

FY2024

Instructions for Preparing a Proposal of Strategic Basic Research Programs : ACT-X

As for “Overview”, “Research Supervisor’s Policy on Call for Application, Selection, and Management” and “Strategic Objective” of the research area to be applied for, please see the following URL and select the research area.: <https://www.jst.go.jp/kisoken/boshuu/teian/en/top/ryoiki.html>.

For a research applicant, researcher ID for e-Rad must be required in order to submit a proposal. However, if a student proposes the research and his/her belonging institute does not allow the issuance of the student's e-Rad researcher ID, it is possible to apply using the researcher ID of the supervisor. Ensure that you have deleted “Proposal Preparation Checklist” before submitting proposal documents.

(note 1) If there is a defect in a proposal document uploaded to e-Rad that makes it difficult to review the proposal, the proposal will not be accepted. Please be attentive to the preparation of documents. “Defects that make a review difficult” refers to missing documents (especially, form 1: cover of proposal documents), garbled characters that make a review difficult, and the absence of important entry items in a proposal. JST shall not be held responsible for any defects in proposal documents that appear before a deadline for proposal applications, whether or not the proposal is accepted. Therefore, please be aware that JST makes neither an amendment of the proposal upon prior confirmation by the applicant, nor a request for the applicant to correct proposal documents before a deadline of submission. A research applicant cannot withdraw his/her proposal on e-Rad after the deadline.

(note 2) For the items that are included in both e-Rad and a proposal document, if the descriptions are not same, the information in the proposal document takes precedence.

Research Proposal (Form) Completion Requirements

A list of documentation to submit is shown below. Prepare research proposals by following the research proposal completion requirements on the next page and the following pages. Please use the Research Proposal Form of this year. Depending on the research area, the proposal form and application conditions (research period, research expenses, standard amount of research expenses) may differ. Please ensure to download and use the proposal form of the research area to which you are planning to apply.

When preparing a proposal, it is requested to clarify the “Overview of Research Area” and “Research Supervisor’s Policy on Call for Application, Selection, and Management” of the research area on the Call for Research Proposals.

Form No.	Document
Form 1	Cover of research proposal documents (within one page)
Form 2	Research Proposal Overview (within one page)
Form 3-1	Project Description (within three pages)
Form 3-2	Research schedule (within one page)
Form 4	Research Achievements (within three pages)
Form 5	Information on Other Supports
Form 6	Other Special Remarks (within two pages)

* File sizes should not exceed 3MB in total.

* In the case that the applicant for ACT-X is a Student, a JSPS Research Fellow, or those who is not have a position to become the responsible person for the contract to spend research fund in the belonging organization, it is required that the "Memorandum of Confirmation concerning application to the ACT-X" signed by both the Student etc. and the academic advisor must be submitted through e-Rad in addition to the research proposal application documents.

Memorandum of Confirmation Form: https://senryaku.jst.go.jp/teian/koubo/act-x_confirm.pdf

*See also the user manual of e-Rad: https://www.e-rad.go.jp/en/manual/for_researcher.html

*Researchers must understand Application Guideline “Chapter 8: Key Points in Submitting Proposals” and “Chapter 9: Limitations on the Multiple Application within the Strategic Basic Research Programs” before making an application.

FY 2024 Application ACT-X Research Proposal

- ※ Fill in form 1 within one page of A4 paper (observe strictly).
- ※ You may delete notes in blue in this and other forms. When information entered in e-Rad is different from that in research proposal documents, the latter will be considered correct.

Research Area	<p>*Select one of the Research Area inviting applications in 2024. (Description Example) ACT-X “ Name of the Research Area”</p>
Title of proposed research project	<p>*When the theme is in English, describe the theme in Japanese (about 20 characters) along with the English theme</p>
Name of Applicant	
Date of birth, age, and gender	<p>Month, Day, Year (Age: as of April 1st, 2024) male / female</p>
Affiliated Institution, Section, Title	<p>Describe the affiliation and title accurately without any omission. (i.e., describe Graduate school, Department, Majors, XX laboratory, and project/tenure/associate/assistant professor). For students, enter the master's / doctoral school year in addition to the department.</p>
Academic Background (University Graduation and after)	<p>(Entry example) Graduated from Faculty of xxxx, xxxx University, in 20XX Graduated from Engineering xxxx major, Graduate School xxxx of r xxxx University in 20XX (Instructor: Professor xxxx) 【Instructor Name Required】 Completed Ph.D. in Graduate School of xxxx University in 20XX (Instructor: Professor xxxx) 【Instructor Name Required】 Doctoral Acquisition (xxxx) (xxxx university) in 20XX</p>
Research history (main research content and work history)	<p>(Entry Example: It is essential to include the director's name of the belonged laboratory.) Research history: Assistant Professor, Faculty of xxxx of xxxx University in 20XX to 20XX Research about xxxx in the professor xxxx's laboratory Researcher of xxxx Research Institute from 20XX to 20XX Engaged in xxxx research in the xxxx laboratory of professor xxxx</p>
Information of Applicant	<p>URL: Please indicate URL of researchmap if not, please put the websites where the information of the applicant is available.</p>
Research period	<p>From October 2024 to March 2027 (2.5 years) <i>Do not include the period of the acceleration phase.</i></p>

<p>Total Research Budget</p>	<p>Total Budget: thousand yen</p> <p>(Do not include decimal point. Pay attention to the unit <thousand yen>.-> 6 million yen = 6,000 thousand yen. Check also if the expenses exceed the upper limit set for research expenses stipulated in the "Research Supervisor's Policy on Call for Application, Selection, and Management". Do not include indirect cost.)</p>
<p>Institution that executes Research Costs (Institution planning to contract with JST)</p>	<p>(Name of Institution that executes Research Costs. In case of that the research applicant belongs to multiple institutions, choose ONE and describe it in this box.)</p>

Research Proposal Overview

Outline

- ※ In Form 2, Provide an overall description of the research proposal within one A4-size sheet (no exceptions). Use 10.5 point or larger font size (If these instructions are not followed, the research proposal might not be accepted). Unlike form 3-1 (project description), it is not allowed to cite numbers of papers that are shown in the list of achievements (form 4).
- ※ For the facilitation of comprehension by evaluators, please include figures and tables (color is acceptable) as necessary.
- ※ Form 2 is an important material for documentation-based selection to be evaluated from the perspectives below:
 1. Can the proposal be expected to contribute to fulfilling the purpose of the Research Area? Is it aligned with the goals of the solicited Research Area?
 - * Mainly, does the proposal correspond to items a. in “(1) Selection Standards (Preliminary Evaluation Standards)” in Section 5.1.3, “Selection Perspective” of Application Guideline?
 - ”a. --- The research proposal contributes to the achievement of a Strategic Objective, and the research proposal is Consistent with the Research Area purpose.”
 2. Is it aligned with the goals of the ACT-X Program?
 - *Mainly, does the proposal correspond to the goal noted in c. in “(1) Selection Standards (Preliminary Evaluation Standards)” in Section 5.1.3, “Selection Perspective” of Application Guideline for “Basic research that is original, challenging, innovative, and expected to attain high-quality basic research by international standards over the coming decades and generate new values necessary for scientific and technological innovations”?

Therefore, in this form, provide a brief description that focuses on the details corresponding to Item 1, “Background and Objectives,” of ACT-X Form 3-1 (Project Description), and provide the minimum explanation (corresponding to Items 2 to 5 of Form 3-1) required to understand your description above. The scientific/technical evaluation of the validity of the Project Description will be considered mainly with ACT-X Form 3-1.
- ※ A preliminary selection entailing a documentation-based selection for each Research Area may be held from the perspectives of 1) and 2) above.

Project Description

- ※ Clearly state the work to be undertaken. Figures and tables (in color permitted) may be included if necessary.
- ※ For Form 3-1, do not exceed three A4-size sheets (no exceptions). Use 10.5 point or larger font size (If these instructions are not followed, the research proposal might not be accepted).
- ※ In this form of project description, make effective references to the descriptions of achievements listed in Forms 4 to clarify the relationship between the achievement and the research being proposed by the research project applicant. In making the references, the numbers listed in the forms can be quoted in this form.

1. Background and Objective

- Please state the purposes of your proposal and provide any background to your conceptions, including connections with your research work to date. Furthermore, specifically explain new values necessary for scientific and technological innovations this proposed research would generate.”
* Mainly, does the proposal correspond to item d. in “(1) Selection Standards (Preliminary Evaluation Standards)” in Section 5.1.3, “Selection Perspective” of Application Guideline?”
“d. -- The originality of the research project is based on the applicant’s own idea.”
- In addition, describe shortly scientific and technological impacts of the results and expected societal changes as a result of the impacts from the viewpoint of “scientific and technological innovation” while taking into consideration the purpose of the research area to which the proposal is submitted. Concerning on the social and public future values, explain details in “5. Future Prospect of Research.”

2. Target of proposed research project

- Describe briefly (within 60 words) the research target at the end of the proposed research project.

3. Research Plans and Approach

- For each major research item, please describe the specific research items and how to proceed (including problems expected in achieving the goals set in the previous section and their solutions).
- For proposing an original scheme, please why the scheme is appropriate by comparing with conventional. If you have already got preliminary data and knowledge, you are recommended to explain those.
- As only for ACT-X perspectives, related to item c. in “(1) Selection Standards (Preliminary Evaluation Standards)” in Section 5.1.3, “Selection Perspective” of Application Guideline?”, do

not forget to describe how to achieve your research goals through collaborating with researchers from the proposed research area and other related communities.

- If the total amount of research expenses (direct expenses) exceeds the standard amount, please briefly describe the reason.
 - * The standard amount of research expenses (direct expenses) is set for each area. Please be sure to check the “Research Area Overview”, “Research Supervisor’s Policy for Selection” for the research area to apply, and “Explanatory Meeting Material” on the research proposal website.

4. Originality and novelty of the proposed research and comparison to current state of similar studies

- *Consider the present state and trends of research in related fields in Japan and overseas to clearly show the position in the world, originality, novelty, and superiority of this research plan. Mention specific contents of competing research as required. Also explain in what aspect this research plan is original and challenging from ACT-X viewpoint as stipulated in “Applications Guideline 5.1.3(1): selection standards” b.*

5. Future Prospect of Research

- ※ Concisely describe ideas of the research proposer concerning the scientific and technological impacts that results of this research plan may bring about in the future.
- Consider how the purpose of the research area to which an application is submitted is related to this research plan to explain ideas concerning contact points between results of future research and society (for example, creation of new technologies, acquisition and utilization of intellectual property rights, or their spread in and acceptance by the society).

Research Schedule

- ※ **In Form3-2, describe on one page of A4-size sheet (no exceptions).** If this instruction is not followed, the research proposal might not be accepted.
- ※ Enter the schedule of the proposed research project.
- ※ (The following is an example of 2.5 years research period.)
- ※ If proposed project consists of several research subthemes, state clearly schedules of each subtheme.
- ※ Length, position, and thickness of arrows can be changed.

Example

Research Subjects	2024 Fiscal year (6 months)	2025 Fiscal Year	2026 Fiscal Year
1. XX related Gene Expression Analysis			
• Identification of XX related genes	→		
• Gene Expression Analysis		→	
2. Development and verification of model animal			
• Development of model animal		→	
• Verification of model animal		→	
3. Imaging Analysis			
• Data Collection	→		
• Development of software	→		
• Data Analysis			
4. Development of XX Diagnostic Method			
• Elucidation of XX Correlation	→		
• Development of diagnostic method and verification		→	

Research Achievements

【Author notation in English papers by the applicant : (example) Taro Kagaku】

- ※ In performing selection, evaluators (research supervisor, research area advisor) sometimes search through publication databases to check achievements in detail. This requires the entry of the applicant's name for publication [author notation in English papers by the applicant].
- ※ In Form 4, describe on three pages of A4-size sheet (no exceptions).
- Confirm that a research applicant has the ability to carry out this research proposal and that he/she can be expected to contribute to the development of the research area and the continued development of related research fields. Please list and explain your activities and their results.
- Academic papers, books, proceedings, invited lectures, awards, patents, licenses, start-ups, datasets, software, standardization, past achievements of principal researchers, and other achievements and achievements related to the applicant's research field and proposal content. Please give priority to those that are most closely related to the content of your proposal and those that are recent.
- Please provide a concise explanation of the importance of the achievements/results, the role of the applicant, etc. Please make your explanation as objective and quantitative as possible based on facts (we do not require you to include JIF, h-index, etc.).
- In the case of an academic paper, the paper title, author name (list all authors and underline the applicant), publication name, volume number, pages, year of publication (in Western calendar), etc., and in the case of a book, bibliographic information, etc.). Please describe only those that have already been published or are confirmed to be published. The author may be abbreviated as T. Kagaku, etc.
- For patents, please describe the application number, inventor, name of the invention, applicant, and filing date.
- It is also possible to number the items to be entered sequentially and quote the numbers in the description of the research project (Form 3-1).

Information on Other Supports

- ※ Enter the research project, research period, role, amount of research funds received, and effort for each research project concerning competitive national funding programs (including CREST, PRESTO, ACT-X, AMED-CREST, PRIME) or other research funds (all current research funds for individual research subjects, such as subsidies, grants, joint research funds, contract research funds, etc., including those from overseas) from which the applicant is receiving funds or for which an application is being or is planned to be made. Also see application guideline "Chapter 8.1 Measures against Unreasonable Duplication and Excessive Concentration" and "Chapter 9 Limitations on the Multiple Application within the Strategic Basic Research Programs."
- ※ Enter this proposed ACT-X project first, followed by other research projects in a descending order of the amount of research funds (for the whole period, only direct cost) the applicant receives.
- ※ Add rows if needed.
- ※ If a student uses the supervisor's e-Rad ID and describes that the effort rate is 1% on the e-Rad, fill out this proposal form with the actual effort ratio (eg, 50%). At that time, enter the percentage (%) of the time spent on ACT-X research out of 40 hours a week as "effort".

(*) When applying, since the call of FY2021 is made based on the fact that the "Integrated Innovation Strategy 2020" stipulates that "disclosure of information on the status of acceptance of foreign funds is a requirement when applying for research funds." Therefore, it is clarified that research funds from overseas should also be entered in the form of "whether or not there is other support" (or "status of application / acceptance of research funds, etc." depending on the project). In addition to competitive funds, both domestically and internationally, please list all research funds such as grants from private foundations, contract research expenses from companies, and joint research expenses.

Example

No.	Program (Name of Institution)	Status	Title of Project (Name of Principal investigator)	Research Period	Role (Principal Investigator or co-Principal Investigator)	Research Fund Received (1) Allocated Budget (For entire period) (2) FY 2024 (planned) (3) FY 2023 (actual) (Thousand yen/unit)	FY2024 Effort (%)
-	ACT-X (This application)	Submitted	Enter the effort ratio in the right box →→→→→→→→				70
(1)	Grants-in-Aid for Scientific Research, Fundamental research (C) (Japan Society for the Promotion of Science)	Awarded	Creating W by V (** *)	2020.4 — 2024.3	Principal Investigator	(1) 1,000 (2) 500 (3) 300	20
(2)	X Foundation/Y Research grant (○○Foundation)	Submitted	Achieving high performance in X by Y (** *)	2023.9 — 2025.3	Co-Principal Investigator	(1) 900 (2) 400 (3) -	10
(3)						(1) (2) (3)	

【Notes for Description】

- If it is difficult to enter due to unavoidable circumstances such as being unable to enter based on the contents of the concluded confidentiality agreement, etc., it is possible to submit the application without filling in items other than effort.
- If the information entered in the research proposal differs from reality, the research project may be rejected.
- JST may ask for application and plan documents submitted to other systems when a proposal reaches the interview stage.
- Please refer to the below on each description.

(1) Status

Enter one of the following.

Do not enter effort for a theme corresponding to "Submitted" except for the ACT-X proposed theme.

Awarded: It is currently awarded, or decided to be awarded.

Submitted: It is at the state of selection and it is yet to be decided to be awarded.

(2) Role

Enter one of the following.

Principal Investigator:

Research fund is to be received as a representative for the research theme.

Co-Principal Investigator:

Research fund is to be received as a person in a non-representing position for the research theme

(3) Research fund received

Enter the amount of the research fund in thousand yen in a following manner.

- (a) Awarded as "Principal Researcher" in the research project
Enter the amount of the research fund of the team supervised by the Principal Researcher, excluding that of joint research teams.
- (b) Awarded as "Co-Principal Investigator"
Enter the amount of the research fund of the joint research team represented by the Co-Principal Researcher.

(4) Effort

Enter "ratio of time (%) necessary for conducting research relative to 100% for the whole work hours during the ACT-X research period (2024.10-2025.3) in fiscal year 2024 if adopted for ACT-X. (If a student is an applicant, describe the percentage of time spent for ACT-X research in 40 hours per week as "effort".) Do not enter effort for themes that are already applied and in the process of selection, or that are planned to be applied (those entered as "Submitted").

Take care that the sum of effort for the theme proposed for ACT-X and other themes that are entered as "Awarded" does not exceed 100%.

Other Special Remarks

- ※ In Form 6, Provide an overall description of other special remarks in two pages or less of A4-size sheets (no exceptions). If this instruction is not followed, the research proposal might not be accepted). For items that have check boxes, please check the applicable ones.
- ※ Please refer to “Chapter 5, 5.1.2 (2)” in the application guidelines and state whether or not you have a conflict of interest.
- ※ Until previous years, research applicant who had a conflict of interest with the research supervisor were excluded from selection, however this will be abolished from FY2024. (refer to Ch 5.1.1)

1. Conflict of interest between the applicant and evaluators

Follow the description of application guideline “5.1.2 (2) Conditions for those with conflict of interest” to describe conflict of interest of the research applicant shared with the research supervisor or research area advisor of the research area to which the proposal is submitted.

(Item 1) Conflict of interest with research supervisor: YES NO

If YES, state the reason

(Example) The research applicant conducted joint research with the research supervisor on xx project(20xx-20xx). It comes under condition (d) for conflict of interest stipulated in 5.1.2(2).

(Item 2) Conflict of interest with research area advisor(s): YES NO

If YES,

-Describe the name of research area advisor with conflict of interest: (The Advisor’s Name)

-State the reason

(Example) The research applicant is conducting joint research with the advisor in ** project. It comes under conditions (d) for conflict of interest stipulated for 5.1.2(2).

<Note for Description>

Follow the description of application guideline “5.1.2 (2)① Persons Involved in the Selection Process” to describe conflict of interest of each Co-PI shared with the research supervisor to which the proposal is submitted.

Evaluators who, based on the listed information, are deemed by JST to have a conflict of interest will be excluded from proposal review, will not be allowed to speak at document screening meetings, and will not be allowed to meet face-to-face during the interview screening meetings, so please make sure to clearly list the names of any evaluators who have a conflict of interest. For a list of area advisors, please refer to the Proposed Research Areas homepage. A link to it can be found on the Call for Proposals homepage.

[Application Guideline 5.1.2.(2): Conditions for those with conflict of interest (summary)]

(a) Persons, who are relatives of applicants.

- (b) Persons, who are affiliated with the same department or specialty at a university to which the applicants are affiliated, who are board members or are considered affiliated members of the same university or managed corporation, or who act as the represent of the university. Here, “same department or specialty” means a one rank above group of the smallest research unit.
- (c) Persons, who are affiliated with the same or group company with which applicants are affiliated.
- (d) Persons, who are conducting a close collaboration in a research work with applicants. (Examples are persons, who are conducting a joint research project or have co-authored a paper with applicants, a researcher pursuing the same research objectives as a applicants, a participant or a Co-PI of the research project, others, being recognized those practically affiliated with same research group.)
- (e) Persons in a close teacher-student relationship, or in a direct employer-employee relationship.
- (f) Persons in relationships of direct competition with applicants.
- (g) Persons in other relationships judged by JST to representing conflicts of interest with applicants.

2. Current investment in your organization by JST

Follow the instructions in Application Guideline, Section 5.1.2, (2), “Conditions for those with conflict of interest” to describe whether the organization to which a researcher belongs is a company in which JST has invested.

Current investment by JST: YES NO (If Yes, please write down the detail.)

The name of Institution: XXXXXX (president: YYYYYY)

<Notes for Description>

*For the companies in which JST has invested, access the following website. The companies in which JST has terminated the investment are not within the scope of our management of the conflict of interest. You do not need to describe such companies.

<https://www.jst.go.jp/entre/result.html#M01>

*The standard date to determine the applicability of the conditions described above is the date on which we start accepting applications. Describe the companies that are disclosed as a company in which JST has invested as of the standard date. If a company is one of the companies in which JST is going to invest but has not disclosed as such, do not describe such a company in order to ensure that the secrecy of the internal information of JST is maintained.

For the disclosed information on the investment made by JST, access the following website.

<https://www.jst.go.jp/entre/news.html>

3. (Only for those relevant) special notes for efforts by an applicant

Enter the situation and reasons when an applicant needs work hours (effort) for special duties (work of the academic committee or private company job, etc.).

4. Other special remarks:

- If you are submitting multiple applications for the same research area, please describe the differences from the previous proposal.
- If you have any plans for a change, please let us know.
- Please feel free to use any other information such as describing your enthusiasm for this research proposal.