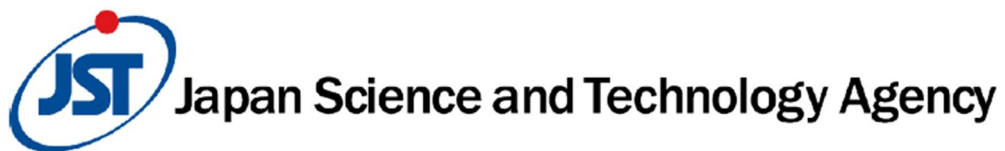


Moonshot Research and Development

Project Manager Application Guidelines

Appendix1 2025

【Goal6】



Department of Moonshot Research and Development Program

March, 2025

1. Overview

(1) The moonshot goals for which Project Managers (PMs) are called

Below are the Moonshot Goal for the prospective Project Managers (PMs) and its Program Director (PD) will attempt to achieve. Make sure to check the R&D concept to achieve the goal and the PD Guideline for PM Application in the appendix.

Moonshot Goal 6 (PD: KITAGAWA Masahiro)	Realization of a fault-tolerant universal quantum computer that will revolutionize economy, industry, and security by 2050.
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Please note that the “proponents” referred to in these application guidelines and application forms are people who will carry out proposals as PMs, “leader’s institutions” are institutions that employ PMs and support PM activities, and “R&D institutions” are institutions with which the people carrying out R&D under the direction of PMs (Performers) are affiliated. In addition, “leader’s institutions” and “R&D institutions” are also referred to as “R&D institutions, etc.”.

(2) Schedule of the call for application and selection

Call for application starts from	<u>Monday, March 31, 2025</u>
Applications accepted until (Final time and date of acceptance from e-Rad.)	<u>Noon, Tuesday, June 3, 2025</u> <u><No delay accepted></u>
Period of document-based review	early June – mid June
Notification of results of document-based review	Late June

Period of interview-based review	August 27, 2025 – August 29, 2025
Notification and announcement of selection results (Notification sent to all proponents)	Late-September or later

※ Use e-Rad to apply for this call (see Chapter 5, "How to use the cross-ministerial R&D management system (e-Rad) for your application" in the main text of the application guidelines).

※ The underscore indicates that the schedules are fixed. All other schedules remain Unfixed and are subject to change.

※ Notifications will be sent via e-mail to all proponents who are invited to the first-round interview selection, second-round document review, and second-round interview selection.

(No postal mail will be sent. Notifications will be sent to the e-mail addresses registered on e-Rad. Please ensure that you have set your e-mail address to receive our notifications.)

※ The timing of e-mail communications to candidates for the first-round interview selection, second-round document review, and second-round interview selection, and the schedule for the interview selection meetings will be announced on the official public call for applications webpage.

<https://www.jst.go.jp/moonshot/en/application/202503/ms6.html> as soon as they are determined.

※ Proposals not completed via e-Rad by the application deadline will not be considered for review under any circumstances.

2. How You Apply for the Call

Download from the website the materials you need for making application including the

forms for proposals: <https://www.jst.go.jp/moonshot/en/application/202503/ms6.html>
Use e-Rad (<https://www.e-rad.go.jp/>) to apply for this call (see Chapter 5).

When the deadline is close, a large number of accesses may be made to e-Rad, which may overload the system, make you need a long time to view pages, make you unable to upload files, cause errors to make you go back to the top page etc., cause some other troubles, and make you unable to finish your application by the deadline. Allow yourself sufficient extra time to finish your application. **If you have not finished your application steps from e-Rad before the deadline, your application, regardless of the reason, will not be accepted as a subject of our examination. We will not accept any replacement or substitute of your written proposals after the deadline has come.** If a large-scale system trouble should occur to e-Rad during the period of application and thus it should be difficult to make application from e-Rad, then we may post our corrective actions on the website of this call. Your understanding is appreciated.

Write the same organizations, posts, and other information on e-Rad and in the description on your written proposals (if any contradiction is found, the description on your written proposals are taken as an official one). Note that we cannot accept your proposal if your written proposal uploaded from e-Rad contains some difficulty that makes our examination difficult. "Some difficulty that makes our examination difficult" here includes any omission on the form of your written proposals, any erroneous conversion of characters that makes it difficult to read and examine the document, any important omission in any item provided on your written proposal, and the like.

For the precautions and the details of the application method, see the website of this call and Chapter 4, "Instructions for proponents" and Chapter 5, "How to use the crossministerial R&D management system (e-Rad) for your application" in the main text of the application guidelines.

The website of this call:
<https://www.jst.go.jp/moonshot/en/application/202503/ms6.html>

2.1 Application type

Follow the instructions on filling in the form to create a written proposal. Download the

proposal form from the following website.

<https://www.jst.go.jp/moonshot/en/application/202503/ms6.html>

For the details of how to apply, see Chapter 5, "How to use the cross-ministerial R&D management system (e-Rad) for your application" in the main text of the application guidelines.

2.2 Documents to be submitted

The list of the documents that must be submitted is as follows. In addition, JST may ask a proponent to provide additional information in the course of selection. A proponent may be asked to submit a statement of accounting of a leader's institution if it is an enterprise.

[Form 1] Basics

[Form 2] The scenario to achieve the Moonshot Goal (within 4 pages)

[Form 3] Proposal for R&D project (within 7 pages)

[Form 4] Plans for promoting the R&D project and budget plans (within 2 pages)

[Form 5] Proponent management ability (within 2 pages)

[Form 6] Application status, efforts, and acceptance of other research funds

[Form 7] Information on conflicts of interest

[Appendix to Form] Performer candidate information sheet (within 1 page per performer)

3. The periods to implement R&D projects

As a general rule, the period will be from April 1, 2026 to November 30, 2030. Note that the research and development project may be changed (accelerated or decelerated) or terminated depending on the results of the annual evaluation.

For details, please refer to "3.5 PDs' progress management and evaluation of the PMs" in the main text of the application guidelines.

4. Monetary amount for R&D projects

For the budget scale per PM of the R&D project at the time of proposal, please refer to Appendix 3 of the Application Guidelines, "PD Policy (Goal 6)", and propose the most appropriate R&D expenses based on the content of the proposed project.

The selected PMs will work under the direction of the PD with the assistance of sub-PD, advisors, etc., to build up the R&D project. During the refinement period, the PM will brush up (review and materialize) the contents of the R&D project proposed at the time of application. The contents of the project development include a review of the scenario to achieve the MS goals, a detailed plan of the R&D project, and the establishment of a support system for the PM activities by the representative organization.

The R&D budget for a R&D project at the initial stage will be judged and determined by the PD in cooperation with the advisors at the time of the refining after the adoption. For more details, please refer to "1.2 The workflow of project operations" in the main text of the application guidelines.

5. The number of proposals to be adopted

The aim is to adopt eight PMs. This may change based on the judgement of the PD.

6. Proponent requirements

6.1 Requirements that proponents as PM candidates are expected to have

Regarding the requirements for the proponents, understand the following two items in advance.

- *The proposals are not accepted or adopted, in principle, if it is revealed that the proponent requirements were not satisfied.
- *The requirements need to be maintained during the period of the execution of the R&D projects. The PM is dismissed if the application requirements come to be not satisfied during the period of the implementation of the R&D project. Before filing an application, ensure that you understand the content stated in Chapter 4, "Instructions for proponents" in the main text of the application guidelines as well as the below

items, which should be considered when you apply for the project.

Proponents need to satisfy all of the application requirements (1) to (5) below.

- (1) Applications must be filed by one person, not by a group.
- (2) PMs are expected to dedicate their efforts exclusively to their responsibilities as PMs as much as possible.

Note: If the PD determines that it would be particularly effective for a PM to conduct part of the R&D of the project themselves to produce better results, they may be allowed to participate as Performers.

- (3) All responsibilities of the R&D project must be undertaken for all periods of the R&D project's implementation.

*For further details, please see section 3.6 "The roles and responsibilities of the PMs, leader's institutions, and Performers" in the main text of the application guidelines.

- (4) A program regarding research and ethics education has been completed at the institution to which he or she belongs. Alternatively, an education program provided by JST must be completed by the application deadline.

*For further details, please see section 4.1, "Completing the course on research and ethics education" in the main text of the application guidelines.

- (5) A pledge must be made regarding the following four items. The proponent must:
 - Understand and be willing to conform to the "Guidelines for Responding to Misconduct in Research Activities" (decision, Minister of Education, Culture, Sports, Science and Technology, August 26, 2014)
 - Understand and be willing to conform to "Guidelines for the Management and Audit of Public Research Funds In Research Institutions (practice standards)" (revised on February 1, 2021)
 - Not have committed any misconduct in research and development activities (forgery, falsification, and theft) or any unjustifiable use of trusted research funds
 - Not have committed any misconduct in research and development activities with

respect to the past achievements of the researches and developments described in the applicable written proposal

*The pledges are available from the screen to fill in the information of proponents on the Cross-ministerial R&D Management System (e-Rad).

A PM must determine the leader's institution as the base of his or her own activities in Japan.

The leader's institution must be the PM's employer (a university, college, public organization, private enterprise, or the like) and be a Japanese corporation that is based in Japan. For the specific requirements a leader's Institution must meet, please see section 3.6.2, "The Roles and responsibilities of leader's institutions" in the main text of the application guidelines.

*You can apply for this call even if you currently belong to an organization outside in Japan and your leader's institution is not determined at the time of application.

*If, however, you are not able to designate your leader's institution within one month of being selected in principle, then the adoption could be canceled. If the PM does not choose the present institution as the leader's institution, the deadline will be three months after the adoption.

6.2 Requirements for the proposed R&D projects

Before making an application, the proponents must understand that items (1) to (3) below must be satisfied for the R&D project they propose. Please also see section 8 "Viewpoints in selection".

(1) Compatibility with the Moonshot R&D program

- Scenarios leading to the achievement of MS Goals should be ambitious and based on more daring ideas, and if realized, should have a significant impact on industry and society and contribute to solving social issues.

(2) Scenarios leading to the achievement of MS Goals

- The scenario to be addressed in the R&D project should be formulated from a

broad

perspective, including not only technological but also social perspectives, and the issues to be overcome should be analyzed and identified accordingly.

- Provide scientifically supported methods and measures to solve the problems to be overcome.

(3) Plans for constructing a research and development organization

- The measures and plans for constructing an organization that further develops the ability to conduct R&D projects at the highest level, regardless of its location within or outside of Japan, not limited to a specific research community, and leveraging knowledge from a wide range of fields to solve problems.

6.3 Requirements for leader's institutions

As the base of PM activities, a leader's institution must endeavor to support the PM in devising effective and efficient activities and managing the business to support the PM's activities. A proponent, even if it is unclear whether the organization to which the proponent belongs will be his or her leader's institution, is allowed to make an application; however, he or she must determine a leader's institution by the close of the refining stage. The adoption will be canceled if a leader's institution is not determined within, in principle, one month* following the adoption of the project.

*If the PM does not choose the present institution as the leader's institution, the deadline will be three months after the adoption.

Before making an application, the proponents must fully understand that items (1) and (2) below must be satisfied by the leader's institution.

- (1) To be an employer of the PM, which is a university, college, public organization, private enterprise, or the like, that is a Japanese corporation and has a base of activities in Japan, and to employ the PM by the end of the refining period.
- (2) To accept the items described in section 3.6.2, "The roles and responsibilities of leader's institutions" in the main text of the application guidelines and to finalize a contract with JST.

7. Methods of selection

The proposals received will be evaluated through a document-based review and an interview-based review, carried out by the PD in cooperation with the sub-PD and the advisors. The results of the PD's selections will be discussed by the Governing Committee to determine the PMs. After this, JST will make a final decision on the PMs, based on the details of the Governing Committee's discussion.

<https://www.jst.go.jp/moonshot/en/application/202503/ms6.html>

8. Viewpoints in selection

Our selection will be based on the following viewpoints and made in a comprehensive manner.

Following perspectives

Purpose and Intent

The project must meet the objectives of the project and be expected to produce the results that the project aims to achieve.

The project must be able to clearly explain a reasonable scenario (hypothesis of success) from the viewpoint of social implementation, including technological aspects and the division of roles between the public and private sectors, toward the achievement of the 2050 goal.

Originality and superiority

The proposal must have originality and superiority based on domestic and international trends, etc.

The goals and contents of the project proposed by the PM (hereinafter referred to as "proposal contents") must have a significant impact on future industry and society. The project goals and contents (hereinafter referred to as "proposal contents") proposed by the PM must be innovative and expected to have a significant impact on

future industry and society.

Goals and Plan

The goals to be achieved during the implementation period, the implementation plan, and the budget plan must be specific and appropriate.

Proposals must be based on more daring ideas and be more challenging than conventional proposals.

Implementation System

The proposal must have an implementation system that is optimized for the execution of the proposed activities.

Proposals must bring together top-level R&D capabilities, knowledge, and ideas from Japan and abroad.

Execution Capability

The applicant must have the necessary track record and ability to assume responsibility for the proposed activities.

The applicant should have a broad human network of relevant researchers and expertise, both domestic and international, to promote cutting-edge research and development.

The applicant should have management and leadership skills to establish an optimal R&D system and review the system flexibly according to the progress, etc. etc.

And ensuring of transparency and fairness of research, appropriate treatment of research results, management of technical information and other items are to be considered because of importance in fair research activities.

9. Essential points for application

Below are the especially important points for application. Please make sure to confirm the related contents of the guideline.

● Completing the course on research and ethics education 【See also 4.1 in the main text of the application guidelines】

The proponent needs to complete a program regarding research and ethics education at

the institution to which they belong. Alternatively, an education program provided by JST must be completed by the application deadline. Note that if we cannot confirm their finishing the course, we will regard their applications as not having satisfied the requirements.

●Restrictions on multiple applications 【See also 4.2 in the main text of the application guidelines】

- (1) No one proponent is allowed to make applications of two or more R&D projects for the same Moonshot (MS) Goal .
- (2) In the Moonshot R&D project, a PM cannot be the PM of more than one project.
- (3) A single proponent may not propose R&D projects for multiple Moonshot Goals simultaneously.
- (4) If, as a result of this call for proposals, a person becomes involved in two or more research and development projects as a PM or Performer, adjustments such as reducing the R&D budget or not allowing participation in some of the tasks of the projects in which the researcher is involved may be made based on the content and scale of the R&D, at the PD's discretion.

●Determination of leader's institution after PM adoption 【See also Project Manager Application Guidelines Appendix1 (Goal6) 6】

You can apply for this call even if you currently belong to an organization outside Japan and your leader's institution* is not determined at the time of application. If, however, you are not able to designate your leader's institution within one month** of being selected, then the adoption could be canceled.

*The leader's institution must be the PM's employer (a university, college, public organization, private enterprise, or the like) and be a Japanese corporation that is based in Japan. A PM must determine the leader's institution as the base of his or her own activities in Japan.

**If the PM does not choose the present institution as the leader's institution, the deadline will be three months after the adoption.

[If the English version of the information of call for application does not conform to the Japanese version, the Japanese version shall prevail.]

10. Inquiry Office

Department of Moonshot Research and Development Program, JST

E-mail: moonshot-koubo@jst.go.jp

Office hours: 10:00–17:00

*Except for Saturdays, Sundays, national holidays, and the year-end new-year holiday.

*Please make sure to write “[2025 PM(goal 6)]” in the subject.

Tel: 03-5214-8419

We will only accept emergent telephone inquiries on the day of the deadline or in an emergency. Even if we receive your question(s) by telephone, we may ask to handle the issue via e-mail.