Our approach to Core Trustworthy Data Repositories Requirements

*Hiroko Kinutani[1], Asanobu Kitamoto[2,3], Yasuyuki Minamiyama[6], Kazuhiro Hayashi[7], Yasuhiro Murayama[4,5]

1. Earth Observation Data Integration and Fusion Research Institute, The University of Tokyo, 2. Digital Content and Media Sciences Research Division, Natl. Inst. of Informatics, 3. Center for Open Data In the Humanities, Research Organization of Information and Systems, 4. ICSU-World Data System Scientific Committee ex officio, 5. Natl. Inst. of Info. and Communications Technology (NICT), 6. Natil. Inst. of Polar Research, 7. Natl. Inst. of Science and Technology Policy

In the international Open Science trend, discussion toward publishing research data is getting active in Japan, especially in the context of research data supported by public funding. On the other hand, limited number of institutions and research areas in Japan maintain internationally recognized platforms for research data preservation and services.

For the sustainable and stable data publication, a trustworthy data repository, or a data repository recognized to be trustworthy by stakeholders must be established. It is widely accepted that a condition to be recognized as trustworthy is to acquire a commonly/internationally accepted certification, but as of February 2017, only four data repositories in Japan have acquired international certification (such as World Data System Certification). We believe that Japanese research communities need to step forward to participate in this international action for better data preservation and services.

In December 2017, we have held a workshop titled "Workshop on Practical Information Sharing on CoreTrustSeal Certification" to discuss and to understand CoreTrustSeal (CTS) Certification Requirements and interpretation of the CTS requirements, taking five trial self-assessment examples made by experts of participating data repositories. Discussion about certification has been extended in RDUF (Research Data Utilization Forum) subcommittee "Networking of stakeholders of subject research data repositories," which was established in 2017 as a community of experts involved in research data repositories in Japan.

The CTS Requirements consist of background information, Organization Infrastructure, Digital Object Management, and Technology, of a repository. Each Requirement in the Catalogue is accompanied by guidance text to assist an applicant in providing sufficient evidence. We have found, however, that these abstract requirement sentences are sometimes misleading for Japanese repository experts to complete CTS self-assessment of their own data repository, even with reference to the CTS extended guideline. Our goal is to understand the reality of operation and environment of data repositories under Japan's legislative and cultural systems, and create explanatory documents that better connect the reality of Japanese experts and the spirit of CTS self-assessment.

We will introduce our activities of meetings and investigation for understanding CTS. This is an important step toward obtaining internationally-recognized trustworthiness of their data repositories.

Keywords: Open Science, Research Data Repository, Trustworthy