achieve automatic capture of vital-sign information. In the second half, a discussion on industrial engagement and its metrics was introduced from the perspective of the IEEE Standards Association board, and it was pointed out that the number of recommendation downloads alone may underestimate or overestimate the needs and true value of industry, and the importance and difficulty of measuring engagement in industry was introduced.

2.2.4 Summary of Session 2

Three representatives from industry-recognized SDOs presented their metrics-related initiatives. While quantification and tracking of metrics for measuring industry engagement are underway, the following future issues were also identified.

- Lack of indicators to quantify cross-industry collaboration and collaboration between SDOs, which is becoming increasingly important.
- Lack of means to know where and to what extent the established standards are being used and what impact they have on business.
- While the means of obtaining metrics-related data are improving, restrictions due to privacy concerns are increasing.
- The need for further development of statistical processing that takes into account the objectives of various standardization activities.

Further discussion and research is needed to identify the effectiveness of metrics and create criteria to compare one metric to another (**Fig. 2**).

3. Summary of the workshop

Many delegates expressed that this workshop was a success and provided a useful exchange of views from industry. It was also suggested that TSAG should hold such a workshop again, or even regularly, either separately or jointly with the CxO meetings. The action plan will be updated on the basis of the outcome of this workshop.

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He received a B.S. and M.S. in information and computer science from Waseda University, Tokyo, in 1999 and 2001. In 2001, he joined NTT Service Integration Laboratories, where he was engaged in the performance evaluation of Internet protocol (IP) networks, web applications, and video delivery. In 2006, he joined NTT Communications, where he engaged in the development of voice-over-IP systems. In 2010, he joined NTT Network Technology Laboratories, where he engaged in research and development of a quality-of-experience control video-delivery mechanism. In 2015, he was assigned as the primary USA liaison based in Washington, D.C. and was engaged in enhancing collaborations with US academia and industry. In 2020, he was assigned as a senior research engineer, supervisor at NTT Network Technology Labs and engaged in the research and development of future network architecture. He is currently the head of Standardization Office and oversees the NTT Group's standardization activities. He is currently the chair of the Asia-Pacific Telecommunity (APT) Preparatory Group for WTSA-24 Working Group 1 (Working Methods).