

Explanatory Note to  
the Waseda University Research Data Management and Publishing Policy

Preamble

Waseda University (the "University") holds as its founding principles the preservation of the independence of scholarship, the promotion of the practical application of scholarship, and the fostering of good citizens. The University has, in accordance with the founding principles, engaged in research activities that uphold the lofty ideals of scholarship, with the aim of contributing to the well-being of mankind and world peace. The University recognizes its duty to further advance its research activities and to respond to the social demand for open science. This entails the appropriate management of its research data, which can serve as a cornerstone for its research activities, and the development of a framework for publishing and effectively using such research data, in line with the founding principles. Therefore, the University has established its policy to appropriately manage, publish, and effectively use its research data as follows.

(1) This Policy describes the University's approach to the fundamental management of its research data in accordance with its founding principles. The purpose for which this Policy has been established is as follows:

- 1) To ensure the appropriate management, publication, and effective use of research data; and
- 2) To perform the University's social responsibility associated with the management, publication, and effective use of research data.

(2) Appropriately managing, publishing, and effectively using research data by the University's researchers means protecting the research data and recognizing its value. This approach is crucial to ensure that the researchers can continue to produce outstanding research work for years to come while safeguarding the University's future research endeavors.

(3) The University's research activities encompass a wide range of fields. Therefore, researchers may take specific action when managing, publishing, and effectively using their research data, taking into account the characteristics of their respective research fields and according to the circumstances surrounding their faculties.

## 1. Definition of research data

The term "research data" as used in this Policy is defined as data collected or generated by researchers in the course of or as a result of their research activities.

(1) The term "research data" is defined as data collected or generated by the University's researchers in the course of or as a result of their research activities, regardless of whether in digital or non-digital form, and includes all types of data, such as numerical values, images, and text.

Research data is specifically classified as follows:

- 1) Primary data (raw data: original data that is collected or generated from a research subject for the first time);
- 2) Secondary data (data that is processed from primary data or obtained by analyzing primary data);
- 3) Data, other than the data 1) and 2) above, that can be used to support academic papers and other similar publications; and
- 4) Information that is provided in academic papers and other similar publications written based on the data 1), 2) or 3) above.

(2) The term "researchers" means the following persons. However, the specific scope of researchers to which this Policy applies may be separately defined by researchers' faculties, taking into account the characteristics of their respective research fields.

- 1) The University's full-time and part-time faculty members, researchers, and staff who are engaged in research activities;
- 2) The University's students who are engaged in research activities; and
- 3) Persons who are engaged in research activities using research funds or the University's facilities or equipment, other than those who are listed in 1) and 2) above.

(3) If any individuals from joint research partner universities, companies, or organizations are engaged in the University's research activities, they may be included in the persons to whom this Policy applies after discussion with the relevant partners. Any research data obtained by the University's researchers from their joint research partners should be appropriately dealt with in accordance with the partners' rules.

## 2. Management of research data

Researchers appropriately manage their research data in compliance with international standards, applicable laws and regulations in Japan and other countries, the University's rules and regulations, and joint research agreements, among other things, taking into account the characteristics of their respective research fields.

(1) Researchers have the right and responsibility to appropriately manage the research data that they have collected or generated.

(2) Researchers appropriately manage their research data in compliance with international standards, applicable laws and regulations in Japan and other countries, the University's rules and regulations, and joint research agreements, among other things, taking into account the characteristics of their respective research fields. If there are any conditions or restrictions imposed on the management of the research data as above, researchers ensure that such conditions or restrictions are complied with.

(3) Researchers manage their research data in each research stage. However, if there are any specific requirements agreed upon with their joint research partners, they comply with such requirements. It should be noted that for publicly funded research activities in particular, matters relating to the publishing of research data need to be clearly disclosed at the time of developing a data management plan and before starting the research project.

### Example of research data management in each research stage

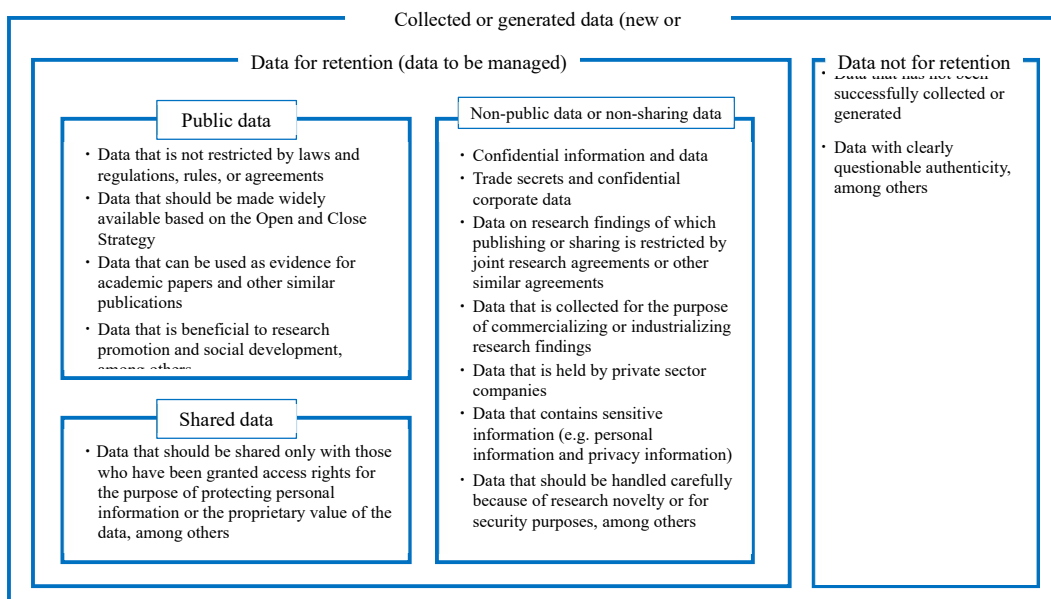
Before the start of the research project: Note that it is recommended that a data management plan be made and metadata be maintained before making a research plan.

During the research project: Pay attention to this Policy and properly retain and manage research data.

After the completion of the research project: Separate research data into "research data for retention" and "research data not for retention (and for destruction)." Then, further separate "research data for retention" into "research data for publishing," "data for sharing" and "research data not for publishing or sharing (non-public or non-sharing

data)."

## How research data would be managed and published



(4) If researchers conduct joint research with universities, companies, or organizations, they have prior discussions and agreements on the rights to and responsibility for their research data with the partners.

(5) If a researcher leaves the University because of resignation or graduation or terminates his/her research activities for any other reasons, the researcher may destroy his/her research data in an appropriate manner and transfer his/her right and responsibility to appropriately manage the research data to any other researchers of the University. However, when transferring the research data, the researcher ensure that it will not hinder the University's future research endeavors, and if any conditions or restrictions are imposed by international standards, applicable laws and regulations in Japan and other countries, the University's rules and regulations, or joint research agreements, among other things, they will take precedence. (Researchers should particularly note that the retention periods for research materials used to support academic papers and other similar publications are specified in the Detailed Regulations for Enforcement of Rules for Preventive Measures against Research Misconduct and the

Investigation Procedures.)

(6) Researchers pay attention to the reliability, reproducibility, and traceability of research data to ensure research fairness when managing the research data.

### 3. Publication and effective use of research data

Researchers publish and promote the effective use of the research data held by them to the extent possible, taking into account the characteristics of their respective research fields, unless it is restricted by international standards, applicable laws and regulations in Japan and other countries, the University's rules and regulations, and joint research agreements, among other things.

(1) The term "publish" refers to either "publish" which means allowing the public to use research data and not limiting its users, or "share" which means allowing only limited users to use research data. If research data is not published, it will be "non-public or non-sharing" data.

(2) Researchers take into account the characteristics of their respective research fields and comply with conditions or restrictions imposed by international standards, applicable laws and regulations in Japan and other countries, the University's rules and regulations, and joint research agreements, among other things, when considering publishing or effectively using their research data. If there are no conditions or restrictions imposed as above, it is advisable to publish and effectively use the research data in accordance with the Open and Close Strategy<sup>\*1</sup> and the FAIR Data Principles<sup>\*2</sup>. With respect to data which will be published or effectively used, and which contains inventions or other intellectual property, it is advisable to consult the Intellectual Property and Research Collaboration Support Section of the Research Innovation Center about the IP process before publishing or effectively using such data. The University plans to develop a framework for providing research data for a fee and establish applicable rules and regulations.

#### \*1: Open and Close Strategy

1) "The Open and Close Strategy for research data is a strategy adopted to separate

research data into non-public data and non-sharing data according to the characteristics of the data."

Source: Academic eXchange for Information Environment and Strategy (AXIES) (July 1, 2021) "Guidelines on University Research Data Policy Development"

2) "...research data may contain critical information that is required for safeguarding our national security and maintaining our nation's industrial competitiveness as well as scientific, technological, and academic excellence. To this end, research data that should be carefully handled for the purpose of safeguarding personal information, confidential information of businesses, research novelty, and national security is required to be kept non-public. In addition, it may not be appropriate to immediately publish research data when safeguarding our industrial competitiveness and maintaining our scientific, technological, and academic excellence. It may be an option to set an appropriate embargo period (a limited period of time during which data is not made public) while striking a balance with the promotion of the effective use of research data through publication. Therefore, research data needs to be published and shared appropriately in accordance with the Open and Close Strategy, taking the foregoing into consideration. In other words, research data should not be simply published or shared, but researchers should set the extent of publishing and sharing it in accordance with the Open and Close Strategy and with reasonable justification."

Source: Administrative communication, the Ministry of Education, Culture, Sports, Science and Technology (June 2, 2021) "Basic approach to the management and effective use of publicly funded research data (notice)"

## \*2: The FAIR Data Principles

### To be Findable:

- F1. (meta)data are assigned a globally unique and eternally persistent identifier.
- F2. data are described with rich metadata.
- F3. (meta)data are registered or indexed in a searchable resource.
- F4. metadata specify the data identifier.

### To be Accessible:

- A1. (meta)data are retrievable by their identifier using a standardized communications protocol.
  - A1.1. the protocol is open, free, and universally implementable.
  - A1.2. the protocol allows for an authentication and authorization procedure, where necessary.

A2. metadata are accessible, even when the data are no longer available.

To be Interoperable:

I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.

I2. (meta)data use vocabularies that follow FAIR principles.

I3. (meta)data include qualified references to other (meta)data.

To be Re-usable:

R1. (meta)data have a plurality of accurate and relevant attributes.

R1.1. (meta)data are released with a clear and accessible data usage license.

R1.2. (meta)data are associated with their provenance.

R1.3. (meta)data meet domain-relevant community standards.

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Japan Science and Technology Agency Bioscience Data Base Center

Source: FORCE11: THE FAIR Data Principles (2016)

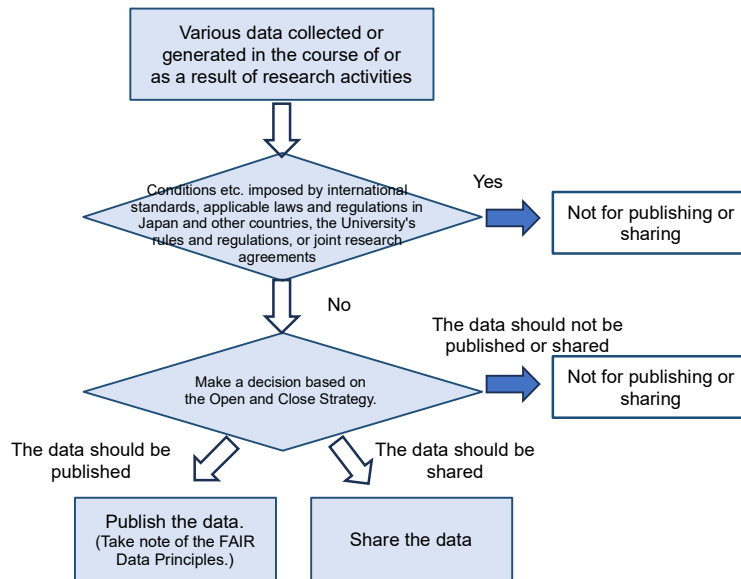
<https://www.force11.org/group/fairgroup/fairprinciples>

NBDC research team (translation), Japanese translation of "The FAIR Data Principles" (2019) <https://doi.org/10.18908/a.2019112601>

(3) Researchers should make their own decision as to whether or not to publish research data mainly based on whether or not publishing such research data is beneficial to research promotion and social development in their research field. Moreover, researchers should make their own decision as to whether or not to share research data mainly based on whether or not there is a need to restrict access to such research data to certain researchers for the purpose of protecting personal information or the proprietary value of the data. (However, it is generally advisable to publish research data that can be used to support academic papers or other similar publications).

(4) Research data for publishing have metadata and then be published through an appropriate repository.

\* Flowchart used to determine whether research data should be published



#### 4. The University's duty

The University has a duty to create and maintain an environment that allows researchers to appropriately manage, publish, and effectively use their research data.

(1) The University plans to provide the support described below for researchers to appropriately manage, publish, and effectively use their research data.

- Providing data storage for preserving and managing the research data
- Providing an institutional repository for publishing and effectively using the research data
- Offering guidance and advice on methods for managing, publishing, and effectively using the research data
- Carrying out dissemination and educational activities to promote the management, publication, and effective use of the research data



#### 5. Reviews of this Policy

The University reviews this Policy from time to time in response to changes in the social situation and the environment surrounding its research activities.

(1) The University reviews this Policy and this Explanatory Note to the Waseda University Research Data Management and Publishing Policy from time to time in response to changes in the social situation and the environment surrounding the University.