

ERATO Guide

—For projects adopted between FY2016 and FY2018—

Department of Research Project
JST

Contents

Record of changes	2
Overview	
1. What is ERATO?	
The position of ERATO within JST	5
2. Overview of the ERATO program	
Overview of the program	6
Features of the program	7
Overall project schedule	8
R&D management	
3. Research group	
Research group composition	9
Registration of Research Participants, handling of students	10
Participation of private enterprises is possible	11
Commitment of researchers to other work	12
Commitment of researchers to other works: System 1	
“Project-sponsored young researchers’ research activities at their own initiatives”	13
Commitment of researchers to other work: System 2	
“ERATO Special Treatment Application for Personnel Expenses”	14
Job transfer or reassignment of researchers, etc.	15
Joint research with overseas bodies	16
On-top funding for international activities	17
Regarding the promotion of diversity	18
4. Project Headquarters (HQ)	
Roles of HQ	19
Members composing HQ	20
5. Research and budget planning	
Flow of research planning and decisions on budgets	21
Points to be aware of in preparing a Research Plan and revisions	22
6. Contracts	
What are multiple-year contracts?	23
The contract system	24
7. Budget management	
Budget item categories	25
Budget implementation	26
Transferring sums to other budget item categories	27
Budget carryover	28
Sharing use of equipment and/or combined purchase	30
Handling of income arising in the process of research implementation	31
Research results	
8. Handling of research results	
Intellectual properties	32
Utilizing JST’s academic-industry collaboration and technology transfer-related system	33
External publicity, press releases	34
Recommendation of press releases	35
Submitting research results through research papers or oral presentations	37
Open access to research papers and data management	38
Hosting of symposia, workshops and other outreach activities	39
Project website management	40
Research reports, etc.	41
Research evaluation	
9. Research evaluation	
Types of evaluation and when they are conducted	42
Evaluation viewpoints and schedule	43
Points to be aware of	
10. Towards the promotion of fair and honest research	44
11. Points to be aware of in implementing the research	47

Record of changes

Date of change	Section (Page heading in ERATO Guide)	Main change in contents
October 30, 2018	3. Research group – Commitment of researchers to other work –	The reporting time for the Special Treatment Application Report for Personnel Expenses has been revised from “when the work in question is completed” to “the end of each fiscal year during the applicable period and at the end of the applicable period.”
April 1, 2019	2. Overview of the ERATO program – Overview of the program –	Details regarding the Management and Advisory Subcommittee added.
April 1, 2019	2. Overview of the ERATO program – Overall project schedule –	Main activities of the Management and Advisory Subcommittee added to the overall schedule.
April 1, 2019	3. Research group – Commitment of researchers to other work –	The flow of the procedures concerning special treatment application of personnel expenses have been detailed.
April 1, 2019	5. Research and budget planning – Flow of research planning and decisions on budgets –	Remarks accompanying the launch of the Management and Advisory Subcommittee and source for downloading forms added.
April 1, 2019	8. Handling of research results – Intellectual properties –	The reference URL has been changed and in line with the revision of Administrative Points to be Aware of in Documents Related to the Contract Research Agreement the wording “in the event that a research institutions decides not to apply for a patent” has been altered to “in the event that a research institutions decides not to obtain a patent right.”
April 1, 2019	8. Handling of research results – Recommendation of press releases –	Information JST wants when project members request JST to issue a press release and the URL for downloading the forms have been detailed.
April 1, 2019	8. Handling of research results – Research reports, etc. – 9. Research evaluation – Evaluation viewpoints and schedule –	Remarks accompanying the launch of the Management and Advisory Subcommittee, the period of implementation of interim evaluations, and source for downloading forms added.
April 1, 2019	9. Research evaluation – Types of evaluation and when they are conducted – – Evaluation viewpoints and schedule –	The changes in the schedule chart accompaying the changes from post-completion (preliminary evaluations) to interim evaluations added and parts of explanactory text amended
April 1, 2019	11. Points to be aware of in implementing the research	The URLs for downloading forms for research plan, research progress report, press releases etc. have been detailed.
April 1, 2020	Entire ERATO Guide	URL links in which the “http” prefix has been altered to “https.”
April 1, 2020	3. Research group – Regarding the promotion of diversity –	In the section “Regarding the life events of researchers participating in ERATO,” researchers, etc. employed using budgets other than direct costs have become eligible, and the child rearing period changed to until children become nine years old but have not yet reached the first April 1 following their 9th birthday.

Record of changes

Date of change	Section (Page heading in ERATO Guide)	Main change in contents
April 1, 2020	8. Handling of research results – Intellectual properties –	<ul style="list-style-type: none"> • In line with the revision of Administrative Points to be Aware of, wording “reporting” has been altered to “notifications.” • The fact that it is now possible to send notifications using intellectual property forms in electronic format has been added.
April 1, 2020	8. Handling of research results – Open access to research papers and data management–	The Data Management Policy for Strategic Basic Research Programs has been merged into the JST Policy on Open Access to Research Publications and Research Data Management.
May 12, 2020	3. Research group – Commitment of researchers to other work –	In response to the Project-sponsored young researchers' research activities at their own initiatives, revisions have been made to the systems regarding the commitment to other work of researchers etc. employed for ERATO projects.
May 25, 2020	10. Towards the promotion of fair and honest research	In the section “Those required to complete the eAPRIN program and measures to be taken”, a new table on those required to complete the eAPRIN program has been added.
December 1, 2020	7. Budget management – Budget item categories –	The subsection “Payment of expenses relating to entrustment of work other than ERATO research (buyout expenses)” has been added to the Direct Costs section.
December 28, 2020	7. Budget management – Budget item categories –	The subsection “Payment of personnel expenses for Research Directors and Co-Research Directors from direct costs” has been added to the Direct Costs section.
April 1, 2021	Entire ERATO Guide	The reference URL has been changed.
June 16, 2021	Entire ERATO Guide	The reference URL has been changed.

1. What is ERATO?

– The position of ERATO within JST –

Exploratory Research for Advanced Technology (ERATO) is a research funding program with a long history, first launched in 1981. Based on a large research budget its objectives are, by promoting challenging basic research through a fusion transcending the existing bounds of research fields and new approaches, to encourage the formation of new trends in science and technology that will lead to the creation of science and technology-based innovations, and to contribute to the attainment of Strategic Objectives.

* ERATO program website URL: <https://www.jst.go.jp/erato/en/index.html>

<<What are the Strategic Basic Research Programs?>>

◆ Purpose

The purpose of Strategic Basic Research Programs is to advance strategic basic research under policies determined by the Japanese Government, and create the seeds of innovative technologies based on new scientific knowledge that gives rise to scientific and technical innovation leading to social and economic value.

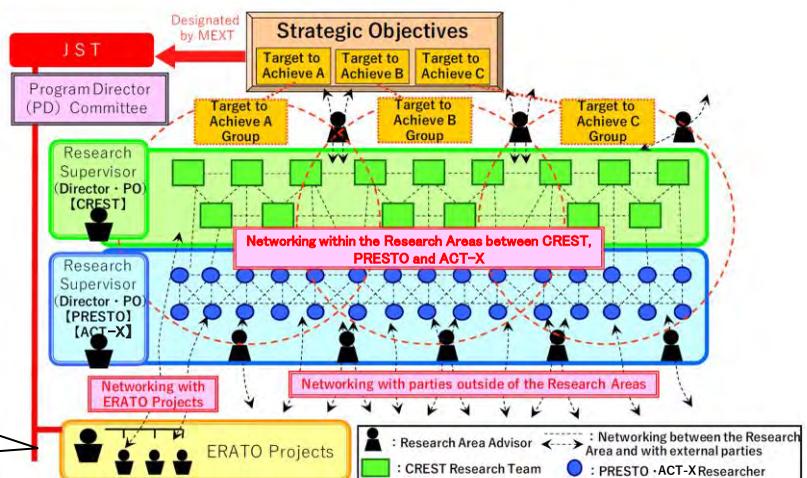
◆ Overview

Based on the national government's science and technology policies and social economic needs, under Strategic Objectives prescribed by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), JST specifies Research Areas to pursue and Research Supervisors/Directors to lead them. The Research Supervisor/Director pursues strategic basic research aimed at creating the seeds of innovative technologies that will give rise to science and technology innovations that lead to the achievement of solutions in Strategic Objectives.

The program includes ERATO (research projects pursued by Research Directors to achieve Research Director's research goals), CREST (Research projects pursued by research teams led by Research Supervisors), PRESTO and ACT-I (research projects pursued by individual researchers) and ACT-X (research projects pursued by individual researchers under the leadership of Research Supervisors).

- (1) Strategic Objectives are set by MEXT and notified to JST
- (2) JST decided upon the research areas and Research Directors

Research Directors are people with excellent research and management abilities who work for a fixed period on project-based basic research with creative and challenging objectives.



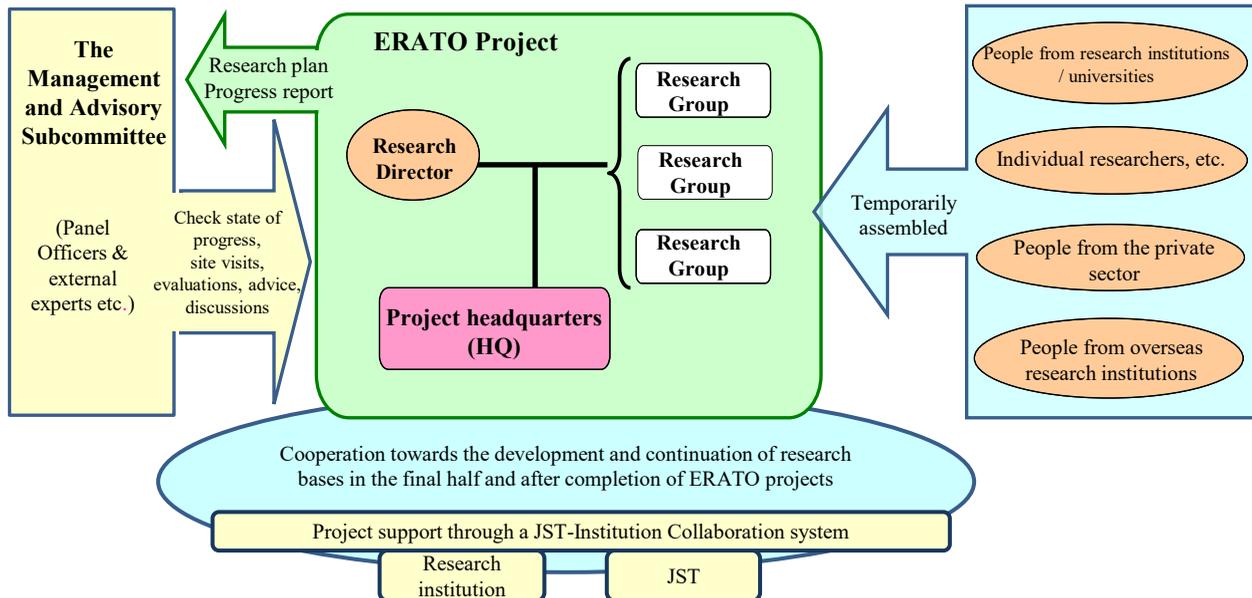
★ ERATO, the acronym of **E**xploratory **R**esearch for **A**dvanced **T**echnology, is the name of the muse of poetry in Greek mythology

2. Overview of the ERATO program

– Overview of the program –

◆ Research Organization

Each project is managed by a Research Director as a project manager, and both JST as well as the research institution to which a Research Director belongs become involved in day-to-day management of research operations. This is a unique collaboration style between JST and research institutions.



◆ Role of the Research Director

- The Research Director acts as a project manager to draw up a detailed plan for the research, recruits researchers, and directs and manages the research groups to achieve his or her vision.
- The Research Director brings together researchers who are the best in their various fields beyond organizational boundaries, to encourage interdisciplinary research.
- The Research Director is expected to collaborate, as needed, with others in CREST, PRESTO, ACT-I and ACT-X research areas, in order to achieve the Strategic Objectives set by MEXT.

◆ Researchers

The best researchers from academic, industry, and government sectors, including those from overseas, are recruited for each project.

◆ The Management and Advisory Subcommittee

The Management and Advisory Subcommittee is a subcommittee composed of Selection and Promotion Panel Officer(s) and other external experts involved in project selection (adoption) of each project, in order to ascertain the state of progress and offer advice. In addition to ascertaining progress and providing advice it discusses and shares views on interim and post-completion evaluations, the state of project results and the image upon project conclusion. It ascertains the state of management, and its work includes the conducting of examinations of the potential for development and continuation of project results and research infrastructure, and planning aimed at making a reality of them.

◆ Research Base

ERATO research bases are secured independently from existing research bases used by researchers for other projects.

◆ Research Period and Budget

- The set-up period is 0.5 years, project implementation period five (5) years, 5.5 years in all.
- Funding amount is up to JPY 1.2 billion for each project.

* Set-up period

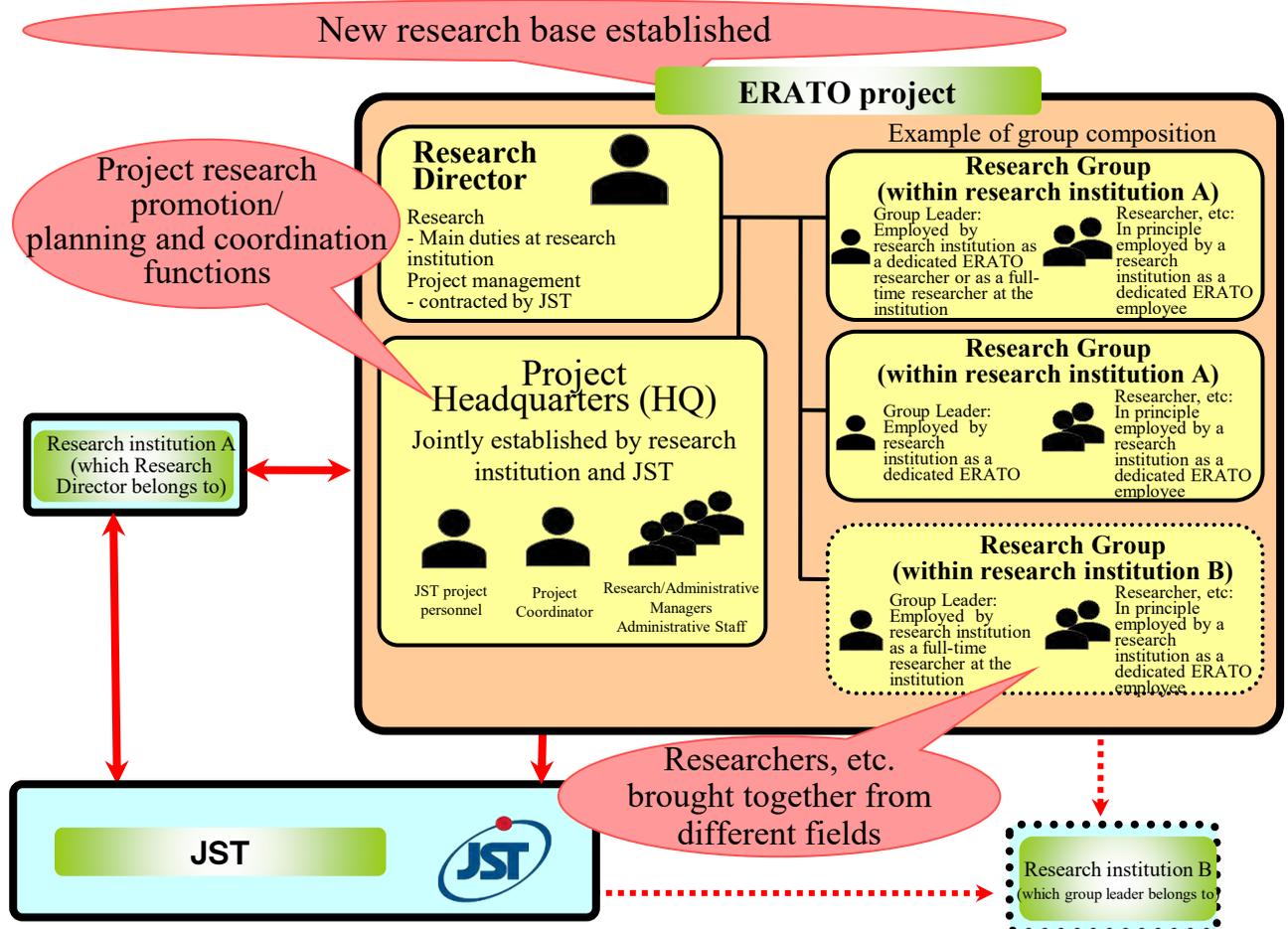
The set-up period is a preparatory period during the first year, devoted to the securing of research sites and manpower, systems and equipment that will ensure the ERATO project implementation term will lead to adequate activities.

2. Overview of the ERATO program – Features of the program –

In order to tackle the creative and challenging research projects ERATO aims for, JST and research institutions mutually collaborate to organize a network-type research institute and projects are promoted under a JST-Institution Collaboration format.

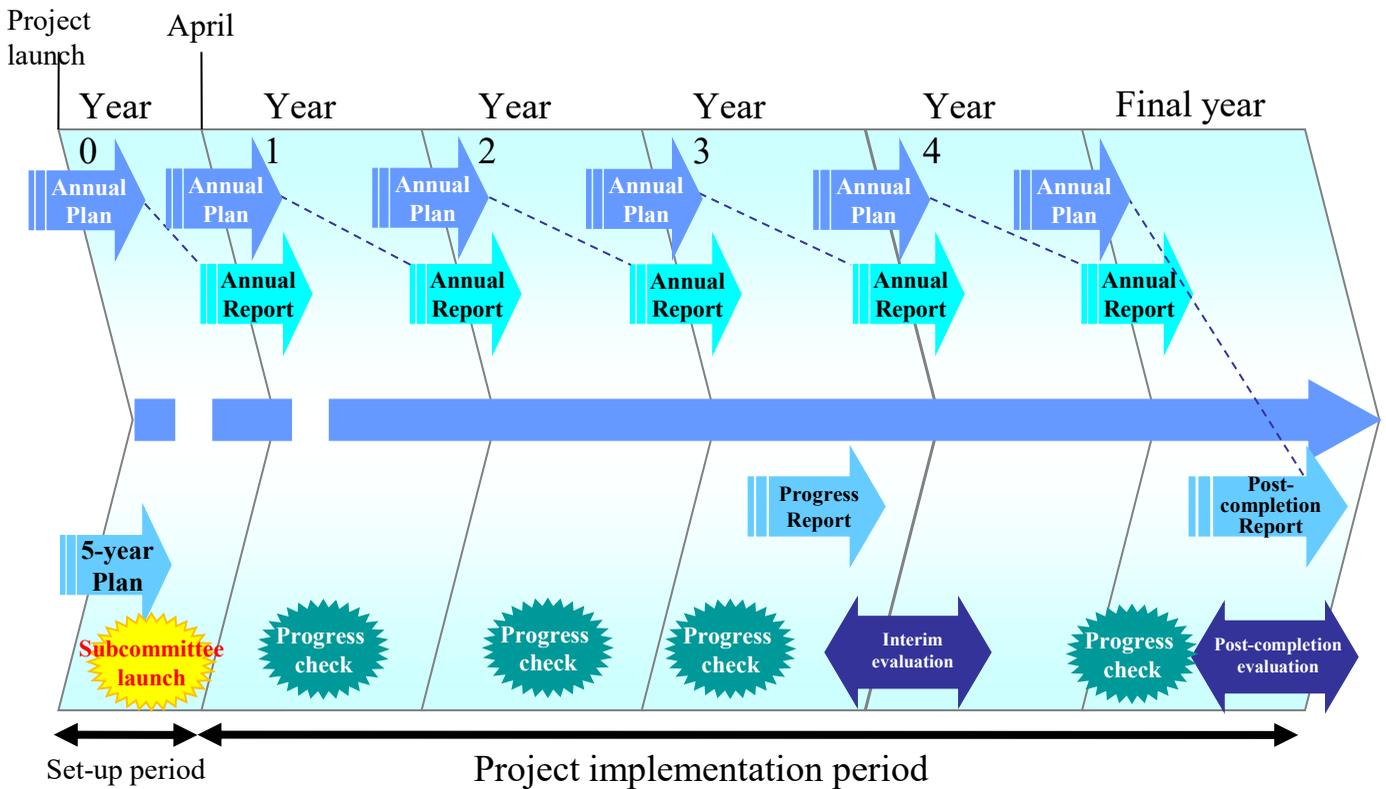
◆ Main features of the ERATO program

- (1) The Research Director is selected and acts as the leader for the selected research area (project), exercising management for the projects as a whole. The Research Director directs the organization of the project and its research, takes charge of research planning, development of research results, outreach activities and planning and coordination work. The Research Director also conducts administrative work connected to the direction of the research project.
- (2) The Research Director establishes a new research facility independent from the existing ones.
- (3) Besides research groups with researchers, the project-headquarter (HQ) office is setup with research administrators for project planning, administration, and project management work.
- (4) Recruit researchers who are the best in their various fields are recruited to encourage interdisciplinary research.
- (5) The group forms a Network-type Research Institute which is temporary and will be dissolved at the end of the research project.



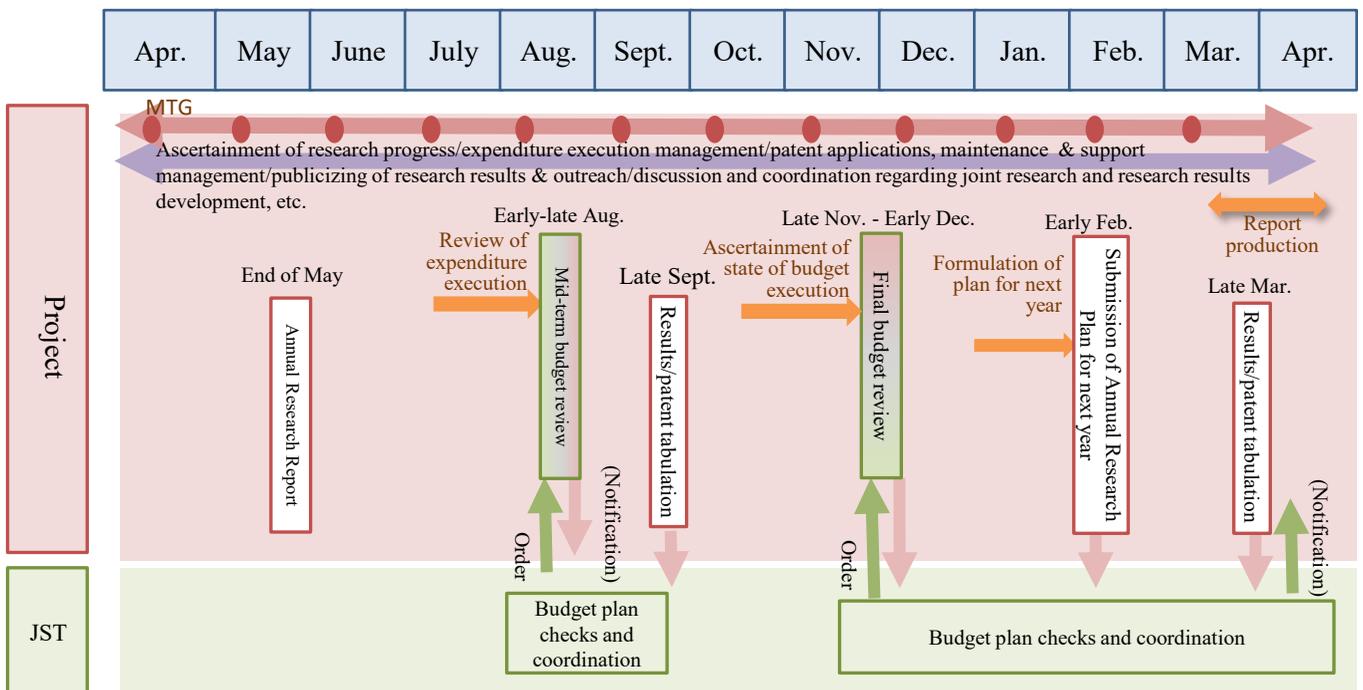
2. Overview of the ERATO program – Overall project schedule –

Overall schedule



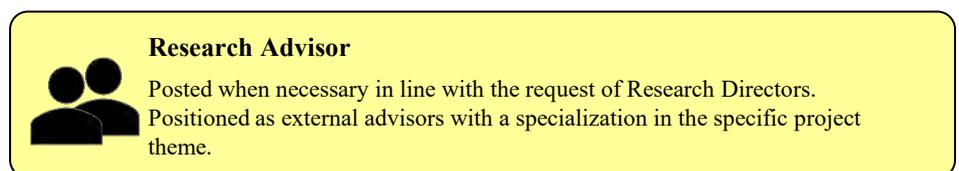
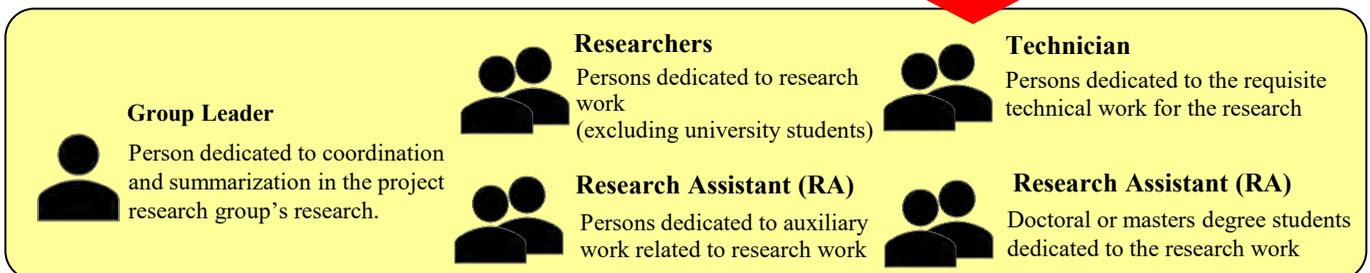
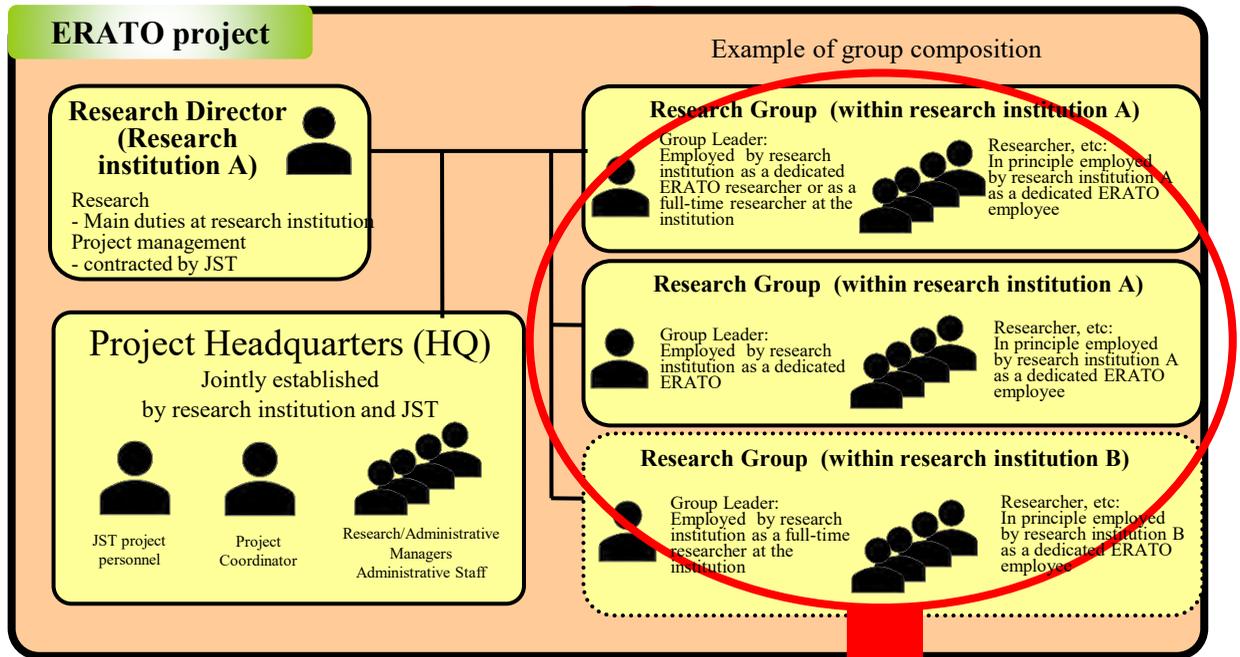
* The Management and Advisory Subcommittee carries out annual site visits to conduct interviews and discussions with the Project. The Subcommittee also checks the documents from the Project such as annual plans and reports.

Annual schedule



3. Research group – Research group composition –

Project managed after having gathered the requisite manpower for research from industry, academia, government and overseas.



◆ **Number of Researchers, etc.**

In general the number of researchers (including technicians) is about 15 people per project.

◆ **Researchers' titles**

The position of researchers on name cards, etc. should **feature both their position within their research institution and the fact that they are an ERATO researcher.** (Refer to [page 37 of this document](#) for details of credits in academic papers.)

◆ **Employment of researchers, etc.**

• **Conditions**

In principle, the conditions are in line with the regulations of the research institution employed (including those seconded from private sector companies).

• **Mode of employment**

Researchers are in principle employed exclusively for the project (however, participation under a combined appointment is permitted in the case of Group Leaders only).

• **Personnel expenses**

Research institutions shall employ research group personnel using the direct costs and staff at the HQs utilizing collaborative implementation expenses.

◆ **Treatment of students**

It is possible for students to participate in a project as a research institution's research assistant (RA).

3. Research group

– Registration of Research Participants, handling of students –

◆ Registration of Research Participants

- Please specify (register) participating members of ERATO research projects in the Research Plan.
- Those who can be registered as Research Participants are all of the researchers (including joint researchers not covered by the research contract and graduate students), corporate technicians, Project Coordinator, Research Manager, Administrative Manager, and Administrative Staff involved in the project.
- Please set the number of Research Participants at a necessary and sufficient scale for the research project.
- As a principle, travel and personnel expenses are treated as research costs only for those who are registered in the Research Plan. Exceptionally, it is permissible to omit registration in the Research Plan of Research Participants, invited persons or those who are engaged in the research for less than three months per year, and for which there is no likelihood that they will author papers or become inventors related to the results of the research.
- In the case where a researcher from an unrelated organization or a non-employed student participates in ERATO research, it will be necessary for them to abide by the terms (regarding the intellectual property rights and confidentiality, etc.) set in the research contracts, etc.

◆ Requirements of students to be registered

- As a principle, he/she is a doctoral course student with a basic scientific qualification and can take on an important role in the research.
- Alternatively, some special mission (such as the upkeep of experimental animals, programming, taking measurements, data analysis, etc.), exceeding the boundaries of the normal university curriculum and/or studies for academic degrees is permissible, as long as it does not interfere with studies.*

*Master's course students and undergraduates may exceptionally participate in the research if they meet the conditions mentioned above. However, those who wish to participate only for an educational purpose or those with missions that overlapped with their studies do not fall under this category.

◆ Recommendation of Research Assistants (RAs)

In order to attract talented students and professionals from both inside and outside of Japan, the 3rd, 4th and 5th Science and Technology Basic Plan all seek to improve financial support for graduate school students, latter stage doctoral students in particular, citing the following numeric goals: “Specifically, we will strive to enable 20 percent of doctoral students to receive an amount equivalent to their living expenses.” Furthermore, the compilation of the deliberations of the Central Council for Education on “The Reform of Graduate School Education to Lead the Future” (compiled on September 15, 2015 by the Subdivision on Universities) requested that it should be made a basic principle to improve employment of latter stage doctoral students as Research Assistants (RA) through various funding sources, and that when latter stage doctoral students are employed as RA or Teaching Assistants (TA), they should be paid a salary equivalent to their living costs. In response to these requests, please enthusiastically seek to employ latter stage doctoral students as RA when conducting ERATO research, and while aiming to base their salaries on the amount of their living expenses configure the sum appropriately and in line with the number of hours they work.

NB:

- It is recommended that the salaries of students are set at around 2 million yen per annum, or 170,000 yen per month. Please add these sums to the research expenses.
- The actual amount to be paid and the duration of payment lies with the research institution. This recommendation does not restrict them to pay more or less than the mentioned amount.

3. Research group

– Participation of private enterprises is possible –

◆ Participation of private enterprises

- Researchers from Private Enterprises can participate in ERATO research as Research Directors, Responsible Researchers, or Research Participants.
- In the case that a contracted supplier (private enterprise) needs to participate in the research group, please consult JST beforehand.
- Contracting (subcontracting) any work that includes R&D elements with a private enterprise is not permitted.
- The defrayment of personnel expenses for Responsible Researchers is not permitted.
 - * Responsible Researchers: Those listed as the main researcher of the contract research and specified in the research contract
- Please implement measures concerning the clarification of the collaboration, rights and obligations between the research institutions participating in the research group.
 - ⇒ In order to assure the appropriate implementation of research, the utilization of research results, and to prevent any obstacles arising, please take the appropriate steps regarding the treatment of intellectual property rights and observance of confidentiality by, for example, concluding joint research agreements with the participating institutions, (to the extent that they do not infringe upon the contract research agreements)

NB: When procurement is made by a 100% affiliate company or one's own company, there are cases where profits need to be excluded. Please refer to the document entitled “Administrative Points to be Aware of in Documents Related to the Contract Research Agreement” (hereinafter “Administrative Points to be Aware of”) and take the appropriate steps.

URL: <https://www.jst.go.jp/contract/index2.html> (in Japanese)

3. Research group

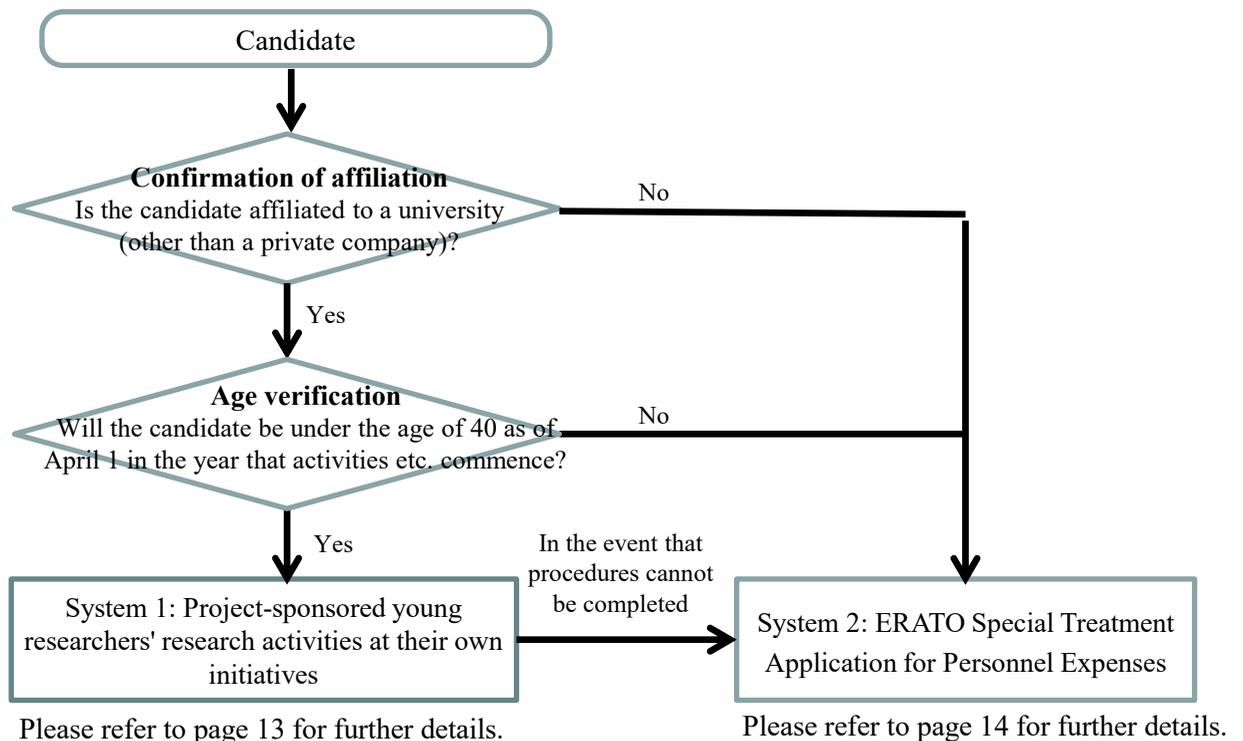
– Commitment of researchers to other work –

Under the ERATO program there are two patterns serving as formats for the commitment of researchers to other work: system 1 “Project-sponsored young researchers' research activities at their own initiatives;” and system 2 “ERATO Special Treatment Application for Personnel Expenses.”

◆ Comparison of system 1 and system 2

	System 1: Project-sponsored young researchers' research activities at their own initiatives	System 2: ERATO Special Treatment Application for Personnel Expenses
Institutions	Universities etc.	Universities, private companies etc.
Age	Under 40 years of age	No restrictions
Positions	Researchers, technicians, research/administrative managers (administrative staff and students are not eligible) employed to implement ERATO projects (for whom all or part of the personnel expenses are paid from direct costs or collaborative implementation costs)	
Effort	Ceiling of 20% of effort dedicated to ERATO	
Implementation method	<ul style="list-style-type: none"> Pursuant to the administrative procedures of the affiliated institutions. List who will use the system on the Research Plan (Research Participants Report), and contact the JST project personnel via HQ 	Administrative procedures detailed by JST (please refer to page 14 of this guide)

◆ Registration procedures for those wishing to apply



3. Research group

- Commitment of researchers to other works: System 1 “Project-sponsored young researchers' research activities at their own initiatives”–

This system enables young researchers who are (fully or partially) employed by the ERATO project to conduct research activities at their own initiatives aiming for improving their professional skills.^{1, 2}

¹ “Implementation policy to grant young researchers (sponsored by a competitive fund) research activities on their own initiatives (tentative translated title)” (The Coordination Committees of Relevant Ministries and Agencies on Competitive Funds, February 12, 2020)

<https://www8.cao.go.jp/cstp/compefund/jisshishishin.pdf> (in Japanese)

² “Project-sponsored young researchers' research activities at their own initiatives” (JST, April 10, 2020)

<https://www.jst.go.jp/osirase/2020/pdf/20200414.pdf> (in Japanese)

◆ Eligible persons

In principle, those who satisfy all of the following.

- (1) Those who are employed in order to implement ERATO projects at research institutions, not including private sector research institutions, that have concluded research contracts with JST (for whom all or part of the personnel expenses are paid from direct costs or collaborative implementation costs) (researchers, technicians, research/administrative managers) (excluding students).
- (2) Those who are under the age of 40
 - Those who are under the age of 40 as of April 1 in the year of each project.
 - Even though the young researcher reaches the age of 40 from the second fiscal year onwards, this system may still be applicable for the researcher by the end of their granted research activities at their own initiatives or by the end of the project whichever comes first.
- (3) Those whose duty is to conduct research. (It is not necessary to be their main duty.)

◆ Implementation conditions

- In the light of the Implementation policy to grant young researchers (sponsored by a competitive fund) research activities on their own initiatives (¹ above) the system shall, according to the circumstances of each research institution, be implemented upon the advance stipulation of regulations by each institution.
- In principle, procedures pursuant to the regulation stipulated by the research institution of affiliation are necessary.
 - (1) The young researcher must be willing to implement voluntary research activities;
 - (2) It must be deemed by the Research Directors, Co-Research Directors and Responsible Researchers that the activities are voluntary research activities that will contribute to the promotion of the project in question, and the consent of the institution of affiliation obtained;
 - (3) It must be deemed by the Research Directors, Co-Research Directors and Responsible Researchers that the activities will be within a scope that does not obstruct the promotion of the project in question, and the consent of the institution of affiliation obtained (the ceiling amount of effort is 20% of the young researchers' effort dedicated to the project in question).
Example: if the effort given to ERATO is 60% the ceiling on effort in other work is 12% (60 x 0.2).

◆ Material to be submitted to JST

On the Research Participants Report in the annual Research Plan please write the name of the work other than that done for ERATO and the amount of effort spent on it.

3. Research group

– Commitment of researchers to other work:

System 2 “ERATO Special Treatment Application for Personnel Expenses” –

- ERATO has separately set up system 2 “ERATO Special Treatment Application for Personnel Expenses,” which secures fluidity in personnel across both industry and academia and also supports the establishment of a variety of career paths for a wide age-range of researchers.
- This system enables researchers to participate in research institutions’ research and education and implement research through Grants-in-Aid for Scientific Research and other competitive funding without dividing the personnel costs of researchers among multiple research funds in proportion to respective work effort.
- In addition to full-time personnel employed solely using ERATO funds, the system is applicable to those who are employed partially using other funding in addition to ERATO funds.

◆ Eligible persons

Those who satisfy all of the following.

- Persons who do not meet the conditions for Implementation of Voluntary Research Activities of Young Researchers Employed for Project (including those unable to follow the procedures for system 1 “Project-sponsored young researchers' research activities at their own initiatives” due to circumstances at their institution of affiliation etc.).
- Those who are employed in order to implement ERATO projects (for whom all or part of the personnel expenses are paid from direct costs or collaborative implementation costs) (researchers, technicians, research/administrative managers) (excluding administrative staff and students).

◆ Application conditions

It is necessary for all the following conditions to be satisfied.

- (1) The research institutions’ research/educational business and implementation of externally funded research such as Grants-in-Aid for Scientific Research does not obstruct the promotion of the ERATO collaborative research in question, and is deemed to contribute to the ERATO collaborative research (the ceiling amount of effort is 20% of the researchers’ effort dedicated to ERATO project).
Example: if the effort given to ERATO is 60% the ceiling on effort in other work is 12% (60 x 0.2).
- (2) The agreement of the Research Director, Co-Research Director, Responsible Researcher and researchers in questions is obtained.

◆ Flow of procedures

1. Please enter the work details, effort percentage and other requisite items on the Status of Special Treatment Application of ERATO Personnel Expenses, and submit it to the HQ.
2. HQ are requested to update the “proportion of personnel expenses contributed from ERATO research expenses” and the “name of work outside ERATO research and percentage of effort” of the researchers in question in the Research Participants Report, and submit it to the JST project personnel.

NB: In the event that such alterations are made midway through a fiscal year, please constantly update and resubmit.

NB: Please find the latest manuals and information at the manuals for researchers page below.

<https://www.jst.go.jp/erato/en/manual/index.html>

3. Research group – Job transfer or reassignment of researchers, etc. –

It is possible for a Group Leader, with the permission of the Research Director and JST to continue to pursue ERATO research even if they are transferred or reassigned to another research institution

◆ **Case where Group Leader, and/or Responsible Researcher transfers to another research institution**

- The research contract with the original research institution will be cancelled, and a new contract will be concluded with the new research institution. Please contact JST immediately once the transfer becomes clear.
- JST will request the return of the research contract funds from the original institution and reallocate it to the new institution, so please contact JST immediately and revise the Research Plans.
- The research contract stipulates that the commodities acquired through direct costs should be handed over to the research institution to which one is newly transferred. Depending on the category of the research institution (universities, etc., or private companies, etc.) the transfer procedure for acquired commodities differs, so please consult the clerical staff in charge at your research institution.

◆ **Case where the department name or job title of the Research Director, Group Leaders under combined appointment, and/or Responsible Researcher changes (reassignment)**

- Notification to JST in the designated format is necessary. Please contact your clerical staff to enact the necessary procedures.

* Responsible Researcher: the main researcher of the contract research (those specified in the research contract)

3. Research group

– Joint research with overseas bodies –

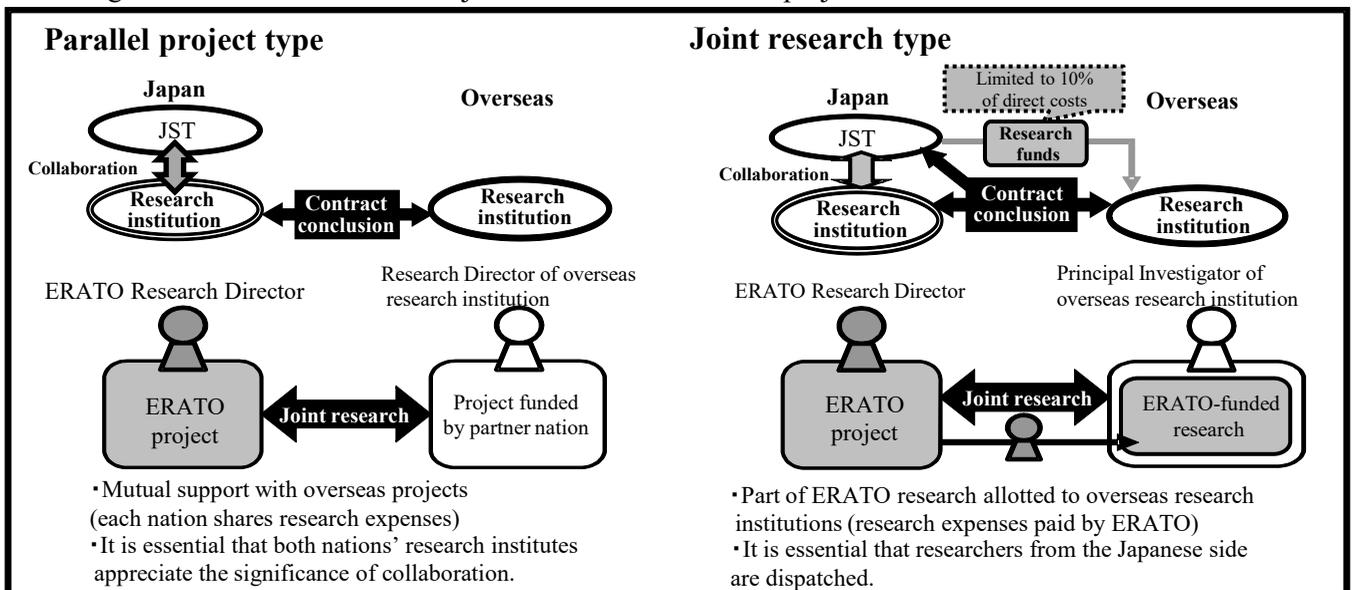
When necessary in order to execute the ERATO project it is possible, subject to the following promotional system and conditions, to conduct joint international research with university and other research institutions.

◆ **Parallel project types in which no funds are allocated to the overseas institutions**

Please conclude a joint research agreement with the overseas research institution stipulating the obligation for confidentiality and the treatment of joint discoveries and intellectual property rights. Note that the necessary travel expenses for visits to the overseas research institution and inviting overseas research institution members to Japan for the project are defrayable from the project budget in line with the regulations of domestic research institutions.

◆ **Joint research types in which project funds are allocated to an overseas research institution**

On the condition that the project researchers are dispatched to the overseas research institution and conduct joint research, the three parties of the domestic research institutions, the overseas research institution and JST will conclude a joint research agreement. In the event that the overseas research institution is unable to agree with the conditions, etc. of the JST agreement it is not possible to conduct international joint research. The total amount that it is possible to allocate to an overseas research institution is in principle limited to 10% of the direct costs from the annual project budget. Note that this ceiling amount is the total of all the joint international research projects.



*** Note that in the event that a joint research agreement is concluded between an overseas research institution and JST the following conditions must be satisfied.**

- The overseas research institution is required to transfer, free of charge, intellectual property rights to JST. (Article 17 of the Industrial Technology Enhancement Act (the Japanese version of the Bayh-Dole Act) does not apply to overseas research institutions.)
- The overseas research institution must be able to properly execute the budget according to the research agreement or according to JST's budget execution guidelines and must be able to submit a detailed statement of research expenses (equivalent to the balance book of Japanese institutions) in English.
- Payments to the overseas research institution for overhead (indirect) costs should not exceed 30% of the direct costs (research budget).
- As a principle, the overseas research institution can enter into agreements in forms specified by JST.

3. Research group – On-top funding for international activities –

When considering international initiatives in a project, it is possible to make use of JST's on-top funding for international activities.

* About the on-top funding for international activities:

<https://www.jst.go.jp/kisoken/en/global/index.html>

- ◆ On-top funding is provided for JST's Strategic Basic Research Programs (ERATO, CREST, PRESTO, ACT-I and ACT-X) with the objectives of making the most of the potential of overseas researchers and research institutions in accelerating and promoting projects (such as joint international research), to increase the level of awareness of the state of initiatives being taken to attain Japan's Strategic Objectives by widely publicizing research results at international symposia, etc., and to conduct the creation of an environment in which it is easy to obtain the cooperation of beneficial overseas researchers in programs.
 - ◆ The budgets for the on-top funding for international activities are added to the research budgets in the collaborative research agreement, but a separate report is necessary so please ensure the project HQ ascertains the way that the funds are used and what effect they have.
- * Those wishing to take advantage of the on-top funding for international activities are requested to contact the JST project personnel.

3. Research group – Regarding the promotion of diversity –

JST implements a research and life event balance support policy (gender equality expenses assistance to encourage R&D by researchers in question and mitigate the burdens placed upon them). The objective of this is to allow researchers to continue their R&D without having to take a break in their career in the occurrence of life events (such as childbirth, child-raising and nursing care), and in cases in which they have no choice but to take time of work, allow them to return to their research when they are ready and carry on with their subsequent careers. JST also makes public role models for females in science.

Please refer to the following website for further details.

JST initiatives aimed at diversity:

<https://www.jst.go.jp/diversity/en/index.html>

■ Guidelines for the management of ERATO research at the time of life events occurring to Research Directors

Handling the matter during the life event period	It is possible for someone to take the role of Research Director and continue the research on his/her behalf.
Extension of Research	No extensions are allowed.
Handling of Research Funds	No changes to be made.

* Duration of Life Events

- Childbirth: 6 weeks before birth (14 for multiples) and 8 weeks after birth
- Childrearing: A continuous period until the child's 1st birthday
- Nursing Care: Period approved necessary during a continuous 6 month duration

■ Regarding the life events of researchers participating in ERATO

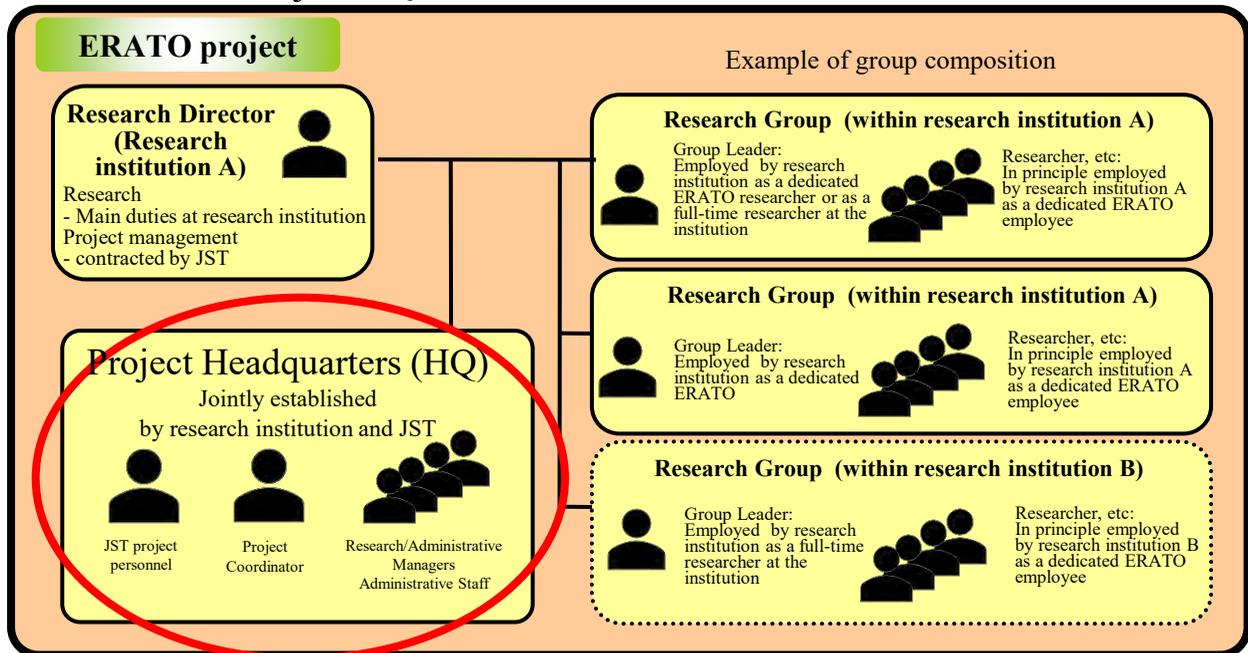
Those who are employed as dedicated appointment researchers, etc. using R&D budgets (excluding indirect costs) of JST projects, or, at the time of application, will definitely be employed during the term during which support is provided, and who are either pregnant, or rearing children up until they become nine years old but have not yet reached the first April 1 following their 9th birthday, or are caring for somebody while continuing with their research can use **the Childbirth, Child-raising, Nursing Care Support System**. Under this system, gender-equal society promotion funds will be paid to the researcher, etc. receiving support in order to encourage research and contribute to alleviating the burdens placed upon the recipient researchers, etc.

4. Project Headquarters (HQ) – Roles of HQ –

Project headquarters (HQ) are composed of the research institution and the JST project personnel, and are the core organization fulfilling an auxiliary role in running the projects on behalf of the Research Director.

Specifically, the HQ conduct (1) research promotion work, promoting efficient research as well as activities to further develop the research results and other activities aimed at improving the projects' social values, and (2) planning and coordination work to promote the creation of an environment in which researchers can dedicate themselves to their research.

◆ Position of the Project HQ



**Perform a core role in the management of projects.
 Consult the HQ when any problems or trouble occurs!**

◆ Work of the project HQ

- ◆ Research promotion work
 - Collection and distribution of research results (planning for symposia and other outreach activities)
 - Improving intellectual property management (securing IP such as patents, etc.)
 - Planning and promotion of results development (planning joint research with private sector companies, technology transfer plans, etc.)
 - Management of publications
- ◆ Planning and coordination work
 - Planning project implementation (research and budget planning, etc.)
 - Work subsidiary to research (purchase of items, personnel procedure preparations, outsourcing management, creation of documents for the press, etc.)
 - Support for the hosting of evaluation meetings, report meetings and outreach activities (creation and preparation of materials, etc.)
 - Coordination with research institutions and JST, dealing with JST order work
 - Serving as a consultation point for researchers, etc.

4. Project Headquarters (HQ)

– Members composing HQ –

HQ are composed of the following members. The specific posting and employment of members is discussed on a project-by-project basis after deciding the requisite number of personnel bearing in mind the features of the project, and after consultation between the three parties of the Research Director, research institutions and JST.

Member	Main work	Remarks
Project Coordinator	<ul style="list-style-type: none"> • Research planning, budget planning, and development of research environment • Management of research progress and ascertaining of research results • Planning and implementation of outreach activities • Contact and coordination with the project HQ and universities • Cooperation in the various reports to JST and the business of JST • Other work demanded by JST or the relevant Research Director 	The content of the work to the left is stipulated in the commissioning contract or Memorandum of Agreement
Research Manager, Administrative Manager	<ul style="list-style-type: none"> • Research promotion work (refer to page 19) • Planning and coordination work (refer to page 19) 	<ul style="list-style-type: none"> • Employed as a full-time or part-time member of a research institution • A maximum of two persons, one Research Manager and one Administrative Manager, can be posted • If the person in question is a part-time member of a research institution, the amount of time dedicated to work can be set at a varied level for research institution-affiliated RA, etc in the case of a Research Manager and for a member of the personnel of a research institute in the case of an Administrative Manager
Administrative Staff	Assisting the Research/Administrative Managers and other general administration work	Employed as a full-time or part-time member of a research institution
JST project personnel (member of the JST personnel)	<ul style="list-style-type: none"> • Assisting in project management • Planning project implementation • Contact and coordination with JST 	—

5. Research and budget planning

– Flow of research planning and decisions on budgets –

A 5-year Research Plan and Annual Research Plan are created on the basis of the submitted proposal at the time of project adoption. They become vital material concerning the research management and operation policy, and the basis of budget formulation and evaluations.

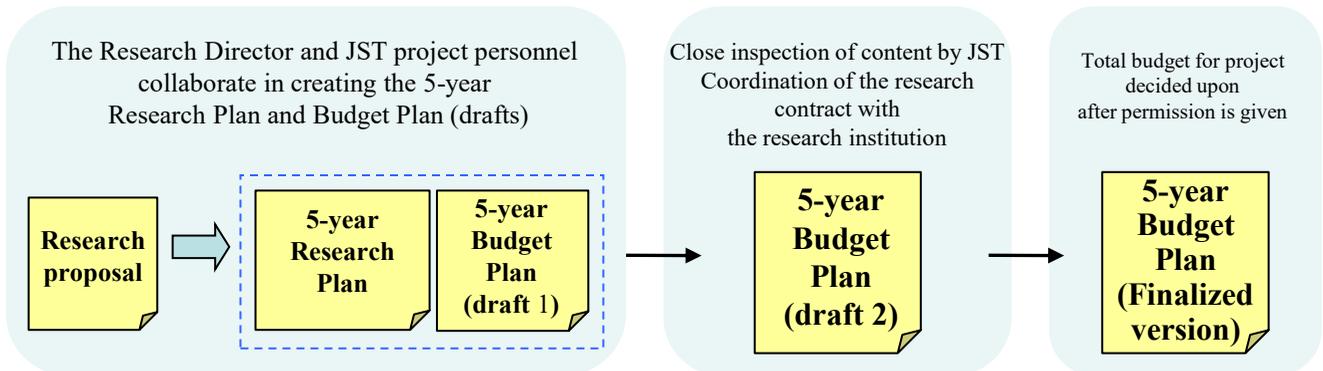
The projects' Research Plans and Reports etc. are shared with the Management and Advisory Subcommittee.

5-year research planning

(1) 5-year Research Plan: Details the project research proposal and research promotion system.

(2) 5-year Budget Plan: Details the total approximate budget for the entire project period from its launch to conclusion.

* The Post-completion Report participants are asked to provide at the end of the project is created in line with the 5-year Research Plan.

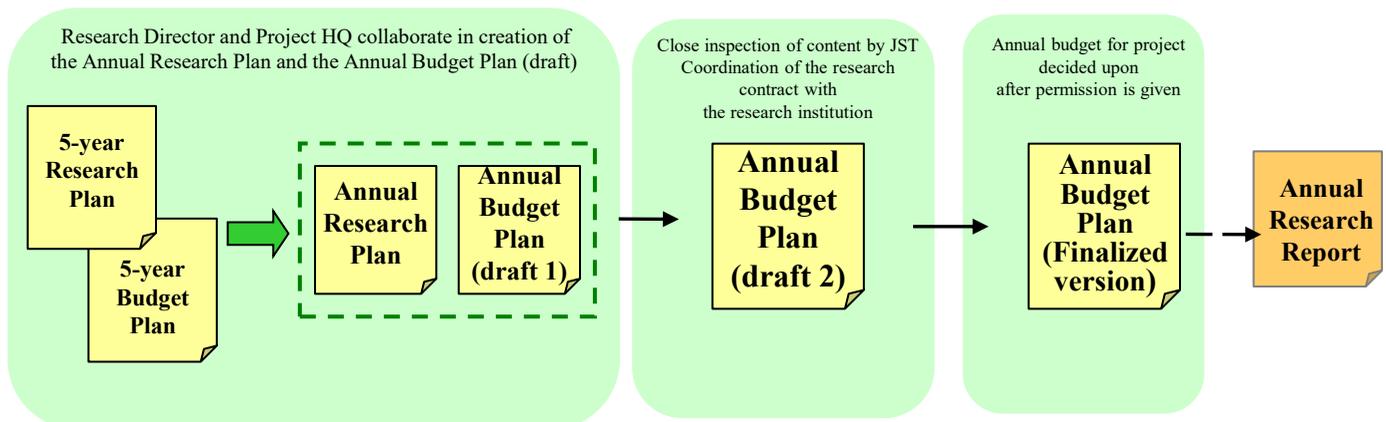


Annual research planning

(1) Annual Research Plan: Details the project research proposal and research promotion system.

(2) Annual Budget Plan: Details the annual approximate budget for the project from launch to conclusion.

*The Annual Research Report submitted at the end of the fiscal year is based on this annual plan.



NB: Please see the manuals for researchers page below for the latest forms of the research plan etc.

<https://www.jst.go.jp/erato/manual/index.html> (in Japanese)

5. Research and budget planning

– Points to be aware of in preparing a Research Plan and revisions –

Please include the amount as accurately as possible at the time of preparation.

- Be sure to include Commodity Fees after considering the state of existing facilities, their necessity and adequacy, and only if they are indispensable.
- When procuring expensive items, we recommend that you conduct market research by obtaining estimates for reference beforehand. Please be careful not to cause significant changes between the amount indicated in the plan and the actual budget implementation.
- Procurement by government-affiliated agencies such as national university corporations and independent administrative agencies are subject to international competitive bidding. Therefore, please take into account the date of delivery and so on when procuring expensive items (for FY2021-FY2022 “expensive” is defined as costing 15 million yen or more) and including them in the budget.
- Personnel expenses will continue to be a heavy burden through the following years, so please be cautious at the beginning of the employment.

* In the case of international competitive bidding please be sure to decide upon the time for budget inclusion having first confirmed it with the person responsible for accounting at the research institution.

Changes to the Annual Research Plan can be made mid-year.

- Considering the state of research progress and state of budget implementation, the research budget may be increased (or decreased) halfway through the fiscal year based on the judgment of JST.
 - *Indirect costs set at a certain ratio against direct costs may simultaneously either rise or decrease.
 - *In the event that an important change to research plans, etc. as made as a result of the discovery of a significant research finding, it is possible to adjust budgets after following the prescribed procedures. In addition, adjustments may be made to the total amounts of 5-year research budgets according to the budgetary circumstances of the ERATO project as a whole.
 - *It is possible to flexibly transfer sums to other budget item categories without obtaining approval from JST if it fulfills the necessary requirements. (For details, see [Page 27](#) of this guide.)
- Even if the budget changes are deemed acceptable under the transfer restriction limit, in the event that any major changes (such as the addition or deletion of an important research item or dramatic course correction in pursuing the research, etc.) occur, you must confirm with JST beforehand, regardless of the amount of transfer or the transfer itself.

6. Contracts

– What are multiple-year contracts? –

ERATO adopts a contract format (multiple-year contracts) that enable even more efficient research by spreading the contract term over several years. It is hoped that these contracts will lead to the realization of uninterrupted research budget implementation, and the efficient and effective use of research budgets.

◆ The following can be achieved through multiple-year contracts

- Research budgets can be carried over to the next year
- It is possible to enter into contracts for procurement, etc. spanning several fiscal years as it takes a considerable amount of time from concluding the contract to the delivery and inspection of delivered items
- It is possible to show the scope of the ceilings for research periods and budgets under the research contract
- Complicated contractual procedures are reduced

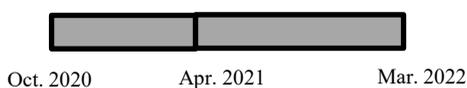
◆ Contract term of multiple-year contracts and research budgets from the second year onwards

- Contract research fees are the amounts detailed on the Research Plan that are decided upon with the permission of JST each project year, and from the second year of the project in question onwards the contract research fees are stipulated in a modified contract at the start of each project year. Furthermore, the contract term is extended year by year within the scope of the research period stated in the Research Plan. (In principle, the ceiling for the project contract term is two years at the commencement of the contract in the case of multiple-year contracts.)
- In the event that it is necessary to revise the text of a research contract due to legal revisions made during a multiple-year contract, these revisions shall be made in a modified contract at the time of annual renewal of the contract.

Example: Contract term commences on Oct. 1, 2020

- First year (commencement of contract)

Contract concluded for the term from the date that the contract commences to the last day of the following project year



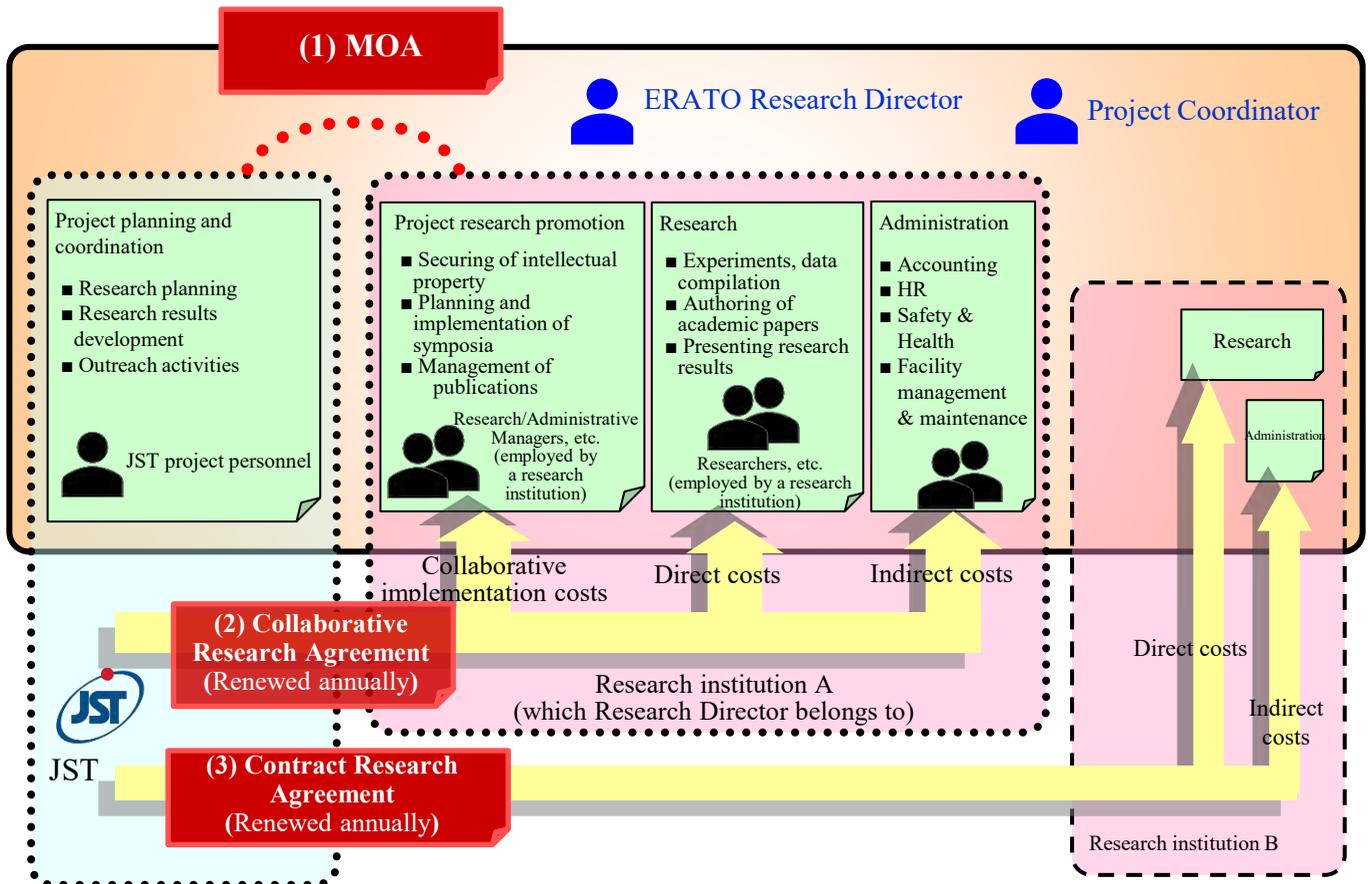
- Second year (annual renewal)

At the start of the project year (Apr. 1, 2021), the contract term is extended, contract research budget renewed, and provisions of the contract revised



6. Contracts – The contract system –

ERATO employs three type of contract: (1) Memorandum of Agreement (MOA), (2) Collaborative Research Agreements subsidiary to MOA, and (3) Contract Research Agreements.



(1) Memorandum of Agreement (MOA)

MOAs confirm that in the course of promotion of project research and project assistance JST and the research institution will collaborate in the setting up and management of the project.

(2) Collaborative Research Agreement

These agreements specifically stipulate with regard to the research institution the research work, research management work, project research promotion/planning and coordination work, and the burden of expenses these incur. They also stipulate ERATO's individual provisions regarding the creation of network-type research institute .

(3) Contract Research Agreement

As a part of the implementation of project research it is sometimes necessary to request a research institution other than that to which the Research Director is affiliated to undertake contract research. The ERATO Contract Research Agreements in principle refer to agreements concluded in such circumstances.

For more details about contract research please refer to the following URL covering this topic.

<https://www.jst.go.jp/contract/index2.html>

7. Budget management

– Budget item categories –

◆ Project budget item categories

Direct costs	■ Costs directly required for project implementation
Indirect costs	■ Indirect costs paid at a fixed rate (30% in principle) that are necessary expenses for the research institutions' management, etc. arising due to the implementation of the research.
Collaborative implementation costs * Used only in collaborative research agreements	■ The requisite personnel and travel expenses for the project research promotion work, and expenses such as those required for patents, etc. (Up to a maximum of 10% of direct costs)

Direct costs:

These are the direct costs for research work, and research setup costs such as for the use of facilities, lighting, heat and water, etc. Please use them for facility costs, consumable supplies expenses, travel and personnel expenses, honorariums, facility improvements and other directly necessary expenses for the implementation of project research. Budgets are split into the four categories of (1) commodities expenses, (2) travel expenses, (3) personnel expenses and honorariums, and (4) others. An accounts report for each category of expense is required each year. Note that equipment bought by universities, etc. under this budget item category shall become the property of the research institution.

- ◆ Costs not regarded as direct costs
 - Costs for items not consistent with the objectives and purpose of ERATO research.
 - Personnel expenses for Responsible Researchers
 - Personnel expenses for those who are already covered by government funds such as Management Expenses Grants and government subsidies to private educational institutions
 - Sub-contract fees that include any elements of R&D
 - That which usage as indirect expenses would be appropriate
 - Patent related fees (application fees, patent attorney fees, related travel expenses, procedure fees, translation fees, etc.), annual membership fees for scientific societies, etc., and expenses arising from the acquisition of qualifications, which will become the rights of the research institutions or participating researchers.
 - Deposits, guarantees and any other monies that are expected beforehand to be refunded.
 - Anything for which the use of in the settlement of contract research fees and so on is deemed as inappropriate by JST.
- * The annual membership fees for academic societies may in the case of new membership be paid for where necessary on an exceptional basis. Please enquire to a member of the JST personnel.

- ◆ Payment of expenses relating to entrustment of work other than ERATO research
 - In order to increase the amount of time dedicated to ERATO research, in the event that the Research Directors or Co-Research Directors so wish and under a certain set of conditions, the payment is possible of expenses for entrusting other persons with work other than ERATO research performed by the Research Directors or Co-Research Directors at their affiliated institutions (buyout expenses).*
 - *Only Research Directors and Co-Research Directors affiliated to universities etc. are eligible.
 - Please refer to the following URL for further details.
<https://www.jst.go.jp/osirase/2020/pdf/20200917.pdf> (in Japanese)

- ◆ Payment of personnel expenses for Research Directors and Co-Research Directors from direct costs
 - Based on the principle of multiplying the annual salary of Research Directors and Co-Research Directors by the amount of effort spent on ERATO research over the course of a year, personnel expenses can be configured within this scope as long as the amount is not disruptive to the ERATO research.*
 - *Only Research Directors and Co-Research Directors affiliated to universities etc. are eligible.
 - Please refer to the following URL for further details.
<https://www.jst.go.jp/osirase/2020/pdf/20200917.pdf> (in Japanese)

Indirect costs:

Indirect costs are the expenses for indirectly occurring costs for management work in support of the projects, and include accountancy, HR work, administrative procedures. A fixed ratio is set for indirect costs against direct costs (within 30% of direct costs).

Collaborative implementation costs:

*Collaborative implementation costs are used only in collaborative research agreements

These are the expenses for the research promotion work conducted by the HQ in charge of a project and include personnel expenses for Research/Administrative Managers and Staff, patent costs, PR-related expenses, publication management expenses and so on. As is the case with direct costs, these are split into the four categories of (1) commodities expenses, (2) travel expenses, (3) personnel expenses and honorariums, and (4) others, and an accounts report for each category of expense is required each year.

With regard to important points in the execution of expenses, please refer to the "Administrative Points to be Aware of" <https://www.jst.go.jp/contract/index2.html> (in Japanese)

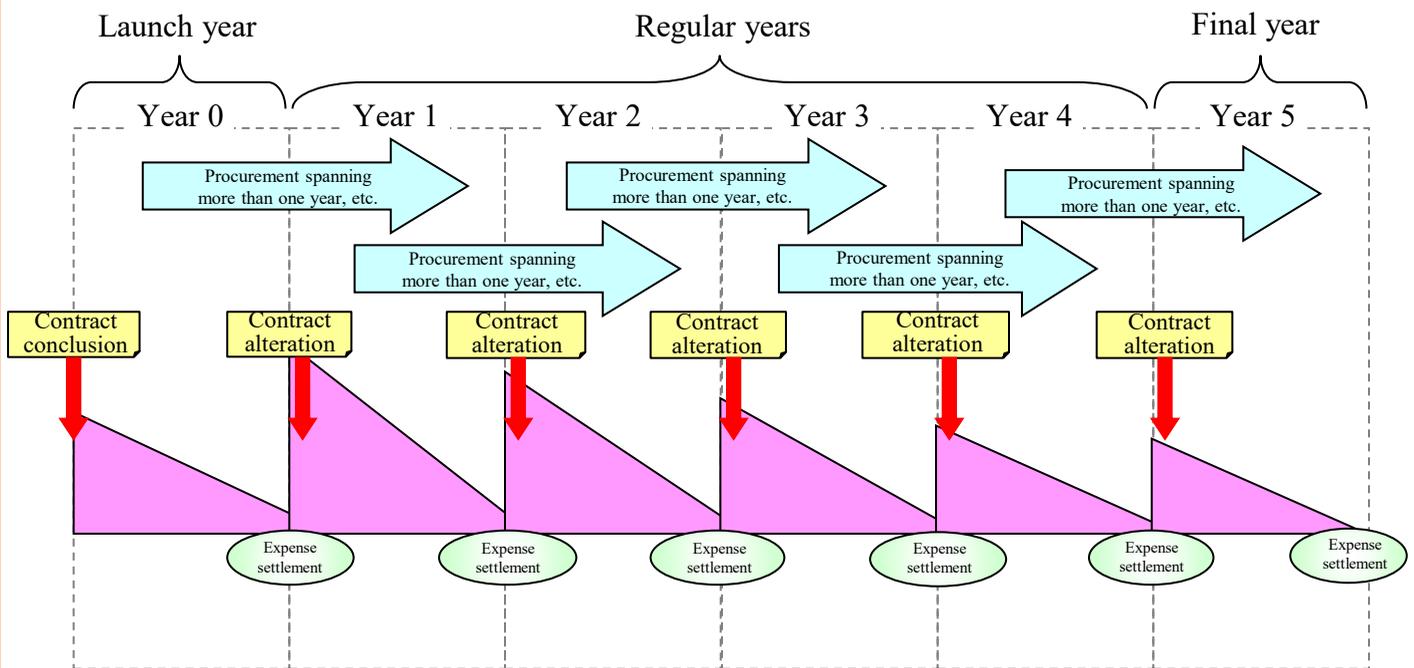
With regard to collaborative implementation costs, please also refer to the additional documents at the following URL <https://www.jst.go.jp/contract/kisoken/2021/erato.html> (in Japanese)

7. Budget management

– Budget implementation –

Project research funds will be paid to the research institutions in question on an annual basis in line with the research contract.

With regard to the implementation of the research budgets, while these shall follow the regulations of each research institution it is possible to do so in a flexible manner including transferring sums to other budget item categories, carrying them over to the next year, aggregated use or expenditure spanning more than one year.



- May Settlement of expenses for budget executed in previous year, report on sums carried over
-
- (HQ ascertains state of budget execution and where requisite reviews and reports to JST)
-
- Jan. Preparation of the Annual Research Plan and Budget Plan for next year
- Feb. Decision made on budget for next year

* Note that when confirming execution of budget at the end of each project year JST does not demand the submission of evidential documents concerning budget execution from research institutions (universities, etc. only), however, when necessary JST may check to confirm whether or not budgets are being executed in line with the Research Plan. Please bear this point in mind when drawing up research plans and executing budgets.

7. Budget management

– Transferring sums to other budget item categories –

Subject to certain conditions the transferring of sums to other budget item categories can be conducted flexibly with regard to direct costs and collaborative implementation costs.

◆ Requirements to enable transfer without JST's approval

When the amount for transferred budget items among direct costs does not exceed 50% of the total amount of direct costs for the year in question, and when the amount for transferred budget items among collaborative implementation costs does not exceed 50% of the total amount of collaborative implementation costs for the year in question (5 million yen in the event that the sum does not reach 5 million yen).

- Even if the budget changes are deemed acceptable under the transfer restriction limit, in the event that any major changes (such as the addition or deletion of an important research item or dramatic course correction in pursuing the research, etc.) occur, you must confirm with JST beforehand, regardless of the amount of transfer or the transfer itself.
- Depending on the content of transfer, JST personnel may later confirm the details.
- Transferrable budget items are defined as the four items of direct costs and collaborative implementation costs in the research contract, which are: commodities, travel expenses, personnel expenses, and other expenses. Thus, the item categories in the Research Plan, “Equipment” and “Materials, Consumables” are both included in the same category of commodities.
- When budget items are transferred, it is not necessary to modify the Research Plan.

◆ Procedure in cases when transferring budget items requires confirmation by JST

- When the above conditions are exceeded please apply to JST through the HQ.

Application procedures for transferring budget items

- (1) Responsible Researchers or HQ will notify the JST project personnel by e-mail regarding the contents and reasons for the transfer.*
- (2) JST will decide if the transfer is necessary to pursue the research.
- (3) JST will notify the Responsible Researchers regarding the decision.

*The application form can be found at the following URL
<https://www.jst.go.jp/contract/index2.html> (in Japanese)

*When contacting JST beforehand, please submit the Budget Transfer Application Form found here:
<https://www.jst.go.jp/contract/kisoken/2021/erato.html> (in Japanese)

Case studies

Case 1: Total direct costs 20 million yen, total transferred to other budget items 13 million

=> Prior permission required (20 million yen x 50% > 5 million yen → in principle sums up to 10 million yen do not require prior permission)

Case 2: Total direct costs of 20 million yen, total transferred to other budget items 6 million yen

=> Prior permission unnecessary (20 million yen x 50% > 5 million yen → in principle sums up to 10 million yen do not require prior permission)

Case 3: Total direct costs of 8 million yen, total transferred to other budget items 6 million yen

=> Prior permission required (8 million yen x 50% > 5 million yen → in principle sums up to 5 million yen do not require prior permission)

Case 4: Total direct costs of 4 million yen, total transferred to other budget items 2.5 million yen

=> Prior permission unnecessary (4 million yen x 50% > 5 million yen → in principle sums up to 5 million yen do not require prior permission)

* The cases 2 and 4 above, in which prior permission is not required, are based on the premise that no major alterations are made to the research plans.

7. Budget management

– Budget carryover –

By entering a multi-year research contract, research funds can be carried over with simple procedures.

◆ What is subject to carryover?

Cases in which alterations are made to the items stated on the Research Plan due to reasons that could not have been foreseen and it is necessary to carry over research funds to the following year in order to attain the research objectives.

* It is possible to carry over the unused budget of these direct costs on the assumption that it will be used effectively and systematically as the research fund for the following year in cases where unused direct costs become clear at the FY end period (e.g., overtime fees, consumable supply fees, differences in prospective consumption tax equivalents, which are all unpredictable at the time of planning).

* Simple budget excess and unused funds do not fit into the category above; thus, they will not be subject to budget carryover.

* Carry over of research funds is possible not only for direct costs but also for collaborative implementation costs.

◆ Carryover procedures according to the period when it becomes clear

1. Carryovers identified in the period from April to the end of December: Prior consultation required

Universities, etc.

(1) In case of carryover without conclusion of contract (a*) :

In principle, unused funds are returned to JST for the time being upon the conclusion of a revised contract. If the carryover is then approved, the funds are transferred back in the next project year.

(2) In case of carryover funds with a concluded contract (b*) :

In principle it is possible to carry over research funds at the research institution retaining them without having to return the funds due to contractual alterations.

* With regard to carryovers identified by the third quarter of the year, the Responsible Researchers should consult with the JST project personnel beforehand. In the event that the carryover is approved the party in question must then follow either of the procedures (1) or (2) above.

Corporations, etc.

In the event that there is a need to use direct costs totaling over 100,000 yen during the next project year, the Responsible Researchers are requested to consult with the JST project personnel by the third quarter of the year. In the event that permission is granted for the use of the funds during the next project year, the contract research funds are returned to JST for the time being upon the conclusion of a revised contract, and the funds (budgets) will be transferred back for the next project year.

(*a) Carryover without conclusion of contract:

Both the concluded contract for procurement of items, or delivery and receipt and inspection, shall be regarded as matters for the next project year.

(*b) Carryover funds with a concluded contract:

The concluded contract for procurement of items expires within the project year in question, but the delivery and receipt and inspection shall be regarded as matters for the next project year.

7. Budget management – Budget carryover –

2. Carryovers identified in the period from January to the end of March

Universities, etc.

In principle it is possible to carry over research funds at the research institution retaining them without having to return the funds due to contractual alterations. If the carryover is then approved, the funds are transferred in the next project year.

* Note that with regard to carryovers identified in the fourth quarter, the reasons, etc. for these carryovers do not have to be reported to JST beforehand, and research institutions are requested to deal with these matters in an appropriate manner at their own discretion.

Corporations, etc.

It is possible for corporations, etc. to carry over research contract funds with a ceiling equivalent to direct costs of a maximum of 100,000 yen to which the sum of corresponding indirect costs are added, on the proviso that they are to be effectively used over the next year as directly essential costs for the execution of the project.

- * JST may conduct investigations into the state of execution of the research, including projected carryovers, and your cooperation on such occasions will be appreciated. In the course of these investigations there might be cases, according to the details of carryovers and the period of their identification, in which upon the concluding of a revised contract the research funds are returned to JST for the time being, and then transferred back as part of the research costs (budget) for the following year. Researchers are asked for their cooperation as this enables JST to effectively use funds by allotting them to other research projects that require funding within ongoing project years.
- * Regardless of when they are identified, in the event that carryovers arise that will have a major impact on Research Plans, or the stagnation of research funds is expected, the Responsible Researchers are requested to swiftly consult with the JST project personnel. Taking into consideration the situation, it may then be necessary to review Research Plans and budgets.

For precise details of budget carry over please refer to the Administrative Points to be aware of
URL: <https://www.jst.go.jp/contract/index2.html> (in Japanese)

Handling of carryover funds according to the time they become apparent

1 st quarter	2 nd quarter	3 rd quarter	4 th quarter	Next project year
(1) Carryover funds without conclusion of contract: In principle transferred as part of budget the next year (<u>prior consultation required</u> / conclusion of revised contract)			(3) In principle carried over within a research institution (conclusion of revised contract <u>not requisite</u>)	

7. Budget management

– Sharing use of equipment and/or combined purchase –

Sharing use of research equipment and/or combined purchases is possible.

◆ Sharing use of research equipment

- Providing it does not obstruct the implementation of the research in question it is possible for research equipment purchased with the direct costs to be used by the research institution for other research work that it performs.
- However, appropriate measures need to be taken on matters such as sharing the responsibility and cost for repairing damages and utility costs.
- * The above also applies to the combined purchase of research equipment, etc.
- * Institutions that are classified as private companies, etc., need to apply for approval to JST beforehand.
- * Please refer to page 48 for precise details of the background to the system.

◆ Combined purchase of research equipment

- There is a need to undergo preliminary confirmation by JST having first of all met the conditions for the totaled up various funds, and clearly shown that they are a logically explicable share of financing.
- Especially when combining the funds of multiple researchers, they will need to decide treatment of the purchased equipment in the case of job transfer of a researcher to a separate institution beforehand, with the secretariat of the research institute, taking the ratio for sharing the costs into account.
- If a job transfer of a researcher to a separate institution is already known, purchasing equipment by combining the funds of multiple researchers will not in principle be permitted.
- * Combined use by institutions classified as private companies is not permitted.

◆ How to treat other cases of combined use

Cases permitted by combining the use of direct costs of a ERATO Project and other costs from a different fund to settle the payment related to a single contract are as follows:

- Cases in which the business of a ERATO project and another is combined together in a single business trip: The travel expense can be shared appropriately between ERATO and the other project.
- Cases in which consumable supplies are purchased in bulk: The sharing usage ratio will be specified between ERATO and the other project. The cost will be divided accordingly.
- Cases where the direct cost of ERATO and funds not limited in use (such as Management Expenses Grants and other own funds, donations, etc.) can be combined and used for ERATO.
- * Institutes classified as private companies may not acquire commodities that will be regarded as a fixed asset by combining ERATO funds and their own funds.

7. Budget management

– Handling of income arising in the process of research implementation –

◆ Handling of income arising in the process of research implementation

In the event that it is expected at the time of formulating the research plan that income will arise, please consult in advance with JST project personnel. In the event that income not originally foresees in the research plan arises due to the implementation of the project, please immediately consult with JST.

- * It is not possible to offset income against expenditure and balance accounts.
- * Please store and sort all evidential documents.

8. Handling of research results – Intellectual properties –

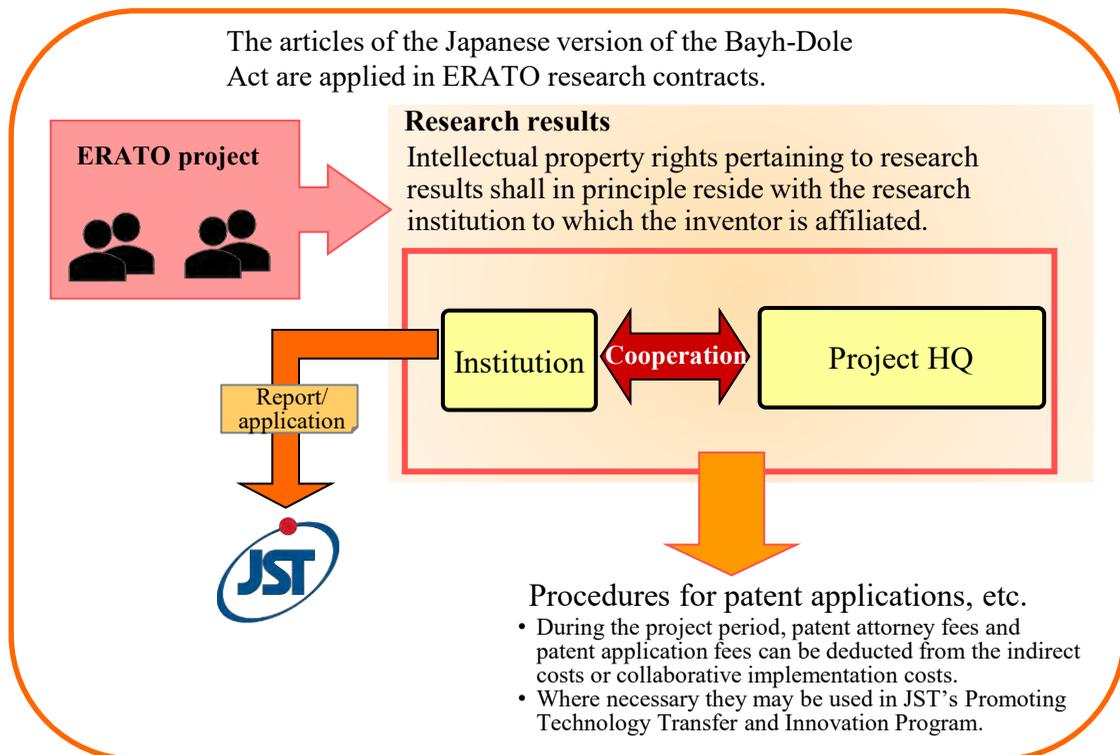
The intellectual property rights of patents, etc., shall, in accordance with research contract terms, basically **reside with the research institutions of the inventor**. The acquisition and utilization of intellectual property rights are to be conducted appropriately by the research institution **while reporting the status to JST**.

- * Patent attorney fees and patent application fees can be deducted from the indirect costs or collaborative implementation costs.
- * In the event that a research institution decides not to obtain a patent right it is possible for JST to become the applicant. If you wish JST to apply for the patent please let JST know as soon as possible since the patent application procedure is a time-consuming exercise. In such cases, the application will be made after a patent assignment agreement from the research institution to JST has been concluded.

◆ **Various report obligations of research institutions to JST**

When applying, filing, transferring, registering, licensing or renouncing patents to a third party, **prior application or reporting from research institution to JST is necessary**. For details, refer to the “Administrative Points to be Aware of.”

<https://www.jst.go.jp/contract/index2.html> (in Japanese)



* Japanese version of the Bayh-Dole Act: This is the generally used term for the law that states that if certain conditions are met it is acceptable for a party conducting research commissioned by the national government etc. not to transfer the intellectual property rights resulting from the research commissioned to the national government or other party in question. This is pursuant to each item of Article 17 (1) of the Industrial Technology Enhancement Act and/or each item of Article 25 (1) of the Act on Promotion of Creation, Protection and Exploitation of Contents.

Industrial Technology Enhancement Act: https://www.meti.go.jp/english/policy/economy/industrial_competitiveness_act/index.html

Act on Promotion of Creation, Protection and Exploitation of Contents: <https://www.cas.go.jp/jp/hourei/houritu/kontentu.html> (in Japanese)

The National Center for Industrial Property Information and Training (INPIT) is conducting the fostering of human resources in the area of intellectual property by providing the specialist knowledge, experience and knowhow in the possession of the Japan Patent Office.

National Center for Industrial Property Information and Training (INPIT): <https://www.inpit.go.jp/english/index.html>

8. Handling of research results

– Utilizing JST’s academic-industry collaboration and technology transfer-related system –

Other than ERATO, which is related to “creating new technology,” JST operates competitive funding to promote the various support systems for technology transfer and ensuring the research results are made use of in society, related to the commercialization of new technology. We have high hopes that the research results acquired through ERATO will lead to such practical use by utilizing such systems.

➤ **Intellectual Property Utilization Support Program:**

<https://www.jst.go.jp/chizai/en/>

In order to promote the acquisition of rights for research results by universities and technology licensing organizations (TLOs), etc., comprehensive support is provided for patent applications including support for acquiring overseas patents.

➤ **JST MIRAI:** <https://www.jst.go.jp/mirai/jp/> (in Japanese)

Currently, new ideas and knowledge can exert a tremendous impact upon organizational and national competitiveness. JST MIRAI promotes high-risk-high-impact R&D that will boldly take on new challenges and aggressively create disruptive innovation.

➤ **Promoting Technology Transfer and Innovation Program:**

https://www.jst.go.jp/EN/operations/operation_b.html

This program provides comprehensive support for technology transfers to private corporations of outstanding research results obtained by universities, etc., and conducts solicited projects with research expenditure assistance in line with the phase of development of selected projects.

8. Handling of research results

– External publicity, press releases –

Participants are requested to enthusiastically publicize their research results to the outside world in order to widely relay ERATO research findings to society. This activity is one of the research evaluation indicators.

◆Examples of external publicity

- Publishing research papers, oral presentations
- New Technology Presentation Meetings
- Symposia, workshops, etc.
- Research reports, annual reports
- Press Releases, etc.
- Other outreach activities

◆Matters requiring confirmation prior to publishing results

- Ensure they do not include patent application details
- Ensure they do not contain details that may obstruct the acquisition of patent rights to be applied in the future
- Ensure no restrictions are imposed on the publication of results under the research contracts (with other research institutions)

◆Other points that should be kept in mind

- Details that may be recognized as being subject to intellectual property rights need in principle to be publicized after applications are filed.
- When publicizing an idea at the initial stage of research there is a potential risk of losing the inventive steps and innovation of related patents.
- If information is disclosed even at seminars held within research institutions or at doctoral degree screening committees, when unspecified persons (with no obligation to maintain confidentiality) participate it may be judged that the novelty of an invention has been lost and it becomes impossible to acquire a patent.
- With regard to applications for intellectual property rights or their transfer, research institutes are requested to be thorough in preparing rules and systems and ensuring there are no omissions or delays, so that the prior applications and various notifications to JST stipulated in the research contract and this guide are implemented within the given time frame.

* Under the Japanese patents system, as a relief measure to help the acquisition of rights to discoveries that have already been made public Article 30 of the Patent Act stipulates regulations concerning “exception to lack of novelty of invention,” which confers the right to apply the exception to lack of novelty of invention for a certain period of time starting from the date of being made public. This is, however, nothing more than an exceptional relief measure and the application date cannot be retrospectively changed to the date of public announcement. Although it is possible to apply the exception in nations other than Japan, the fact is that in many countries the conditions concerning public announcements are strict. In any case, it is imperative that patent applications are filed before any public announcements are made.

8. Handling of research results – Recommendation of press releases –

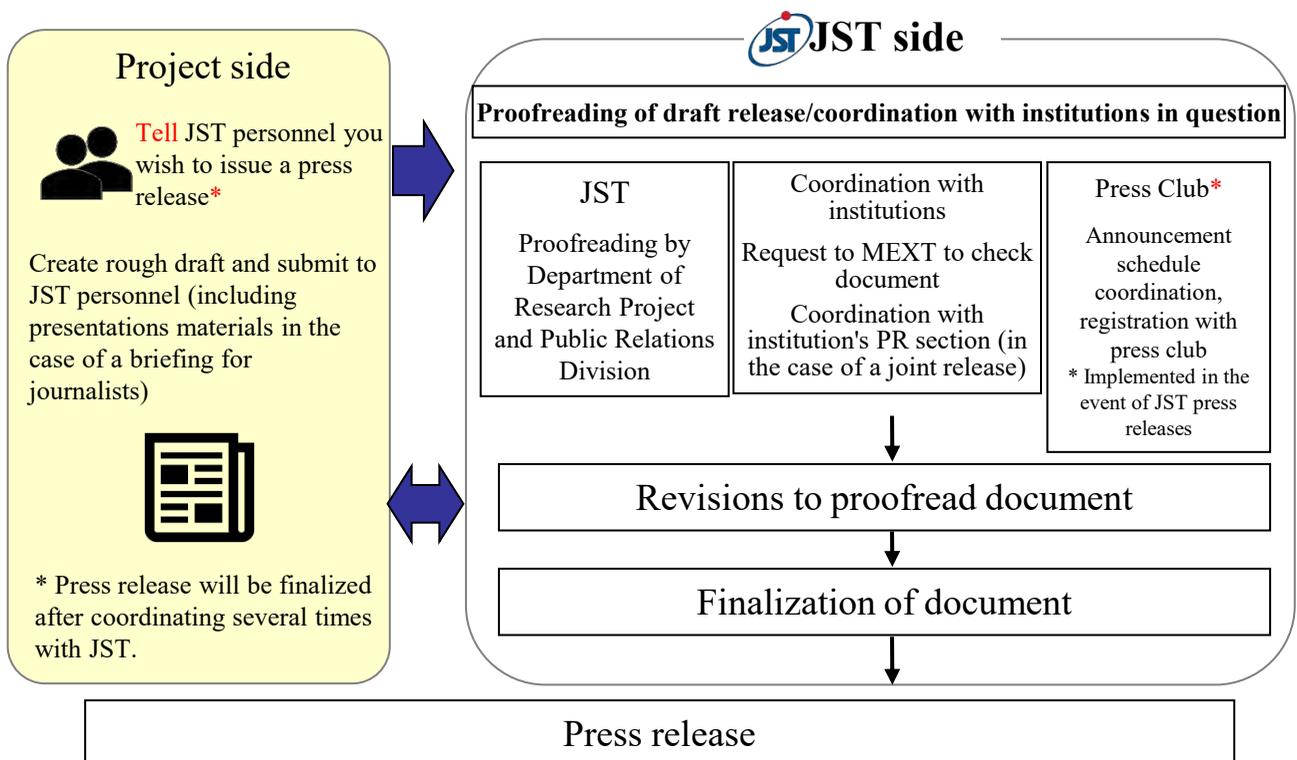
In the event that the support of ERATO leads to the creation of results that will impact upon society, please consider issuing press releases as part of enthusiastic outreach activities for the research results.

◆ JST press releases

- JST's press releases are released through the MEXT Press Club and the Science Press Club.
- The formats of press releases consist of handing out material and press conferences accompanied by press releases (briefings for journalists) after which JST uploads the material to the ERATO website. It is also possible to arrange a joint press conference with the research institution that the researcher is affiliated to.
- Form for JST press release: <https://www.jst.go.jp/erato/manual/index.html> (in Japanese)

◆ Press release procedures

- In order to make a press release a **preparation period of at least around two weeks** calculated back from the academic paper publication, including the time required for proofreading and coordination between MEXT and the research institution jointly making announcement. If you wish to issue a press release contact the person-in-charge as soon as a rough date for acceptance of a paper is anticipated (JST may not be able to assist in cases where there is not sufficient time).
- Please contact the JST personnel in the event that your organization of affiliation intends to individually issue a press release.



NB: Information JST wishes to be notified of

Please notify JST personnel of the following seven items.

1. Name of the journal in which the paper is to be published/ name of the conference where the presentation is to be made
2. Date of end of press embargo
3. Press release format (material distributed to press club/press conference accompanied by press releases)
4. Paper title/academic conference presentation title
5. Organization issuing the press release
6. Name and contact details of PR manager at the above organization
7. Any other points requiring attention

8. Handling of research results – Recommendation of press releases –

◆ Points to remember when issuing a press release

- It is essential that **the content of the press release is novel** and has not been printed in newspapers or reported on television.
- Please cooperate **in the early sharing of information** such as the schedule for the publication of academic papers and the dates of **press embargoes**, etc.
- Please compose the document **without using technical terms** and **in a manner that can be readily understood by journalists**. You are requested to ensure that the document contains three to four bullet points detailing the main gist of the release, and **credits ERATO** for the research funding (please consult with the JST personnel concerning precise points).
- Please **prepare a contact setup so that enquiries from the press can dealt with after the release**.
- If there are research results that you wish to particularly publicize please consider conducting a briefing for journalists. Note that the final decision on whether or not a press conference will be convened is at the discretion of the press clubs.

8. Handling of research results

– Submitting research results through research papers or oral presentations –

In some cases the permission of the Research Director is required before researchers, etc. participating in ERATO projects issue publications, due to intellectual property right considerations. When publishing research results in academic papers and so on, please ensure that you mention that you have received the support of ERATO.

- Please indicate under “Acknowledgements” that you received support from ERATO as shown in the following example.
- You no longer need to write “ERATO, JST” in the author affiliation (starting from the latter half of 2015).
- From April 2017 authors are required to include the JST grant number in their acknowledgments. Please refer to the URL regarding the number.
https://www.jst.go.jp/erato/manual/grantno_erato.pdf (in Japanese)

Ensure that the number is contained in the document as failure to so may result in it not being regarded as the result of a project.

Example acknowledgement

This work was supported by JST ERATO Grant Number JPxxxxxxx, Japan.

A request regarding notation

- When indicating ERATO support, please use either “ERATO, JST” or “ERATO, Japan Science and Technology Agency” and not just “JST” or “ERATO” alone.
- Please use the notation “JST ERATO” in the case of announcing research results of combined projects funded by Grants-in-Aid for Scientific Research.

- In the event that you are asked to register the research funding source when submitting a paper please use the following FundRef number:

ERATO : 10.13039/501100009024

* FundRef is a system that cross-links the research funding information submitted by CrossRef and the academic paper.

8. Handling of research results

– Open access to research papers and data management –

The Cabinet’s “Expert Panel on Open Science, based on Global Perspectives” published its report entitled “Promoting Open Science in Japan” in March 2015. The report compiles the Cabinet’s basic stance and policy on open science. The report stipulates that governmental ministries and agencies, institutions distributing funds, universities and research institutions and so on will formulate guidelines and action plans for implementation of open science. Moreover, the Fifth Science and Technology Basic Plan approved in January 2016 by the Cabinet, states that publicly funded research results will be utilized to their absolute maximum and that this will be Japan’s basic stance on open science promotion.

Based on this trend, JST published in April 2017 the JST Policy on Open Access to Research Publications and Research Data Management. This policy stipulates JST’s specific philosophy regarding providing open access to scientific papers arising from the research and the storage, management and publicizing of research data.

Please ensure open access to your ERATO research results (papers)

With regard to research results (papers) obtained through the ERATO projects, it is recommended that in principle they are made public through institutional repositories and publications presupposing open access.

Please create and implement a data management plan.

Researchers who have been selected as Research Directors from FY2016 onwards are requested to create data management plans detailing their plan and policy for the storage, management, publicizing or non-publicity of research data arising as research results, and submit these plans and policies along with their Research Plans to JST.

Furthermore, they are requested to store, manage and implement the publicizing of research data in line with these data management plans.

See below for further details.

○ JST Policy on Open Access to Research Publications and Research Data Management:
https://www.jst.go.jp/EN/about/openscience/policy_openscience_en.pdf

○ Implementation Guidelines: JST Policy on Open Access to Research Publications and Research Data Management

https://www.jst.go.jp/EN/about/openscience/guideline_openscience_en.pdf

8. Handling of research results

– Hosting of symposia, workshops and other outreach activities –

Participants are requested to eagerly present their research results through the hosting of symposia, workshops and other outreach activities. However, the matter of intellectual property rights must be taken into consideration at all times.

- * Please give due consideration to cost-effectiveness when hosting symposia, etc.
- * The expenditure for presentation of research results obtained through the project in question and matters directly related to the research of the project in question should be made using direct expenses. In the case of matters with an emphasis on PR, including presentations at JST-sponsored symposiums, the collaborative implementation expenses should be used.

◆ Symposia/workshop examples



Examples: Workshops with researchers from other related fields
 Sessions co-organized with academic societies, etc.
 Lecture meetings on research results, etc.

◆ Outreach activities, etc.



Examples: Introducing outline and state of progress of projects on the research project website.



Examples: Creating short movies (videos) in conjunction with research results press releases.



Examples: Present part of the research findings in an experimental workshop format aimed at high school students.

In order to obtain the understanding and support of the general public concerning science and technology, please pursue enthusiastic initiatives for “dialogue with citizens on science and technology.” These initiatives will form part of the items for JST’s evaluation of participants’ projects.

- ◆ For reference “Concerning the Promotion of Dialogue on Science and Technology with the Public, a Basic Approach Policy” (June 19, 2010)
https://www8.cao.go.jp/cstp/stsonota/taiwa/taiwa_honbun.pdf (in Japanese)

8. Handling of research results – Project website management –

As a part of the efforts to widely return to society all the research results of projects, please regard presenting the content and results of research on a website as one of the important activities of projects.

* Note that the websites of each project will be hosted on the JST server due to information security considerations.

◆ Important points to remember when creating your website

- Easily understood websites
Be especially careful to avoid technical terms that few people will understand, and expressions that could be misinterpreted.
- Clearly visible websites with consideration for accessibility
Pay particular attention to the use of clear lettering, background contrast, line spacing and so on, in order that the website is clearly legible to all people.
- Websites with consideration for usability
Take care to make file sizes compact, avoid “dead-end pages”, annotate the dates of updates and display the size of downloadable files.
- Protection of security, personal information, privacy and copyrights
Pay meticulous attention to personal information and data security as well as copyrights.

◆ Others (Refer to the JST website building guidelines)

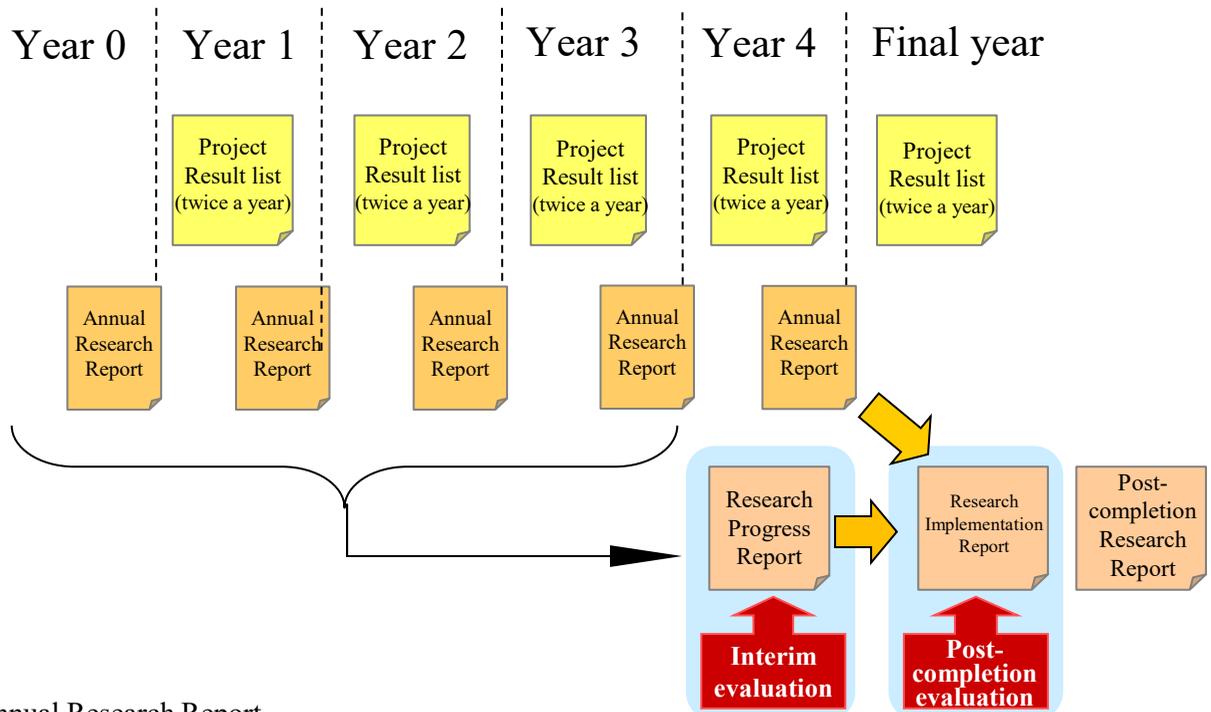
- ERATO website URL
<https://www.jst.go.jp/erato/en/index.html>
- The following criteria must be cleared in order to upload an HTML file to the JST server.
 - (1) HTML grammar check: score of at least 80 points required.
Checking possible at the following sites:
 - <https://cetus.sakura.ne.jp/htmlint/htmlint.html> (in Japanese)
 - <http://www.htmlint.net/html-lint/htmlint.html> (in Japanese)
 - (2) Web accessibility check: There must be no “Known Problems.”
Checking possible at the following sites:
 - miCheker can be downloaded from the following site:
https://www.soumu.go.jp/main_sosiki/joho_tsusin/b_free/michecker.html (in Japanese)
 - <https://achecker.achecks.ca/checker/index.php> (in Japanese)

* Please contact JST project personnel if you require a copy of the JST website building guidelines

8. Handling of research results

– Research reports, etc. –

In order that the projects' research results and state of progress can be ascertained, and as a basic material for evaluation, participants are requested to make the following reports, etc. The projects' Research Plans and Reports etc. are shared with the Management and Advisory Subcommittee.



- ◆ **Annual Research Report**
The Annual Research Report is to be made at the end of each year, detailing research conducted during the year in question. JST will use the reports to check the projects' research findings and state of progress.
- ◆ **Project Result List**
This list should contain a compilation of all the published literature and obtained intellectual property rights, etc., and participants are requested to submit it every six months in principle.
- ◆ **Research Progress Report**
The Research Progress Report is made as a basic material for the interim evaluations that are carried out roughly three years after the start of the project.
- ◆ **Research Implementation Report**
The Research Implementation Report is made as evaluative material for the post-completion evaluation. Participants are requested to make it in a format that adds any further results achieved after the submission of the Research Process Report.
- ◆ **Post-completion Research Report**
This should be prepared when the research project ends. It will include all the ERATO research results together with the purpose of revealing the possible spillover effects expected in the future. Please ensure that this report excludes any non-disclosure information in the Research Implementation Report.

NB: Please see the manuals for researchers page below for the latest forms of the research report etc.
<https://www.jst.go.jp/erato/manual/index.html> (in Japanese)

9. Research evaluation

– Types of evaluation and when they are conducted –

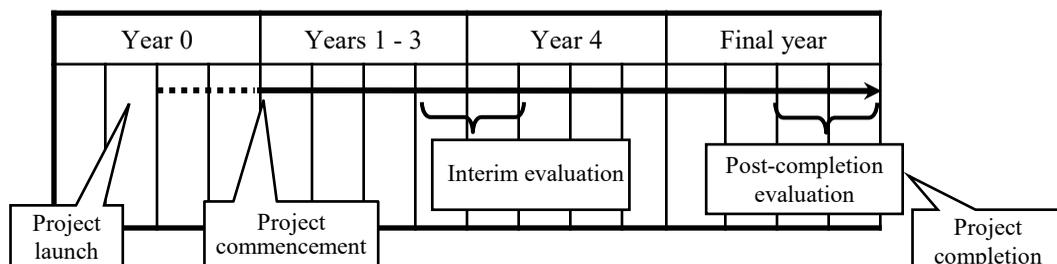
The two types of evaluation conducted within the ERATO research period are the interim evaluation and the post-completion evaluation. The evaluations are conducted, according to the evaluation viewpoints JST stipulates, by the Management and Advisory Subcommittee, which is composed of external experts (evaluators) appointed by JST.

◆ Interim evaluation:

The interim evaluation is conducted between the latter half of the third year and the start of the fourth year, and is based on the Research Progress Report submitted by participants. The evaluation enables the evaluation results to be used in applications for further funding and any pre-commencement evaluations, and its objective is to contribute to the uninterrupted promotion of outstanding research and research that can be expected to be further developed. The results of the evaluation are made public.

◆ Post-completion evaluation

The post-completion evaluation is conducted in the final year of the research. It takes into account research results obtained after the interim evaluation, and is decided upon as the final evaluation by complementing the interim evaluation. The results of the post-completion evaluation are made public.



* Evaluations may be made at other times when JST judges it to be necessary. Furthermore, at the stage at which five years have passed since the project research completion, follow-up evaluations may be conducted to evaluate the scientific and technological continuation and development of research results, and their industrial and social effects.

9. Research evaluation

– Evaluation viewpoints and schedule –

The project evaluation viewpoints and schedule are as follows.

Evaluation items

1. Research project (area) setup and its management
 - Research project's overall concept/ project objectives and plan
 - Project management
2. State of attainment of research and the research results achieved
 - State of attainment/ new developments diverging from the original objectives and plan/ publications, etc.
 - State of interaction with overseas research institution
(in the event that research funds are allotted to overseas institutions pursuant to a joint research agreement)
3. Contribution of research results to science and technology, society and the economy
 - Contribution to science and technology/ social and economic contribution
4. Other notable items (for which extra points will be granted)
 - Support for young researchers/ outreach activities/ post-project developments
 - Promotion of international joint research

(For reference) Sample evaluation schedule

June – July: Explanation of evaluations (By JST to project)
 Coordination of schedule for the Management and Advisory Subcommittee meetings

From October onwards

One month before Evaluation Committee meeting:

Submission from project to JST of Research Progress Report (sent on to the Management and Advisory Subcommittee members)

Day of Evaluation Committee meeting:

Progress report from Research Director and Groups Leaders, Q&A session (presentation and site visit conducted on the same day)

After Evaluation Committee meeting:

Checking of draft Evaluation Report (only to check against factual errors)

Announced on the website after JST's final decision procedures are completed

<https://www.jst.go.jp/erato/evaluation/index.html> (in Japanese)

10. Towards the promotion of fair and honest research

- In the case that any misconduct in research activities or inappropriate usage of research funding is uncovered, the details will be closely scrutinized, the contract research may be cancelled, all or part of the project's research funding returned, and measures taken to publicize the facts of the matter.
- Responsible Researchers and Research Participants must take responsibility for the proper and appropriate execution of the contract research funding in accordance with the rules, etc., of the affiliated institutions.

Recent incidents involving misconduct and dishonesty in research activities have resulted in an alarming situation that threatens the relationship of trust between science and society, and hinders the healthy development of science and technology. To prevent misconduct in research activities, there must be a function of autonomous self-purification in the scientific community. Each researcher must strictly adhere to strict discipline and work to create new knowledge and inventions that are useful for society, based on high moral standards that meet the expectations of society.

As a funding agency for research, JST considers research misconduct to be a grave issue and makes every effort to prevent it in cooperation with relevant organizations, with the goal of regaining public trust.

1. JST believes that honesty in research activities is extremely important for Japan, which seeks to develop itself through science and technology.
2. JST will support honest and responsible research activities.
3. JST will strictly condemn any misconduct in research activities.
4. JST will promote research integrity education and reform its research funding programs in cooperation with relevant organizations, in order to prevent misconduct.

We must develop a healthy scientific culture based on social trust, so as to build a society filled with hopes and dreams for a bright future. We therefore request the continued understanding and cooperation of the research community and related institutions.

JST's web pages on research integrity can be found here:

URL: <https://www.jst.go.jp/researchintegrity/index.html> (in Japanese)

10. Towards the promotion of fair and honest research

■ **Obligation to complete research integrity education**

As a part of its efforts to prevent misconduct JST makes it obligatory for all researchers participating in JST programs to complete the CITI Japan e-learning program on research integrity (eAPRIN: the former CITI program).

■ **Those required to complete the eAPRIN program and measures to be taken**

Please take the following measures. Research institutions and HQ are requested to take measures after referring to (1) to (4) below.

- (1) In principle, those listed¹ in Research Plans (Research Participants Reports) are liable to complete research integrity education.
- (2) Those among (1) above and included in Table 1 are required to take and complete the learning program on research integrity (eAPRIN) designated by JST.

Table 1 Those required to complete eAPRIN

Research contract with JST	Affiliation	Type of participation	Probability of obtaining patents/writing or co-writing academic papers	Research integrity education ⁴
Concluded	Domestic institution	Research Members ²	Regardless of probability	Completion of eAPRIN is required. ^a

^a In the event that completing eAPRIN is not possible due to changes in the environment of those meant to take it (for example, if the period of participation is short (a few weeks) and consequently a person is hardly involved in a project), they may as a result be exempted from completing eAPRIN. In the event of any uncertainty please contact the JST project personnel.

- (3) Please take the following measures with regard to those who are not subject to (2) above.

Table 2 Completion of eAPRIN by those not listed on Table 1

Research contract with JST	Affiliation	Type of participation	Probability of obtaining patents/writing or co-writing academic papers	Research integrity education ⁴
Concluded	Domestic institution	Research Assistants ³	Improbable	Possible for exemption
	Overseas institution	Research Members ²	Regardless of probability	Completion of eAPRIN is desired.
		Research Assistants ³	Improbable	Possible for exemption
Not concluded	Domestic institution	Research Members ²	Regardless of probability	Completion of eAPRIN is desired.
	Overseas institution	Research Members ²	Regardless of probability	Completion of eAPRIN is desired.

¹ In principle, it is required that all project participants are listed on the Research Plan (Research Participants Report), but it is possible to omit temporary participants (those who participate for less than three months). However, in the event that it is feasible that participants will be the authors of papers or inventors connected to the results of the project they are required to be listed.

² The term “Research Members” indicates all those actively involved in the research activities including researchers, technicians, research assistants, students and joint researchers.

³ The term “Research Assistants” indicates administrative assistants and others who support research activities.

⁴ Research integrity education indicates the e-learning programs of the institutions in question, study groups and eAPRIN.^b It should be noted that in the event that research integrity education has already been completed the presentation of certificates of completion may be required. (^b Those wishing to take the eAPRIN program can register for it through JST.)

10. Towards the promotion of fair and honest research

- (4) Note that those who have already chosen one of the courses of the learning program on research integrity (eAPRIN) designated by JST and completed designated modules of the course (Table 3) will be exempted from completing eAPRIN. In the case of any uncertainties please consult with JST personnel regarding details.

Table 3. JST designated module

From FY2014 onward (current)	
Biomedical	(1) Responsible Conduct of Research (2) Research Misconduct (3) Data Handling (4) Rules for Collaborative Research (5) Authorship (6) What is plagiarism? (7) Managing Public Research Funds
Engineering (from FY2015 onward)	(1) Research Misconduct (2) Ethical Issues in the Management of Data in Engineering Research (3) Responsible Authorship (4) Ethical Issues in the Peer Review and Publication of Engineering Research (5) Collaborative Research in Engineering Fields (6) Whistleblowing and the Obligation of Researchers and Engineers to Protect the Public (7) Managing Public Research Funds
Humanities (from FY2017 onward)	(1) Misconduct in Research Activity (2) Plagiarism in the Humanities and Social Sciences (3) Collaborative Research and Authorship (4) Peer review and Conflicts of Interest (5) Managing Public Research Funds

11. Points to be aware of in implementing the research

Other points to be aware of

◆ Reporting accidents

Should any accident occur in the course of the research or any researcher be injured in the accident, please notify JST in writing immediately.

◆ Measures on bioethics and safety assurance

Regarding research in life science, please observe the laws, ministerial ordinances, and ethical guidelines, etc. on bioethics and safety assurance.

Refer to: <https://www.lifescience.mext.go.jp/bioethics/index.html> (in Japanese)

◆ Handling consent/cooperation of other parties necessary for the project

In the case that, in implementing a research initiative, research requiring the consent/cooperation of other parties and research requiring special care in handling personal information is involved, be sure to carry out the necessary procedures to protect civil rights and interests.

◆ Security export control (Measures against the leakage of technology internationally)

To ensure that the results of cutting-edge research do not fall into the wrong hands of developers of weapons of mass destruction or terrorist groups or people who might divert the usage for militant purposes, please observe the Foreign Exchange and Foreign Trade Act (Foreign Exchange Act) and other laws, ministerial ordinances, and notices issued by government ministries and agencies.

Refer to: <https://www.meti.go.jp/policy/ampo/index.html> (in Japanese)

◆ Research activities abroad and access to biological genetic resources

When conducting research activities in the field abroad or international joint research, please confirm and observe the related laws of that country beforehand. Also, in the event of a transfer of biological genetic resources or other research materials, please conclude a Material Transfer Agreement (MTA).

◆ Information may be provided to the Cabinet Office through the Cross-ministerial R&D Management System (e-Rad)

Through the e-Rad system that MEXT administers and operates, there may be cases where we need to provide information to the Cabinet Office. In such cases, we may need to ask for your cooperation in the completion, preparation and checking of information on financial settlement amounts and results (such as the publication of papers).

◆ Proactive participation and activities of young researchers

Research Directors must realize that they bear a huge responsibility to the future of young researchers who participate or become employed by ERATO. They will be asked to consider the post-completion careers of young researchers and cooperate in supporting their various careers so that the young researchers may use their expertise widely in the industry-academia-government area.

11. Points to be aware of in implementing the research

Other points to be aware of

◆ Effective use of currently available research facilities and equipment

In a document issued in November 2015 entitled “Regarding the Introduction of a Joint Use System for New Research Facilities and Equipment that Integrates Research Organizations’ Management” the Council for Science and Technology’s Technology and Research Foundations Section demanded the operation at universities and national research institutions of an organization-level joint use system for research facilities and equipment. Furthermore, on June 24, 2015, MEXT’s Review Committee on Reform of Competitive Research Funding stated in a document entitled “Regarding the Reform of Competitive Funding towards the Sustainable Creation of Research Results (interim report)” that it would be “appropriate in principle to share large facilities and equipment purchased with competitive funds.” See below for further details.

Refer to: https://www.mext.go.jp/component/b_menu/shingi/toushin/_icsFiles/afeldfile/2016/01/21/1366216_01_1.pdf (in Japanese)

Refer to: https://www.mext.go.jp/b_menu/shingi/chousa/shinkou/039/gaiyou/1359306.htm (in Japanese)

◆ Dialogue with citizens on science and technology

Researchers are asked to actively engage in “Dialogue with Citizens on Science and Technology” and explain in their own words the purpose, contents, and research results of their Research Projects to promote citizen understanding.

Refer to: https://www8.cao.go.jp/cstp/stsonota/taiwa/taiwa_honbun.pdf (in Japanese)

◆ Registration on researchmap

The Strategic Basic Research Programs plans to use researchmap as a master database of research record information and in the future to use it in all sorts of situations, such as research record reports and so on. Registration with research map is mandatory for all selected researchers and joint researchers, so please register as soon as possible if you have not already done so.

Refer to: <https://researchmap.jp/?lang=english>

◆ Use of JREC-IN Portal

The JREC-IN Portal is a free service to carry information for perusal on human resources including researchers, their supporters, and engineers involved in research. Please make the most of JREC-IN Portal when looking for research human resources (post-doctoral students, researchers, and so on) with high levels of knowledge to promote research projects.

Refer to: <https://jrecin.jst.go.jp/seek/SeekTop?ln=1>

11. Points to be aware of in implementing the research

Other points to be aware of

◆ Safety and Health Management

- The Research Director and the research institution are requested to ensure that all the researchers, etc, are in good health and to prepare the requisite equipment and environment for research to be conducted safely. They are also requested, when necessary, to conduct safety and health education and guidance and manage the safety and health of the project researchers, etc.
- In the event that a human or material accident that might have a severe impact on the progress of research occurs, first of all secure the safety of personnel and research institution facilities, then immediately report the state of the accident to the Department of Research Project with jurisdiction for ERATO at JST. (The contact details are shown below.)
- With regard to responses after the accident, please keep in contact with and collaborate with the Department of Research Project as appropriate.
- JST will separately inform the project HQ of an emergency contact point.

For inquiries:

Japan Science and Technology Agency (JST)

Department of Research Project

TEL: 03-3512-3528

FAX: 03-3222-2068

Please find the latest manuals and information
at the manuals for researchers page below.

<https://www.jst.go.jp/erato/en/manual/index.html>

Please see the following web page for the latest
administrative procedure forms and documents.

<https://www.jst.go.jp/contract/index2.html> (in Japanese)

Please refer to the following web page for supplementary
documents on procedures specific to ERATO.

<https://www.jst.go.jp/contract/kisoken/2021/kisokena.html> (in Japanese)