Global Standardization Activities

Report of ITU-T TSAG Meeting and Activities of NTT R&D European Representative Office

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Abstract

The ITU-T TSAG (International Telecommunication Union, Telecommunication Standardization Sector, Telecommunication Standardization Advisory Group) and Review Committee conducted meetings June 16–20, 2014. This document reports the results of deliberations on major issues in this TSAG meeting: revision of patent policy and the creation of two new Focus Groups. It also covers the activities of NTT's R&D (Research and Development) European Representative Office based in Frankfurt, Germany with respect to major standards conferences in Europe.

Keywords: ITU-T TSAG, patent policy, R&D

1. Summary of TSAG and Review Committee meeting

The International Telecommunication Union, Telecommunication Standardization Sector (ITU-T)'s Telecommunication Standardization Advisory Group (TSAG) meeting differs from that of standard Study Groups (SGs), the objective of which is to create recommendations. Instead, it is intended as an event to debate ITU-T's standardization activities, work plans, and methodologies. Topics covered include approaches to the way future standardization will be deliberated, how standardization is to be maintained across multiple SGs, the creation of Focus Groups (FGs) for the intensive investigation of new issues, and other themes.

The Review Committee is a group created for the purposes of debating the organizational structure of ITU-T beyond 2016 with an eye to efficient deliberation on standards issues, and for considering partnerships with other standards organizations. Mr. Yoichi Maeda, formerly with NTT and now the chief executive officer and senior vice president of TTC (Telecommunication Technology Committee), serves as its chair.

Focusing on trends in TSAG and the Review Com-

mittee enables members to gain an early understanding of the major thrust of ITU-T's activities as a whole. The following section describes the core issues discussed at the June 2014 TSAG and Review Committee meetings.

2. Core issues discussed at June 2014 meeting

The meetings in June were held at ITU headquarters in Geneva, Switzerland, and they focused on two core issues—the revisions to patent policy and the creation of two new FGs.

2.1 Revision of patent policy

For a year and a half prior to the meeting, ITU's patent policy had been debated by the ITU-T Telecommunication Standardization Bureau (TSB) Director's Ad Hoc Group on IPR (intellectual property rights). Reaching a consensus was difficult, with one side in favor of licensers and the other in favor of licensees. An emergency proposal to revise patent policy on injunctive relief was presented at the meeting by representatives from the US government.

The Ad-Hoc Group had been deliberating on 1) assignment and transfer of patent rights, 2) the definition of *reasonable* and *non-discriminatory*, and 3) the

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limits on the right to demand an injunction. While a consensus was reached at this TSAG meeting concerning point 1, there was no sign of reaching a resolution or compromise on points 2 and 3.

The US has been looking for ways to alleviate the major outlays of costs and manpower borne from lawsuits over standard-essential patents, and the US contingent expressed a desire to communicate a government-level policy that promotes their swift resolution.

However, the proposal came amidst a lack of sufficient advance coordination between the teams from the US and other countries, and there was little in the way of indication that an inquiry of said nature is underway. As a result, the majority of non-US countries attended without IPR specialists (whereas the US had close to 20). Participants came to the meeting with the assumption that progress on the above front would be difficult and that deliberations would have to be ongoing, so the US did not garner support for its proposal. At NTT, the NTT Intellectual Property Center has been dealing with this case, and we were in accordance with other countries in postponing deliberations on this matter until the next ITU-T IPR Ad Hoc Group meeting.

As a result, a resolution on the issue was deferred, and the Ad Hoc Group decided to reexamine the subject, with TSAG requesting the Ad Hoc Group to release an agreement at the TSAG meeting to be held in June 2015.

2.2 Creation of new FGs

2.2.1 FG Aviation

In response to the March 2014 incident of Malaysia Airlines Flight 370 going missing, the Malaysian government proposed the creation of an FG to explore the use of cloud computing technologies as a means of collecting real-time aircraft flight data. Attendees, Japan included, agreed to this proposal, which will establish the Aviation Application of Cloud Computing for Flight Data Monitoring FG.

The International Civil Aviation Organization (ICAO) also plans to cooperate on issues of real-time aircraft flight data collection. The organization is aware that this project will require coordination not just with ITU, but with ICAO, ISO/IEC JTC 1 (Joint Technical Committee 1 of the International Organization for Standardization and the International Electrotechnical Commission), ISO Technical Committee (TC) 20, and other units. The standardization issue at ITU-T is expected to focus on the use of big data and cloud technologies, as well as data searching and

security. Plans are for Malaysia to present a candidate for FG Chair and for China and ICAO to present a candidate for Vice Chair. NTT plans to explore ways to contribute to this FG from the vector of cloud services, big data, and security.

2.2.2 Digital Finance Services

The US-based Bill and Melinda Gates Foundation (B&MGF) proposed the creation of a Digital Financial Services FG at ITU-T. B&MGF was founded by Bill Gates, the former chairman of Microsoft, and his wife Melinda, and is the world's largest charitable foundation.

Digital Financial Services refers to digital methods for the safe remittance and receipt of money for people primarily in developing countries who lack physical bank accounts. A study on these systems as a whole, including telecommunications, will proceed from ITU-T. It was made clear that the funds for this study would come from the aforementioned foundation, with the FG Director coming from the same. ITU-T SG2, SG3, SG13, SG16, and SG17 expressed their readiness to collaborate with the FG. Collaboration with ITU-T and other organizations, such as ISO TC 68, ISO/IEC JTC 1, GSMA (Groupe Spéciale Mobile Association), and SWIFT (Society for Worldwide Interbank Financial Telecommunication), was also highlighted. NTT must carefully follow where the investigation leads in order to ensure the outcome does not conflict in a technical manner with our existing mobile payment services.

3. Future ITU-T trends

The new FG issues agreed upon at this year's TSAG meeting involve proactively utilizing information and communication technology (ICT) and standardization to address social needs. A key point to this attempt is that it will be consistent with e-health, smart grid, and ITS (intelligent transport system) approaches and will not involve the orthodox horizontal approach to classifying issues by layer, but instead will employ a vertical, integrated approach to these layers and consider how standardization must be deployed in the aid of existing social concerns. Japan must actively contribute to these efforts, and through our activities at ITU-T, aid the development of global business by understanding vertical (industry-wide) needs.

4. Activities of Frankfurt R&D European Representative Office

The R&D (Research and Development) European Representative Office was established in 2010 as an overseas branch of the NTT Research and Development Planning Department for the promotion of our network operator partnerships, joint research, and standardization activities in Europe.

Based in Frankfurt, Germany, the organization is the sole representative office in Europe under the NTT holding company. The staff currently consists of this author alone.

The goal in establishing this office is to further expand NTT's R&D activities in Europe. Thus, efforts are underway to communicate with each country's carrier and vendor research organizations to build trust and create wide-ranging partnerships.

In terms of standardization, in addition to participating in discussions on standardization strategy such as the TSAG described herein, and also taking part in a timely fashion in new technical endeavors, this office is simultaneously supporting the globalization of R&D as a whole and launching investigation into the use and joint research of ICT in Europe. The European office is also working to build partnerships with carriers and has contributed to the smooth collaboration in research activities with major European carriers such as BT and Orange; in addition, the business side of the firm has promoted communication and collaboration with carriers.

Europe has begun taking steps to deliberate on a framework for the future, with Horizon 2020, the successor to FP7 (7th Framework Programme), itself a program designed to foster R&D, being launched as a new seven-year plan. The European Commission (EC) is also supporting a multitude of research programs. In particular, deliberation on 5G, the fifth generation mobile telecommunications system, is rapidly moving into motion through industry-government-academia partnerships in Europe. In December 2013, 5GPPP (5G Public-Private Partnership Association), an agreement on public-private research, was officially inaugurated as part of the EU's move towards establishment of 5G services. Horizon 2020 is moving forward with cutting-edge approaches in healthcare systems, smart cities and communities, and transportation, areas of core importance to NTT, so the progress of the program merits careful atten-

NTT's R&D European Representative Office plans to focus closely on R&D trends in the above areas and

how they concern telecommunications networks, as well as movements within vertically oriented industries.

Going forward, we plan to further strengthen our R&D partnerships with overseas Group companies and to enhance the communication of information on these topics to contribute to the global activities of the NTT Group.



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He received the B.E. in electrical engineering and the M.E. in applied systems science from Kyoto University in 1994 and 1996, respectively, and the M.B.A. from Cornell University, USA, in 2005. After joining NTT Network Service Systems Laboratories in 1996, he was engaged in R&D of key technologies for network management systems during 1996–2007 and 2010–2013. He was engaged in R&D strategy planning at NTT Research and Development Planning Department during 2007–2010. He has been with NTT R&D European Representative Office in Frankfurt, Germany, since 2013.

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