Measures for the Implementation of "National Policy on Promoting Open Access to Publicly Funded Scholarly Publications and Scientific Data" (decided by the Integrated Innovation Strategy Promotion Council on February 16, 2024)

> February 21, 2024 Revised on October 8, 2024 Agreements of the relevant ministries and agencies

The following measures are established for the implementation of the measures related to "National Policy on Promoting Open Access to Publicly Funded Scholarly Publications and Scientific Data" (decided by the Integrated Innovation Strategy Promotion Council on February 16, 2024) (hereinafter referred to as the "National Policy").

- 1. Competitive Research Funding Systems Subject to Immediate Open Access
  - We will comprehensively determine the competitive research funding systems whose main outputs are scholarly publications subject to immediate open access<sup>1</sup> from the viewpoints of,
    - those that focus primarily on the creation of new scientific knowledge and treat peerreviewed scholarly publications as their main outputs, and
    - those other than "the systems as part of specific administrative measures to improve the technical level",

and shall be reviewed as necessary in light of policy and market trends related to open access in Japan and abroad.

 The following table shows the competitive research funding systems subject to immediate open access for scholarly publications and scientific data<sup>2</sup>, if the current systems continue and a new application is made in FY2025. This table will be revised in accordance with the revision or

<sup>&</sup>lt;sup>1</sup> The term "immediate" of "immediate open access" in the National Policy means that there is no period of prohibition (embargo) after publication of a scholarly publication and scientific data funded by the relevant competitive research funds in academic journals. The term "publication in an academic journal" means that an academic paper is published in an academic journal in an electronic version. If an academic paper is published in an electronic version before the volume, number and page of the publication are fixed, the time at which it is published in the electronic version shall be deemed as "publication in an academic journal." In addition, since the period required for the procedures to publish a scholarly publication in information infrastructures such as institutional repositories after publication in an academic journal varies depending on the system of the institution to which the author belongs, no special provisions will be made. However, it is desirable to publish the publication in information infrastructures such as institutional repositories within about three months after publication in an academic journal.

<sup>&</sup>lt;sup>2</sup> The scientific data required for publication in information infrastructures such as institutional repositories refers to the "research data for the published scholarly publications that are required to be published from the viewpoint of ensuring transparency and reproducibility in the writing guidelines and publication regulations of electronic journals in which the scholarly publication is published" specified in the National Policy, which are the data on the premise of publication, such as supplemental data. And the scientific data do not include data that is not on the premise of publication, such as data required in the process of peer review. The management and utilization of research data, including the scientific data for scholarly publications, are to be implemented based on an open-and-close strategy in accordance with National Policy on Management and Utilization of Publicly Funded Research Data (decided by the Integrated Innovation Strategy Promotion Council on April 27, 2021). Under the National Policy, the government does not intend to require for the disclosure of research data as "scientific data" that has not been previously disclosed.

abolition of each system of competitive research funds.

	Name of Ministry	Funding Agency	Name of System
1		Japan Society for the Promotion of Science	Grants-in-Aid for Scientific Research
2	Ministry of Education, Culture, Sports, Science and Technology	Japan Science and Technology Agency	Strategic Basic Research Programs <sup>3</sup>
3	Culture, Sports, Science	Japan Agency for Medical Research and Development	Strategic Basic Research Programs (Advanced Research & Development Programs for Medical Innovation)
4	Ministry of Education, Culture, Sports, Science and Technology	Japan Science and Technology Agency	Fusion Oriented Research for disruptive Science and Technology

Table: Competitive Research Funding Systems subject to Immediate Open Access

 Publishing Scholarly Publications and Scientific Data in Information Infrastructures such as Institutional Repositories<sup>4</sup>

Publication in information infrastructures such as institutional repositories shall be done through any of the following methods.<sup>5</sup> Scholarly publications and scientific data to be published shall correspond to publisher version or author accepted manuscript.

(Publication in Institutional Repositories)

 If institutional repositories are available at the institution to which the recipients of target competitive research funds (including corporations; hereinafter referred to as "RECIPIENTS") belong, RECIPIENTS shall, in principle, publish their scholarly publications and scientific data in the institutional repositories.

(Publication in Information Infrastructures other than Institutional Repositories)

RECIPIENTS shall be deemed to have published their scholarly publications and scientific data in information infrastructures such as institutional repositories in the following cases:

- when they have published their scholarly publications and scientific data in repositories established by research field that can be searched on the NII RDC,
- when they have published their scholarly publications and scientific data on platforms where they cannot be searched on the NII RDC, but they listed the identifiers of their scholarly publications and scientific data in the annual research report to the funding agency, and their scholarly publications and scientific data are made searchable on the NII RDC through the

<sup>&</sup>lt;sup>3</sup> Excluding the Advanced Technologies for Carbon-Neutral (ALCA-Next) program and the Cutting-edge Research and Development on Information & Communication Sciences (CRONOS) program.

<sup>&</sup>lt;sup>4</sup> "Information infrastructures such as institutional repositories" means those of which scholarly publications and scientific data can be searched on the research data infrastructure system (NII Research Data Cloud; hereinafter referred to as "NII RDC"), which is designated as "a core platform for the management and utilization of research data in Japan" in the Sixth Science, Technology and Innovation Basic Plan (decided by the Cabinet on March 26, 2021).

<sup>&</sup>lt;sup>5</sup> Although RECIPIENTS include all recipients of competitive research funds, such as co-investigators, the specific implementation method shall be appropriately applied under the supervision of the principal investigator, depending on the characteristics of the competitive research funds and the policy on open access of the affiliated institution. However, this does not preclude publication in multiple information infrastructures.

research project databases of the funding agency,

- when they have published their scholarly publications and scientific data on Jxiv<sup>6</sup> or the repository (tentative name: GRANTS Data) developed by the Japan Science and Technology Agency (JST),
- when they have made their scholarly publications and scientific data immediate open access on electronic journals of academic publishers, etc., they listed the identifiers of their scholarly publications and scientific data in the annual research report to the funding agency, and their scholarly publications and scientific data are made searchable on the NII RDC through the research project databases of the funding agency, or
- when scholarly publications and scientific data are made searchable on the NII RDC through other means.
- 3. Handling of Scholarly Publications and Scientific data for Which Immediate Open Access Is Difficult
  - RECIPIENTS shall make the utmost effort to implement immediate open access when disseminating research outputs. However, if it is difficult for RECIPIENTS to implement immediate open access, they shall report the reasons for the difficulty at the time of each annual research report through systems developed by the relevant ministries and funding agencies.
  - The relevant ministries and funding agencies shall establish items to report on the implementation of immediate open access in the systems used for reporting outputs to funding agencies, such as the Electronic Application System for Projects Funded by Grants-in-Aid for Scientific Research, the Research Project Management System (R3; R-Cube), or e-Rad (the Cross-Ministerial Research and Development Management System). In addition, if immediate open access is not implemented, they shall select and enter one of the following options about the reasons for the difficulty.
    - ※ Reasons for difficulty in implementing immediate open access (multiple choices are allowed):
      - a. Policy of publishers and journals stipulates embargo
      - b. Policy of publishers and journals does not exist or is unclear
      - c. Difficulty in utilizing transformative agreements and APCs that do not put pressure on existing research funds
      - d. Others (free description)
  - In addition, if the reasons for the difficulty in implementing immediate open access is resolved, RECIPIENTS shall promptly publish their scholarly publications and scientific data in information infrastructures such as institutional repositories.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> A system (preprint server) operated by JST that makes preprints freely available on the Internet. Peer-reviewed papers (papers that reflect peer review comments, etc., and published papers) can also be published on Jxiv with the permission of the academic publisher, etc.

<sup>&</sup>lt;sup>7</sup> In this case, it is recommended to reduce the workload of researchers to register scholarly publications and scientific data after the embargo ends by devising a system, for example, registering scholarly publications and scientific data in information infrastructures such as institutional repositories immediately after publication in academic journals, keeping them private during the embargo, and automatically disclosing them after the embargo ends.

- 4. Monitoring the Implementation Status of Open Access
  - With the cooperation of the relevant ministries and agencies, the Cabinet Office shall conduct surveys to confirm the progress on the implementation of immediate open access and monitoring the implementation status of open access.
  - In order to monitor the implementation status of immediate open access calculated by the number of scholarly publications given immediate open access divided by the number of scholarly publications published in academic journals based on the information included in the annual research report to each funding agency, the following information shall be reported for each scholarly publication and scientific data in the annual research report to each funding agency.
    - i. General bibliographic information <existing8>
    - ii. Whether it is peer-reviewed article or not <existing>
    - iii. Whether it is subject to immediate open access<sup>9</sup> <new<sup>10</sup>>
    - iv. Whether immediate open access was implemented or not<sup>11</sup><new>
    - v. (When you cannot implement immediate open access) Reasons for difficulty in implementing immediate open access <new>
    - vi. Link to the scholarly publication (identifier such as DOI of the publisher version <existing> or URL of the landing page of the information infrastructure such as institutional repository <new>)
    - vii. Link to scientific data (identifier such as URL of landing page of the information infrastructure such as institutional repository. If the publication of the scientific data is not required, it shall be clearly stated) <new><sup>12</sup>
  - Regarding the status of open access in Japan, the proportion calculated by the number of scholarly publications given open access divided by the number of scholarly publications

<sup>&</sup>lt;sup>8</sup> Items that already exist in the systems used for annual research report to funding agencies such as e-Rad.
<sup>9</sup> In the National Policy, immediate open access is applied to peer-reviewed scholarly publications (peer-reviewed scholarly publications published in electronic journals, including author accepted manuscript) and scientific data (research data that are required to be published from the viewpoint of ensuring transparency and reproducibility in the writing guidelines and publication regulations of electronic journals in which the scholarly publication is published).

<sup>&</sup>lt;sup>10</sup> Item that is planned to be added in the systems used for annual research reporting to funding agencies such as e-Rad.

<sup>&</sup>lt;sup>11</sup> With regard to "iv. Whether immediate open access was implemented or not," select "Immediate open access was implemented" in the following cases; (1) In the case that immediate open access was implemented on a platform whose scholarly publications and scientific data cannot be searched on the NII RDC (required to make them searchable on the NII RDC through procedures such as listing the identifier when annual research report), (2) In the case that immediate open access was implemented on electronic journals of academic publishers, etc. (required to make them searchable on the NII RDC through procedures such as listing the identifier when annual research report), and (3) In the case that immediate open access has not been implemented at the time of the annual research reports due to the time required for procedures related to publication in information infrastructure such as institutional repositories although scholarly publication and scientific data were published in a journal without embargo.

<sup>&</sup>lt;sup>12</sup> As a general rule, items vi and vii should be provided when "immediate open access was implemented" is selected. Identifier such as URL of the landing page of the information infrastructure such as institutional repository" does not have to be provided in the following cases: (1) In the case that immediate open access was implemented on the electronic journal and the published scholarly publications and scientific data can be searched on the NII RDC through the research project database. (2) In the case that it cannot be provided at the time of the annual research reports due to the time required for procedures related to publication in information infrastructures such as institutional repositories.

published in academic journals will be monitored using methods such as bibliographic databases. The progress of open science, including open access for scholarly publications and scientific data, is being monitored internationally, and the government will work to establish a rational method utilizing international frameworks such as the G7.

## 5. International Cooperation

 The government will cooperate on open access with like-minded countries, regions, and international organizations such as the G7, utilizing the G7 Science and Technology Ministers' Meeting and conferences of multilateral and bilateral frameworks. We will promote cooperation among international platforms to advance the publishing and sharing of research outputs and consider a framework for monitoring the progress of open science.

## 6. Other Issues for Future Consideration

- Relevant ministries and funding agencies will proceed to establish a system in order to monitor the implementation status of open access efficiently through cooperation among their systems that funding agencies use for reporting the research report including e-Rad and their necessary updates by the time the first annual research report of competitive research funds will be implemented. The Cabinet Office will lead to adjust and coordinate about them.
- In cooperation with funding agencies, universities, etc., and other institutions to which RECIPIENTS belong, the government will promote consideration on the appropriate intersystem federation so that scholarly publications and scientific data can be searched on the NII RDC.<sup>13</sup>
- The first survey on the implementation status of immediate open access is expected to be conducted around the end of 2027. Therefore, by the end of 2027, the government, funding agencies and universities, etc. will implement a function that enables them to efficiently check the research outputs of the adopted projects subject to immediate open access on e-Rad, etc.
- If issues arise in implementing these measures, funding agencies and RECIPIENTS will discuss measures. And if necessary, the relevant ministries and funding agencies will also discuss measures.
- These measures will be reviewed as necessary based on policy trends regarding open access in Japan and abroad.

<sup>&</sup>lt;sup>13</sup> Intersystem federation among following systems are assumed; systems used for annual research reporting to funding agencies such as the electronic application system for Grants-in-Aid for Scientific Research, the Research Project Management System (R3; R-Cube) and e-Rad, the research project database of funding agencies (Grantsin-Aid for Scientific Research Database, JST Project Database, and AMEDfind), Jxiv, and NII RDC, etc.