Summary Minutes of the First Technical Committee Meeting

Date and Time: October 24, 2012, Wednesday, 13: 30 to 15: 00

Place: YRP Ubiquitous Networking Laboratory, 6th fl. Main Conference Room

Participant:

Chairperson: Noboru Koshizuka (Professor, Interfaculty Initiative in Information Studies, The University of Tokyo)

Vice-chairperson: Hideaki Takeda (Professor, National Institute of Information)

Member: Kenji Hiramoto (Executive Adviser for Chief Information Officer, Ministry of Economy, Trade and Industry), Yoshiaki Fukami (Visiting Researcher, Keio Research Institute at SFC)

Observer: Ministry of Internal Affairs and Communications (MIC) Information and Communications Bureau, Cabinet Secretariat Office for Information and Technology, Ministry of Economy, Trade and Industry (METI) Commerce and Information Policy Bureau, Minimum of Land, Infrastructure, Transport and Tourism (MLIT) Geospatial Information Authority of Japan, Cabinet Secretariat (Disaster Management)

Other: Katsunori Shindo (Yokosuka Telecom Research Park, Inc.)

Bureau: Takeshi Tsukuni (Mitsubishi Research Institute, Inc.)

Material distributed:

Proceedings of the First Technical Committee Meeting

Material 1-1 1st Technical Committee Meeting Seating List

Material 1-2　1st Technical Committee Meeting Member List

Material 1-3　Management of the Technical Committee (Draft)

Material 1-4　Missions and Topics for the Technical Committee Meeting

Material 1-5　Open Data Strategy Initiatives of the Ministry of Internal Affairs and Communications

Material 1-6　Technical Standard Specifications (Draft)

Supporting Material 　Technical Standard Specifications (Draft)

Proceedings:

1. Opening
2. Greetings from the Chairperson
3. Self-introduction of committee members and observers
4. About the management of the Technical Committee meeting

・The management of the Committee was outlined by the secretariat based on Material 1-3.

・The proposed handling of materials and minutes for the Committee meeting was approved unanimously as shown in Material 1-3.

1. About the mission of the Technical Committee

・Chairperson Koshizuka explained the mission framework of the Committee by using supplementary materials.

* First, let me brief you on my own perspectives.

At the time of the establishment of the Consortium, we intended this Technical Committee to carry out activities related to "discussions on new technical standards necessary to promote open data."

Discussions may be carried out in different ways, but we should first address the open data initiative under the Information and Communication Cooperation Project by the Ministry of Internal Affairs and Communications. I hope that our focus is placed on the technical specifications under the ministry's initiative. Based on the results of discussion, we should endeavor to attract more players who are interested in our initiative.

Another point of discussion is the importance of formulating international standards for public data. How should we produce open data from among public data? We would have to rely on government procurement or public procurement. If the U.S. or European countries set up international standards ahead of us, our effort might come to nothing because the public procurement system under Japanese specifications would violate WTO requirements. In such a case, we would need to introduce de jure standards.

Committee members have been endeavoring to work out an optimal open data system. The Committee should seek to formulate techniques for applications based on public infrastructure, such as disaster prevention, accidents, traceability, public transportation, and medicine. These are fields considered essential in Japan.

This Technical Committee should cooperate with the Utilization and Distribution Committee in horizontal coordination and mash-up of data to create new industries and public data.

Tremendous amounts of data are being generated in the industry and other segments of society. Not all open data need to be provided free of charge. Some may need to be restricted. Other may be offered for profit. Generally, an open data application will be provided as a combination of openly shared data and private closed data. We may be required to address the interoperability of these two types of data. We should discuss issues concerning licensing and governance in this respect through cooperation with the Data Governance Committee.

Another challenge is how to lower hurdles for information senders. At any rate, it is essential to connect data, while increasing the number of cooperators. In this respect, we must direct our attention to compatibility between existing and future technologies.

As to moves toward international standardization, we should also promote both de jure and de facto standards. It is hoped that we can make specific proposals to international groups and first drafts, while gaining friends worldwide to work together.

[Comments and Questions about the Material]

* I understand the chairperson has indicated that there are currently some elements of open data that cannot be handled when we focus solely on Linked Open Data (LOD) for open data.

As long as LOD is concerned, we might ask whether the Web is the technology intended exclusively for open data. As the Web is used also in intranets, it may used for any purpose. The Web is a universal technology based on an open data concept, and at the same time the Web is a framework for sharing information. "Open" can be replaced with "Web." Thus, "open data" is equivalent to "a data-based Web."

Of course, as the Chairperson pointed out, we must note that the Web is not enough to cover all LOD requirements. At least, however, we will have to start with the Web.

* Just as you mentioned, it is especially important to make data as open as possible.

・Then, Chairperson Koshizuka detailed the missions of this Committee, using Material 1-4.

[Comments and Questions about the Material]

* First of all, governments and public organizations must start making open data available to the public. There is still to be an Open Data standard. Few would object to the general idea that, for data to be used more widely and to establish a common framework, data should be provided in an easy-to-use manner.

On the other hand, there has been a change in software approaches. As technical layers are advancing, technical discussion should be necessary to cope with such new approaches. Two issues may be pointed out in this respect:

First, as to open data under discussion, there are some types of data for which Japan has technical advantages and will well compete internationally, such as sensor data. Basically, such data should be reduced in amount by using a lighter protocol. A typical concept is Internet of Things (IoT). In these fields, to make the best of resources, designers tend to seek standard specifications that can be used most easily by them.

Meanwhile, W3C requires that the Web be available to anyone and that all people be allowed access to open data. The consortium points out that URL must enable not only engineers but also pay people to handle data on it. Machine readability is important, but open data must also be readable to humans.

People in a lower layer who seek to design perfectly digital or binary standards have different targets from those, in a higher layer, who handle data that can be processed more easily by humans. We must form agreement among people in all layers.

We have already a preliminary draft for standard specifications. However, it is important that we reconsider what data should be to enable agreement among all engineers, application producers, and innovators.

A second point of public use of data is that there is now a different approach toward formulating de jure standards although they are very important. The problem is not a conflict between de jure and de facto standards. The trend is that lightweight standards are authorized in the de facto phase, and then they are authorized by de jure organizations.

Specifications are differently developed between de jure standards and de facto standard. We must note these differences and identify specific problems.

De jure standards will form the core of national standards. At W3C and relevant organizations, there is heated discussion among private communities, and their various proposals are being put into practice and improved through actual use by users. Where a large number of de factor standards are already established firmly, it would be difficult to introduce completely different specifications.

Various discussions and activities have been carried out in accordance with open data. Changing targets will force us to change our current approach and standardization process. To conform to different approaches and processes, the consortium will play a vital role in formulating standard specifications best fit as a Japanese model. Deliberate review would be required in the initial phase in cooperation with the Utilization and Distribution Committee.

* The first point is especially important. Much of open data are used for ICT, while data holders are sometimes outside the ICT segment. In such a case, what benefits can data holders receive from open data? This is also the case with content. Thus, we must also consider how to meet the needs and benefits on the part of providers of data. That is, it is essential to build a well-balanced win-win relationship among all players.
1. Open Data Strategies of the Ministry of Internal Affairs and Communications
* Our discussion on proposed standard specifications will be carried out on the basis of the drafted external specifications from MIC's Information and Communication Cooperation Project. For this reason, we want MIC to outline its open data initiative by using Material 1-5.

・MIC's observer explained the initiatives under MIC's open data strategy in accordance with Material 1-5.

1. Drafted technical standard specifications

[Explanation of the Material and Comments and Questions about the Material and the Overall Policy]

* Our discussion on proposed technical standard specifications should be based on external specifications proposed in connection with MIC's Information and Communication Cooperation Project. Upon request from the MIC, Yokosuka Telecom Research Park has recently drafted a specification proposal. We should discuss this proposal.
* Before I start explanation, I would like to comment on API. In the narrow sense of API, we will address REST/API, but it is not the end of the story. API itself depends on data behind it. So it is important to formulate a common data model. Otherwise, even if an API is established, more APIs will have to be added to process different data and different uses. A single Web API is unable to cope with different types of data. Numerous data holders and consumers have used data with various APIs. This means that we have already practical frameworks. To mash up data for common use, we can even use CSV. If we limit the number of means, there could be only a limited number of users. We should widen the sense of API to propose a framework compatible with various uses.
* These proposed specifications are our first draft and should be based on discussion of our planned demonstration project. We ask for your opinions on any other specifications to expand the scope of discussion. Please note that this proposal provides specifications for this fiscal year. We do not expect this proposal to cover all issues. Now, may we have your explanation based on this material?

・Guest participant Mr. Shindo of Yokosuka Telecom Research Park explained the proposed technical standard specifications on the basis of Material 1-6.

* The importance of standardization for open data is recognized by everybody. We should note, however, that de jure standards, once established, need maintenance. Preferably, they should be maintained by parties who used de facto standards. This problem should be discussed at an early time. Data can be used in any way we prefer, by mapping them. Our discussion should be carried out based on this proposal.

We should discuss as early as possible which part to standardize because our proposal would be brought to a different standardization organization, depending on the part standardized.

* We should discuss the proposed specifications in order to apply them to MIC's project. Recently, different standardization approaches are often taken toward individual uses. In light of this, we might better address each use in the demonstration project to make our system successful.
* At the next meeting, we want actual examples to be introduced for us to see what types of data are used and how such data are applied. Then, we would be able to deepen our discussion.
* The progress of MIC's demonstration experiments will be reported where possible.
1. Notice from the bureau

・The second and later Committee meetings will be notified by email as soon as the schedule is available.

・The 2nd Utilization and Distribution Committee meeting is scheduled for November 7 (U.S. Microsoft Corporation's Mark Gayler will give a speech), and the 2nd Data Governance Committee meeting for November 14. Your participation is welcomed.