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Japan Science and Technology Agency (JST)

## JST Policy on Open Access to Research Publications and Research Data Management

Rapid development in Information and Communication Technology (ICT) in recent years has made research results (e.g., papers and generated research data) easier to be shared and used mutually. This leads to rapid spread of the concept of Open Science globally, which is a new method to advance research.

Open Science has also been discussed actively under an international framework. The G7 Science & Technology Ministers' Meeting in Tsukuba, Ibaraki in 2016 confirmed the need to share global common guidelines on Open Science and the importance of infrastructure reinforcement for its promotion as the joint statement<sup>1</sup>.

In Japan, the "The Expert Panel on Open Science, based on Global Perspectives" hosted by the Cabinet Office summarizes the basic stance and key principles of the concept. According to the panel, "'Open Science' refers to a new approach to promoting innovation through knowledge creation in science and technology. This will be realized by facilitating access to and use of publicly funded research results, such as scientific papers and their underlying data by the scientific community, industry, and the general public"<sup>2</sup>. Additionally, the 5th Science and Technology Basic Plan<sup>3</sup> also states: "As open access is promoted, research outcomes will become available to all manners of users, ...result in the accelerated production of knowledge through new collaborations ..., thereby enabling the production of new sources of value. In addition, the move toward open data will result in the achievement of social transparency in the research process and the broad utilization of research outcomes, with the additional prospect of results that will encourage international exchange and public participation in such cooperative endeavors. In light of such trends, Japan's basic stance on the promotion of open science is to expand the utilization of the outcomes of publicly funded research to the maximum extent possible."

JST developed "JST Policy on Open Access" and has promoted Open Access<sup>4</sup> to research results, such as academic publications resulting from research projects funded by JST (hereinafter referred to as "research projects"). In consideration of recent trends mentioned above, JST newly establishes Policy on Open Access to Research Publications and Research Data Management, aimed at improving a research environment for promoting Open Science.

<sup>&</sup>lt;sup>1</sup> "Tsukuba Communiqué" G7 Science & Technology Ministers' Meeting in Tsukuba, Ibaraki (May 15 to May 17, 2016)

<sup>&</sup>lt;sup>2</sup> "Promoting Open Science in Japan" The Expert Panel on Open Science, based on Global Perspectives, Cabinet Office (March 30, 2015)

<sup>&</sup>lt;sup>3</sup> Cabinet decision (January 22, 2016)

<sup>&</sup>lt;sup>4</sup> Means to publish academic outputs in a way that allows access to everyone and free of charge via the internet without any restrictions.

### (Provisional Translation)

Publications resulting from research projects (hereinafter referred to as "research publications") are required to be made publicly available in principle. Additionally, research data resulting from research projects (hereinafter referred to as "research data") should be preserved and managed appropriately, and it is recommended that the research data underlying the research publications (hereinafter referred to as "underlying data") be made openly available. In applying this policy, it should be recognized that some classes of research data need to be given particular consideration to release. Such data should be properly handled, e.g., exemption from release.

Moreover, JST will cooperate with research institutions whose research projects are funded by JST, and other stakeholders, to implement this policy. This policy also addresses the challenges of developing infrastructure of scientific and technical information required to advance Open Science, and promoting the communication between public and researchers.

Described below are specific guidelines on handling research results.

## I. Open Access to Research Publications

Open Access should be applied to all research publications in principle.

It is recommended that final accepted peer-reviewed manuscripts and other relevant submitted versions should be publicly available by depositing them in an institutional repository or other mechanisms that has been developed as the state measures for Open Access. In that case, it should be considered for license conditions and embargo period<sup>5</sup>, suggested by the academic journals on which research results were published. At the same time, researchers who participate in research projects (hereinafter referred to as "researchers") are permitted to comply with this policy by means of publishing research publications in journals committed to Open Access. However, the ways by which research result be made publicly available should be determined by researchers themselves. This policy does not necessarily mean to recommend to publish research results in journals committed to Open Access.

In achieving Open Access, it is preferable to specify terms of the copyright and the usage rules clearly when the reuse of the research results are allowed, in line with journal policies and the researcher's intention.

The detailed implementation guidelines are to be specified separately.

# II. Handling Research Data

(Development of Data Management Plan<sup>6</sup>)

The researcher, who is responsible for a research activity plan of a research project (Principal Investigator, hereinafter referred to as "PI"), is required to develop a data management plan defining how to manage research data. The plan should be submitted to JST before the

<sup>&</sup>lt;sup>5</sup> Certain period at which access to full text of publication in repositories is not allowed to users.

<sup>&</sup>lt;sup>6</sup> A plan to define how to handle research data in the course of research project, in particular, refers to the descriptions of policies and plans for the project on preservation, management, and release/non-release of research data with its restriction.

### (Provisional Translation)

research project begins at the latest.

(Preservation, Management, and Access to Research Data)

The PI is required to preserve and manage research data appropriately based on the data management plan.

It is recommended that underlying data should be made openly available. The release of other research data, except for underlying data, is also expected. It is recognized that there are certain cases that should be given consideration on setting embargo period according to certain conditions, so as not to cause any disadvantages to researchers and other relevant parties. It is also desired to set and clarify the rules for secondary use to facilitate reuse of research data.

However, the data, which are recognized to require special considerations for release (e.g., the data related to confidentiality, trade secret, national interest, national security; the data intended to be collected for the use of commercialization and industrialization; the data possessed by private enterprises; the data that should be restricted under joint research agreements and similar entities; the data that should be protected in terms of privacy protection; and the data that should be protected in terms of proprietary interest) may be exempted.

The details of research projects in scope, data management plan, and handling of research data are specified separately.