

FY2024  
RISTEX R&D Programs  
Solution-Driven Co-creative R&D Program for SDGs  
(SOLVE for SDGs)  
: Scenario Creation Phase, Solution Creation Phase

Call for R&D Proposals  
[Application Guidelines]

Application Call Period

Wednesday, April 10 ~ 12:00 (noon, Japan time) on Wednesday, June 5, 2024

Note: This translation is provided as a reference material. If there is any discrepancy between this translated version and the original Japanese version, the original Japanese version prevails.



Research Institute of Science and Technology for Society (RISTEX),  
Japan Science and Technology Agency  
April 2024

# Overview of Call for Proposals of Research Institute of Science and Technology for Society (RISTEX)

The R&D program soliciting proposals in this call is the "Solution-Driven Co-creative R&D Program for SDGs (Scenario Creation Phase, Solution Creation Phase)" (the "Program"). Please refer to the next page for the main selection schedule. Applications will be made through the Cross-ministerial R&D Management System (Please refer to "4.6 Application Method"). Please note that applications using paper media (postal email, express parcel delivery, hand delivery, etc.) or made by email will not be accepted.

The overview and features of the Program are as follows. Please prepare your application after confirming the details in "Chapter 3. Overview of R&D."

## SDGsの達成に向けた共創的研究開発プログラム

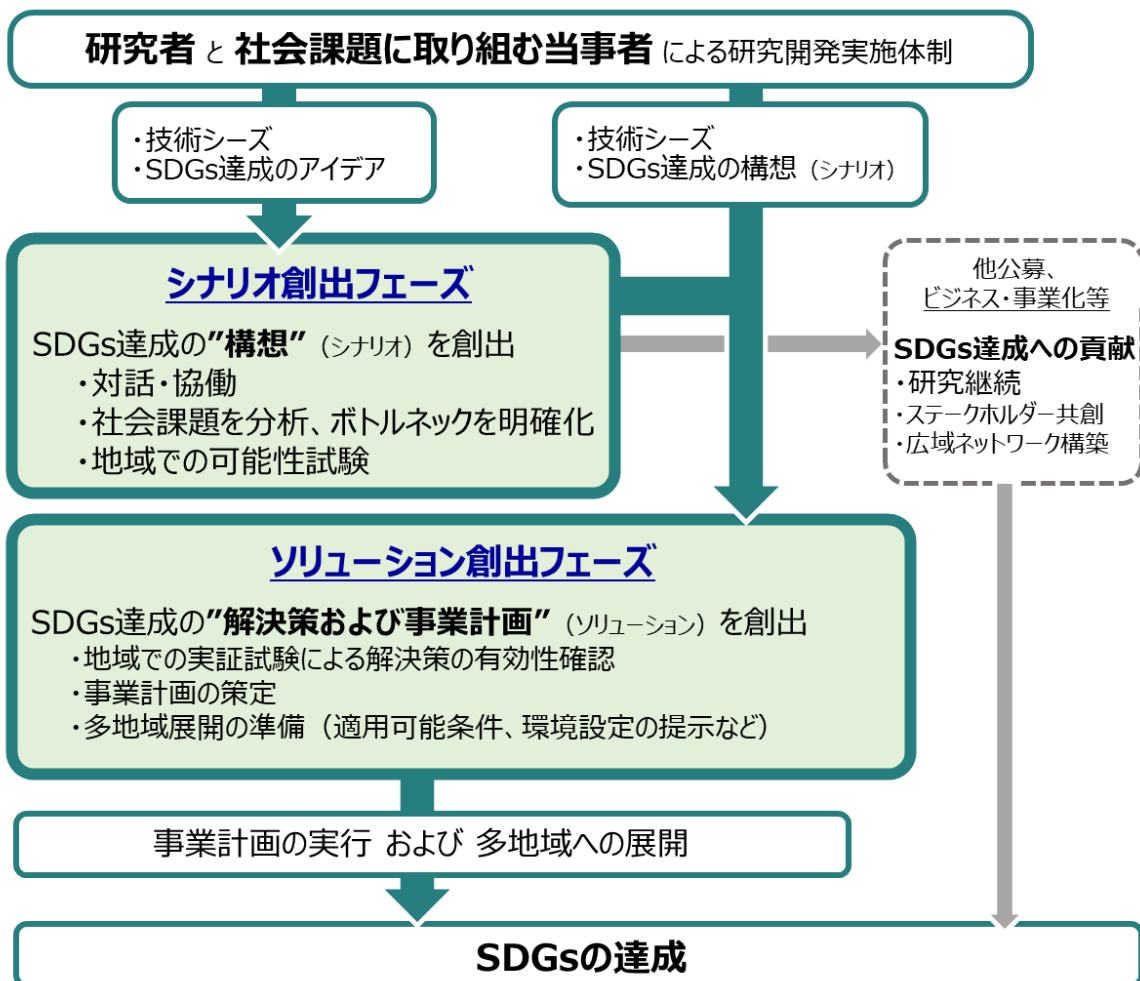


Figure: Solution-Driven Co-creative R&D Program for SDGs (Scenario creation phase, Solution creation phase) Overview

- The Program will conduct **"co-creative"** research and development. Therefore, **dialogue** and **collaboration with local communities** is essential. Person in charge of R&D (Principal Investigators) and **representatives of parties working on social issues in communities** (Collaborators) are asked to work together to solve issues.

“Co-creation” in this program is not limited to outreach activities aimed at increasing literacy and communicating research results in an easy-to-understand way but also includes concrete actions to solve social issues through dialogue and collaboration (engagement) with stakeholders from diverse perspectives.

- In the Program, they will work on the following in each phase to **establish a business plan and implementation system for solving social issues** after the research and development period ends.

[Scenario Creation Phase]

**Extraction of social issue characteristics, clarification of bottlenecks, performance of community possibility tests, and creation of concept (scenario)** to achieve the SDGs.

[Solution Creation Phase]

**Confirmation of effectiveness of solution** to social issues through **verification tests in communities**, presentation of **applicable conditions for expansion into other communities**, and **business plan formulation** for independent continuation **centering on Collaborators**.

■ Selection Schedule

Call begins	Wednesday, April 10, 2024
Briefings of Solicitation	Thursday, April 25, 2024, Online Meeting Details will be posted on the proposal application website. ( <a href="https://www.jst.go.jp/ristex/proposal/proposal_2024.html">https://www.jst.go.jp/ristex/proposal/proposal_2024.html</a> )
Application deadline *1	12:00 (noon, Japan time) on Wednesday, June 5, 2024 (No delays accepted)
Document screening period	June to July (planned)
Notification of document screening results	Notice will be provided at least one week prior to interview screening
Interview screening*2	Scenario Creation Phase: Friday, August 2, 2024 Solution Creation Phase: Monday, July 29, 2024

Candidate Interview with the Program Supervisor	Tuesday, August 20 and Wednesday, August 21, 2024
Notification and announcement of selection results	Late September 2024 (planned)
Start of R&D	Early October 2024 (planned)

\*1 Deadline for submitting applications through the Cross-ministerial R&D Management System (e-Rad).

\*2 Interview selection will be held online using Zoom. Please cooperate for the advance connection test.

■ Other Considerations

a. Proposers eligible for the interview after document screening will be notified in writing and informed regarding the guidelines for the interview, date and time, and additional documents to be submitted. **During the interview, both of Principal Investigator and Collaborator will be asked to explain the concept of his/her R&D project.**

b. The Principal Investigator will be notified of the results of document screening and interview screening regardless of if they are accepted or not.

In addition to the above, please be sure to enter an e-mail address, phone number and address registered in e-Rad, and the contact information provided in application form 1, as JST may contact the Proposer.

c. The Principal Investigator must have completed the educational program for research integrity at the time of proposal application. For details, please refer to “4.5 Requirements for Application” and “6.1 Enrolling in and Completing the Educational Program for Research Integrity”.

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# Chapter 1 Introduction to the Call for R&D Proposals

## 1.1 Overview of RISTEX R&D Programs

The Research Institute of Science and Technology for Society (RISTEX) of the Japan Science and Technology Agency (JST) seeks to create new social and public value through solving specific social problems. By building networks of stakeholders and R&D participants who engage in solving social problems and promoting research and development (R&D) that makes use of knowledge in natural sciences, humanities, and social sciences (HSS) under a competitive environment, we aim to obtain outcomes that will lead to practical solutions to problems in the actual society and to promote utilization of obtained outcomes in wider society.

In the JST RISTEX R&D Programs, RISTEX sets up R&D Focus Areas and Programs (referred to as “Focus Areas and Programs”) which it considers important in solving social problems, calls for proposals and promotes those selected as R&D projects (referred to as “Projects”).

The management of Focus Area and Program is performed by the Program Supervisor with the cooperation of Program Advisors. Principal Investigators and R&D participants conduct R&D within the institutions with which they are affiliated under the Program Supervisor’s management.

This program corresponds to the Competitive Research Fund System posted on the Cabinet Office website (<https://www8.cao.go.jp/cstp/compefund/>) .

### ○ **Program Supervisor**

The Program Supervisor performs management of the Program as the person responsible for the operation of R&D that contributes to achieving the program targets.

### ○ **Assistant Program Supervisor**

The Assistant Program Supervisor is delegated by the program supervisor to act on behalf of some of the Program Supervisor’s roles.

### ○ **Program Advisor**

The Program Advisor provides appropriate advice to the Program Supervisor from an expert perspective.

The Program Supervisor, Assistant Program Supervisor, and Program Advisor monitor the progress of the project through site visits, etc., and provide guidance and advice while respecting the independence and autonomy of the R&D team. They also conduct project selection, approval of R&D plans,

and post-evaluation. In addition, project activities and results will be made public to provide opportunities to promote networking and to incorporate external opinions.

- **Principal Investigator**

The Principal Investigator represents the project and has overall responsibility for the project. The Principal Investigator performs suitable management of implementation of R&D and appropriately manages the outcomes and overall R&D expenses of the project with R&D institution.

- **Collaborators**

Representatives of parties tackling social issues. They take the lead in promoting projects together with Principal Investigators.

Please note that the application guidelines and proposal formats differ depending on the focus program.

The proposal format, place of submission, and other details of this program differ depending on the phase for which you are applying (i.e., “Scenario Creation Phase” or “Solution Creation Phase”).

Please pay particular attention to this point.

## **1.2 For Researchers Considering Applying for or Participating in the Programs**

### **1.2.1 Contribution to the Accomplishment of Sustainable Development Goals (SDGs)**

#### **JST to contribute to the accomplishment of SDGs!**

At the “United Nations Sustainable Development Summit” held in September 2015, “Transforming our world: the 2030 Agenda for Sustainable Development” was unanimously adopted; the document was an achievement with “SDGs” at the core as a further comprehensive and new action target common to the world for the human beings, the Earth, and the welfare. The seventeen goals in the SDGs do not only indicate various problems in relation to the sustainability that is facing the humankind but also demand that those problems be solved comprehensively and in an integrated way. It is expected that scientific and technological innovation solves such social problems and that scientific evidence is provided to contribute to the formulation of excellent policies. We can say that these roles conform to “the science in the society and the science for the society,” a new task of the science that was declared in “World Declaration on Science and the Use of Scientific Knowledge” (Budapest Declaration\*), adopted at International Council for Science in 1999. As a core organization to promote the

science and technology policies in Japan, JST promotes advanced fundamental research and works on the R&D of a problem-solving type to meet the requests from the society. SDGs are one of the worldwide objectives that can itemize all JST missions. We, in the course of the JST programs, want to collaborate with industries, academia, government agencies, and private enterprises and cooperate with researchers to realize a sustainable society.

President, Japan Science and Technology Agency (JST)

\* The Budapest Declaration states that “science for knowledge,” “science for peace,” “science for development,” and “science in society and science for society” are the responsibilities, challenges, and obligations of the science in the 21st century.



## 1.2.2 Promotion of Diversity

### **JST Promotes Diversity!**

The diversity is essential requisite for promotion of scientific and technological innovations. It is possible to open a new perspective of science and technology by the collaboration and discussion with various stakeholders having different specialties and values, irrespective of gender and nationality.

JST is, by promoting advances in diversity in its all activities in science and technology, undertaking possible problems of our future society, contributing to the strengthening of industrial competing power of Japan as well as to the enrichment of spiritual happiness of people. Our activities in this field accord with the “Sustainable Development Goals (SDGs)” agenda of the United Nations, in which goals relevant to diversity advancement are shown, including gender equality, contributing to efforts on our domestic problems but also to those on problems common to various countries.

Currently, the activity of woman is being positioned at the core of the Growth Strategy of the Japanese Government, being started as “the largest potential of Japan” in the strategy paper. Expanding the participation of woman researchers in R&D projects is substantially important for advancing R&D, as they are a party of various researchers supporting science and technology innovations. JST is expecting that woman researchers would take this opportunity, positively and will apply to our Strategic Basic Research Programs, actively. JST is undertaking the improvement of our “Childbirth, Child-raising, Nursing Care Support System”, to constantly, based on the voice of the system users, creating environments enabling a researcher on leave to return his/her research, for example.

The call for and review of R&D proposals will be conducted also from a viewpoint of advancing diversity. Our dear researchers, we cordially invite you to the call for R&D proposals.

President, Japan Science and Technology Agency (JST)

### **We Are Waiting for Your Application!**

JST is promoting diversity in research, based on our perspective that the diversity is for understanding of other researchers having ideas different from yours, and for creation of new values by combining your and their ideas. The diversity thus has potentials to give solutions not only to the domestic problems but also to problems common in all nations across the world. Therefore, JST is undertaking the societal problem of the globe such as the Sustainable Development Goals (SDGs), through the promotion of diversity in research, collaborating with foreign institutions.

JST is promoting the diversity by ensuring the activities of women researchers, of course young researchers, and foreign researchers having foreign citizenship. To ensure that each researcher is

fully able to exercise his/her skills, JST is providing continual supports for childbirth, childcare, and homecare of elderly relatives, and also endeavoring to maintaining a balanced membership composition in committees and alike. JST especially welcomes the application of women researches to our program, from whom we cannot have so many R&D proposals in previous years, to realize environments where various kinds of researcher can work, cooperating and competing with each other. Through these activities, JST is pursuing the creation of new values.

We are sincerely waiting for your active applications, especially those from woman researchers.

Director of Diversity and Inclusiveness  
Director of the Office for Diversity and Inclusiveness  
Japan Science and Technology Agency (JST)

### 1.2.3 Toward the Promotion of Fair Research

#### **Toward the Promotion of Fair Research**

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 scientific technologies. 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, the Japan Science and Technology Agency (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 supports honest and responsible research activities.
3. JST strictly condemns any misconduct in research activities.
4. JST will promote education in research ethics 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.

President, Japan Science and Technology Agency (JST)

## **Chapter 2 Concept of Program Supervisor in Solicitation and Selection**

**Program Supervisor: KAWAKITA Hideto**  
CEO, International Institute for Human, Organization and the Earth  
Previous Program Supervisor: SEKI Masao  
(Term of office: May 2019 – August 2023)

### **1. Background of the Sustainability Development Goals (SDGs)**

The definition of Sustainable Development as used in the SDGs, is widely used around the world, and is commonly known as the “Sustainable Development Goals” (SDGs), chaired by the Gro Harlem Brundtland, Norway’s first female Prime Minister. The United Nations Brundtland Commission’s report “Our Common Future” (1987) defines the term. It is “development that meets that needs of the status quo without jeopardizing the ability of future generations to meet their own needs.

This concept, established in 1987, still holds true more than 35 years later. On the contrary, the importance of the concept and the need to implement it are increasingly recognized with a sense of urgency. This strong sense of urgency led to the adoption of the SDGs by the United Nations in 2015. While I commend the Brundtland Commission for its foresight and insight, it is very unfortunate that, if we think about it dispassionately, we still have not solved the problem.

As the various statistical trends clearly show, the sustainability of human society has not improved, future generations are increasingly at risk, and current needs are not being met. Global warming is accelerating, and the atmospheric CO<sub>2</sub> concentrations have already exceeded 400 ppm, which is considered a danger zone. However, at the current level of voluntary targets of countries around the world, it is impossible to limit temperature increase to within 1.5°C, which is strongly recommended by scientists, and if the current situation continues, it will be a cakewalk. The situation is the same in the United States.

According to the report by the Intergovernmental Panel on Climate Change (IPCC), the worst-case scenario is at 4.8 °C temperature rise and a maximum sea level rise of 0.82 m by the end of the century. The effects on society, the economy, and people’s lives are expected to be immeasurable in all areas, including food, water, and health, as well as the damage to ecosystems and the

intensification of natural disasters.

Along with the climate crisis, biodiversity has also been rapidly lost. According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Service (IPBES) report released in May 2019, as many as one million species are currently threatened with extinction. The decline in biodiversity to lead to a significant reduction in ecosystem services, with major consequences for a wide range of human societies. For example, the decline of pollinators has been estimated to lead to an annual economic loss of \$577 billion due to reduced crop yields.

## **2. What is Happening in the World Today**

In August 2018, Greta Thunberg, a 15-year-old (at that time) Swedish girl, started a one-woman protest against climate change policies by boycotting her school classes and sitting in front of the parliament building every Friday. This movement spread throughout Europe and the world as the “Fridays for Future” movement. Later, invited to speak to COP24 (24th Conference of the Parties to the United Nations Framework Convention on Climate Change), Greta said, “Unless we are willing to look not at what is politically possible, but at what needs to be done, there is no hope.” She urged policy makers to act to protect the future of young people and avert a climate crisis. Greta’s powerful message, delivered in a calm tone of voice, sparked a storm of empathy around the world and spurred young people to take action, that on Friday, March 15, 2019, teenagers in 125 countries around the world rose up en masse and marched in protest. And it has grown to 7.6 million young people in more than 185 countries standing up in time for the UN Climate Change Summit in September 2019.

The climate crisis is shared around the world, and more than 2,000 cities and municipalities around the world have now declared a “climate emergency”. And major governments in Europe, the United States, China, Japan, and elsewhere have aligned and committed to achieving a decarbonized society by mid-century. However, the road to solving the problem is steep and there is not a moment to lose. To limit temperature, rise to within 1.5°C, we must achieve a 45% reduction in greenhouse gases by 2030.

The fight against climate change requires the courage and determination to create a new socio-economic system that is not an extension of the past, and to carry out the “transformation” that is at the root of the SDG’s philosophy.

As for the other pillar of the SDG’s philosophy, “Leave No One Behind,” poverty and widening

inequality are major global issues. According to the 2019 report of the international NGO Oxfam, the growing maldistribution of wealth and widening inequality have become uncontrollable. For example, it states that the wealth of just 26 of the world's richest people equals the wealth of half of the world's population, or 3.8 billion people, counted from the poorest to the richest. Furthermore, in 2023, Oxfam reported that the world's richest 1% grabbed nearly twice as much wealth as the other 99% over the past two years.

Furthermore, in terms of the interrelationship between climate change and poverty, it is important to note that it is these poor and vulnerable people who will be most affected by the negative impacts of climate change, such as extreme weather events and natural disasters. It is now an urgent task to achieve a resilient (strong and resilient) society against climate change by working on climate change mitigations and aiming for a decarbonized society, while at the same time putting more effort than ever before into disaster prevention and other climate change adaptation measures. We need to realize a resilient society that not only aims for sustainable and inclusive economic growth, but also protects human life, livelihood, and dignity in the face of increasing natural disasters and other downward risks to human life.

Humanity is now facing a complex combination of crises, including COVID-19, but in the recovering from the damaged economy and society, we should aim to rebuild a better society (build back better or build forward better), not simply restore it to the way it was. The key is to achieve economic recovery (green recovery) through large-scale investment to realize a decarbonized society, and at the same time, to realize an inclusive and resilient society through a co-creative approach to solving local issues, such as SOLVE. All of these are the very essence of the SDGs.

### **3. What Should We Do?**

Needless to say, these global issues, such as climate crisis and poverty, are not something that is a matter for others. We in Japan are also called upon to take action to bring about major long-term changes. At the same time, there are a number of pressing issues that Japanese society in particular needs to resolve in order to create a society that is sustainable and leaves no one behind.

For example, in Japan, where the birthrate is declining and the population is aging rapidly, the working-age population to sustain the society is drastically decreasing, and it is clear that the current social system cannot be maintained by future generations. The reality is that we are aware of this



crisis, which we know is coming in the long run, but are not taking sufficient action to deal with it. The trend of population concentration in large cities such as Tokyo is expected to continue, and even core cities such as prefectural capitals in regions outside of Tokyo are now facing a serious crisis of sustainability of local communities due to population decline, especially in the working age population.

However, as the phrase “Japan, a country with advanced issues” suggests, the problems that Japan faces are realities that many other countries will soon have to face. Therefore, if Japan is able to take the lead and demonstrate effective solutions, it can be used as a model for other countries in the future, and the Japanese model has the potential for global deployment. Crisis is also opportunity, and by providing solutions to the world’s problems, Japan has a unique opportunity for mid- to long-term growth and development.

In particular, the rapidly advancing Science, Technology, and Innovation (STI) can be an effective way to achieve this. For example, services utilizing information technologies such as AI, IoT, Big Data, 5G, robotics, drones, and blockchain are already beginning to be widely used in areas related to everyday life, such as smart agriculture, mobility and distribution, medicine, and healthcare, etc. Although it is true that these technologies have the power to disrupt the existing order and drastically change society and people’s lives at time, they also entail various risks because they are new technologies, the SDGs, with their high ideals of transforming society and creating a society in which no one is left behind. It is an indispensable driving force for the realization of this goal.

Technology is not a panacea, nor does technology itself solve problems. The accelerating pace of digital technology and other scientific and technological advances must be used for the future of people and society, and must be used as a force to solve problems. In other words, the solution concept we are aiming for is to “build a human-centric ultra-smart society.”

This is also the very core of Japan’s new growth model, the “Society 5.0” strategy, presented in the Fifth Science and Technology Basic Plan approved by the Cabinet in January 2016. Japanese industry also supports the government’s strategy as the entity responsible for implementing this strategy. In its Charter of Corporate Behavior, a code of conduct for member companies that was substantially revised to incorporate the SDGs and released in November 2017, Keidanren clarified its intention that industry will “play a leading role in realizing a sustainable society,” and in its Charter Implementation Guide, which outlines concrete actions to be taken, Keidanren has adopted the Society 5.0 for SDGs strategy, which outlines specific actions to be taken, and encourages member companies to take action. In addition, in November 2018, we also released a comprehensive

strategy, "Society 5.0: Creating the Future Together," to provides policy recommendations for a new era. And in March 2020, Keidanren, the University of Tokyo, and GPIF released a joint research report, declaring their commitment to act together to "advance ESG investment, realize Society 5.0, and achieve the SDGs." In addition, Keidanren has newly launched a new vision for future growth in the Corona Disaster, "New Growth Strategy" in November 2020. The strategy calls for an end to the growth path that has been followed to date. The Sixth Basic Plan for Science, Technology and Innovation (STI) approved by the Cabinet in March 2021, also calls for the resolution of social issues and the reduction of disparities in science, technology, and innovation. In order to create new value through innovation, it has been pointed out that it is important to use "comprehensive knowledge" from the humanities and social sciences that creates social value and "knowledge" from the natural sciences. "Convergence of Knowledge: Basic Concept and Strategic Promotion Measures" has been extensively discussed by the Expert and Diet Member Roundtable of the Council for Science, Technology, and Innovation since July 2021, and later summarized in an "Interim Summary" in April 2022. In order to realize solutions to social issues through "comprehensive knowledge" that utilizes not only academic knowledge but also on-the-ground knowledge, it is essential to build a network for multi-stakeholder collaboration.

Now is the time for all sectors and stakeholders, including government, academia, industry, investors, civil society, consumers, labor, and media, to pool their wisdom and energy to create and scale up solutions to global and local challenges for a long-term perspective. The key is a multi-stakeholder approach and the co-creation of solutions based on consistent stakeholder engagement and dialogue, starting from the research and development stage, in order to ultimately implement new and unprecedented technologies and ideas into society.

#### **4. What This Program Aims to Achieve**

In this program, we aim to solve social issues in a specific region by utilizing Science, Technology, and Innovation (STI) in this way, and to present the results as a solution that can be developed into a business plan and deployed in other regions in Japan and abroad. Although the program is based on technological seeds, it is not technology-driven but rather solution-driven in the sense that science and technology are considered as a component of a social system that should be optimized and customized to solve problems. We also emphasize the concept of "back casting," in which we first

determine the target society from an outside-in perspective based on the external environment and objective scientific knowledge, and then consider what needs to be done by calculating the difference from the current situation in reverse.

The issues facing the region today are diverse and increasingly complex, and in order to solve them, it is essential not only for individual entities to respond individually, but also for diverse stakeholders to work together to find a solution that is not partially optimal, but rather optimal as a whole. The 17 goals of the SDGs are a collection of independent and disparate goals. Rather than a collection of goals, we need to pay attention to the interrelationships, tradeoffs, and synergies among them. It is important to take the stance of making society more sustainable, inclusive, and resilient (strong and flexible) by transforming the social system itself through co-creative activities in which diverse stakeholders collaborate.

The SDGs aim to “Leave No One Behind” by organizing and setting common goals that transcend the positions of citizens, businesses, central and local governments, NPOs, researchers, and others, regardless of whether they are in developed or developing countries. Everyone has their own role in achieving a solution. For example, researchers play the role of researchers, and local governments play the role of local governments. Generally speaking, it tends to be thought that each sector should solve problems as “specialists.” However, by rethinking these issues from the perspective of the SDGs, they become common challenges that everyone in this society should participate in as a concerned party, engage in dialogue, learn from each other, generate ideas, and collaborate by leveraging their strengths. Without this basic approach, we will not be able to solve the difficult and complex issues facing our society today. And only then will it be possible to create a significant impact that no single sector can produce on its own.

This program aims to promote co-creative activities (identification and sharing of issues; dialogue, communication, and trust building; design of venues, tools, and management of systems for diverse actors to gather; creation of performance indicators (KPIs) and intermediate goals; development of solution scenarios; feasibility testing in the field; demonstration testing; and development of business plans). And to transform society and create a strong, inclusive, and sustainable society that leaves no one behind, we support the creation of living knowledge in the form of “scenarios” and “solutions” to create impactful and “meaningful” change in society.

## **5. To tackle severer social issues**

Even since the Program's launch, the path to sustainable development continues to be riddled with difficulties in Japan and around the world.

The Sixth Assessment Report published by IPCC in March 2023 (AR6; <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>), which provides more accurate forecasts than the previous report, also anticipates severer situations.

At The High-level Political Forum on Sustainable Development (SDG Summit), held for the first time in four years at the UN in September 2023, the middle year to 2030, Secretary General Guterres said that only 15% of the targets are on track and that many are going in reverse. As priority areas, he listed eradicating hunger, accelerating the transition to renewable energy, spreading benefits of digitalization, improving the quality of education for children and youth, stopping the war on nature such as climate change, pollution, and biodiversity loss, and establishing gender equality (<https://www.un.org/sg/en/content/sg/speeches/2023-09-18/secretary-generals-remarks-the-high-level-political-forum-sustainable-development>) .

According to the Sustainable Development Report 2023 by the Sustainable Development Solutions Network (<https://s3.amazonaws.com/sustainabledevelopment.report/2023/sustainable-development-report-2023.pdf>) , Japan ranked 21st among 166 countries in the SDGs performance by country, the lowest since the start of the survey: while Goal 4 (Education) and Goal 9 (Innovation) were considered as "achieved", the highest in the five-grade evaluation, Goal 5 (Gender), Goal 7 (Energy), Goal 12 (Consumption/Production), Goal 13 (Climate Change), Goal 14 (Life Below Water), and Goal 15 (Life on Land) were given the lowest grade as "major challenges".

Amid such difficulties in the world, even severer in Japan, the importance of R&D and its implementation for sustainable development has increased more than ever, and the Program has received 434 proposals and selected 44 of them in both scenario creation and solution creation phases since its establishment in 2019. The selected projects have varying themes. When checking each project's priority goals against 17 SDGs, while many projects address Goal 3 (Health/Welfare), Goal 11 (Urbanization), Goal 4 (Education), and Goal 6 (Water Hygiene), there are still no projects focusing on Goal 1 (Poverty), Goal 2 (Hunger), Goal 5 (Gender), Goal 9 (Innovation), Goal 10 (Inequality), Goal 12 (Production/Consumption), Goal 13 (Climate Change), and Goal 16 (Peace). Based on the above-mentioned achievement evaluation of Japan, we expect more proposals on Goal 5 (Gender),

Goal 12 (Production/Consumption), and Goal 13 (Climate Change).

## **6. Respect diverse stakeholders and develop social system with collaborators**

The Program's goal, or its biggest characteristic, is that the Principal Investigator pairs with the Collaborator who will work on solving issues on site to implement and establish research results and expand to multiple regions, by utilizing knowledge and technology of natural science and humanities and social sciences as well as on-site/regional knowledge (experience and knowledge of solutions to issues faced on-site or regionally in the past, their assessment, follow-up review, etc.) gained through dialogue and collaboration with stakeholders.

To move from the phase of piloting R&D results in a specific region to the phase of packaging and unitization where common and variable parts are verified for multi-regional expansion, and to the phase of developing social system where the R&D results establish universality, we need Science and Technology for Society (STfS) to respect and learn from various stakeholders including people involved and their supporters, systematize knowledge obtained, and nurture it into businesses and systems that are sustainable both in terms of quality and economy, besides utilizing knowledge and technology of researchers. The Program mainly focuses on developing such important Science and Technology for Society (STfS) with collaborators to establish and expand it.

The world, particularly Japan, is waiting for implementation of research outcomes to improve sustainability. We are looking forward to taking on such important challenges with you.

## Chapter 3 Overview of R&D

### 3.1 Backgrounds and Goals of the Program

Transforming Our World: The 2030 Agenda for Sustainable Development (the 2030 Agenda) gives climate change and natural disasters as issues to face in addition to poverty, hunger and inequality. It expects efforts to address these.

Similarly, the 2030 Agenda argues that science, technology, and innovation (STI) in a wide range of fields (e.g., information technology, medicine, and energy) has the great potential to accelerate human progress, to close the digital divide and to develop a knowledge society. Science, technology, and innovation are positioned as an important means of realizing this. They are needed to contribute to achieving goals.

The 2030 Agenda gives 17 Sustainable Development Goals (SDGs) and 169 targets under the basic philosophy that no one will be left behind. We believe it is important that people who are working on regional social issues in Japan and people who wish to utilize their technology seeds to tackle social issues join forces and conduct R&D. This is needed to identify social issues and to create the solution strategies to them by means of science, technology, and innovation toward the achievement of these SDGs. We will promote R&D through co-creation of both parties in this program.

We will call for R&D proposals and will then select them as R&D projects in this program. We are calling for proposals that identify social issues in regions\* and then demonstrate solution strategies to those issues in this program. At the same time, we ask that participating teams formulate a business plan to realize solution strategies after the end of the program. We are aiming to create a solution as one that combines that solution strategy and business plan.

We assume that the solutions created through this program will be taken over by those who are working on social issues. We expect those people to establish the solution strategies in specific regions and to then accumulate achievements at the regional level through activities to deploy them to other regions including those overseas. We hope that this will lead to the achievement of the SDGs.

\*In this program, we will rate proposals for regional social issues that we can anticipate will be deployed horizontally in a wide range to other regions in Japan and then at a global level and that we can expect to further contribute to the achievement of the SDGs by bringing about a major economic and social impact higher than those we anticipate will be limited to a small-scale deployment of results because those issues exist only in a specific region.

## 3.2 Framework of the Program

Researchers (natural sciences, humanities, and social sciences) and those involved in tackling social issues (Collaborators) will work together on R&D based on the idea of achieving the SDGs by utilizing technology seeds that have already been obtained. The purpose of this is to create solutions to regional social issues toward the achievement of the SDGs.

Program Overview : <https://www.jst.go.jp/ristex/funding/solve/>

Full Information : <https://www.jst.go.jp/ristex/solve/>

### 3.2.1 Research and Development Focus

(Relationship with the 17 Goals)

Please note that the 17 goals and 169 targets of the SDGs are related to each other rather than being individually independent. Accordingly, we are not seeking the sacrifice of one goal to achieve another goal.

(Three Dimensions of Sustainable Development)

The 2030 Agenda states that “we are committed to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner.” There is a need to create value that balances economic, social, and environmental value in creating solutions to social issues.

(Targets of Support in This Program)

The efforts themselves to solve real-life social issues are the targets of support. It is essential that there are already technology seed to be used to solve social issues. Consequently, R&D of technology seeds itself is not a target of support.

Science, technology, and innovation are important means to achieve the SDGs. However, we believe solving issues by combining a variety of expertise with existing technology seeds can also be an effective approach instead of technology seeds that use cutting-edge science and technology serving as the sole driving force of innovation.

The technology seeds in this program will be those with R&D results in the science and technology whose applications are envisaged. They will also be those which are at the stage in which it will be possible to test their feasibility in society. Even if these seeds have results in science and technology to solve real-life social issues, the laboratory-level feasibility tests to demonstrate their effect as a prototype and the development of software at the laboratory level will have already been completed.

In addition, even if the activities will ultimately contribute to solving problems in social issues, those that pursue only the commodification and commercialization of software and equipment are not targets of support in this program.

### 3.2.2 R&D Phase

We are looking for proposals to conduct R&D up to the creation of solutions that target specific regional social issues in regions in Japan in this program. We will establish two phases – the scenario creation phase and the solution creation phase – to provide the appropriate support according to the progress of the R&D. In either phase, proposals will depict a vision and adopt the back casting technique to formulate a plan by coming back from that vision to the present time.

#### <Scenario creation phase>

Proposals will extract the characteristics of regional social issues through dialogue and collaboration and then analyze and clarify bottlenecks to tackle specific social issues. Proposals will examine solution strategies that utilize technology seeds and will then conduct a feasibility test in the region under the assumption of a new social system that solves social issues. Furthermore, this is the phase in which proposals will prepare a roadmap based on the evidence obtained from the feasibility test and then create a concept to realize deployment to other regions and to achieve the SDGs by FY2030.

#### <Solution creation phase>



Proposals will conduct R&D based on the concept of deployment to other regions and achievement of the SDGs by FY2030 (hereinafter the “scenario”). They will then demonstrate the effectiveness of the social strategies for social issues through demonstration experiments in specific regions. At the same time, proposals will also present the applicable conditions and environment settings for deployment to other regions including those overseas. In parallel with this, this is a phase in which proposals will formulate a plan for independent continuation after the end of the program (business plan) and will then prepare to implement that plan. We assume that this business plan will be implemented mainly by the Collaborators.

This phase will support the demonstration stage. Although it is not intended to serve as a dissemination stage, it will be necessary to complete the foothold to a structure that allows continuation of independent activities and dissemination under the assumption that Collaborators will become the recipients of the results at the end of the solution creation phase. We are looking for proposals that specifically envision a path to independent activities.

The Proposer can apply for either the scenario creation phase or solution creation phase.

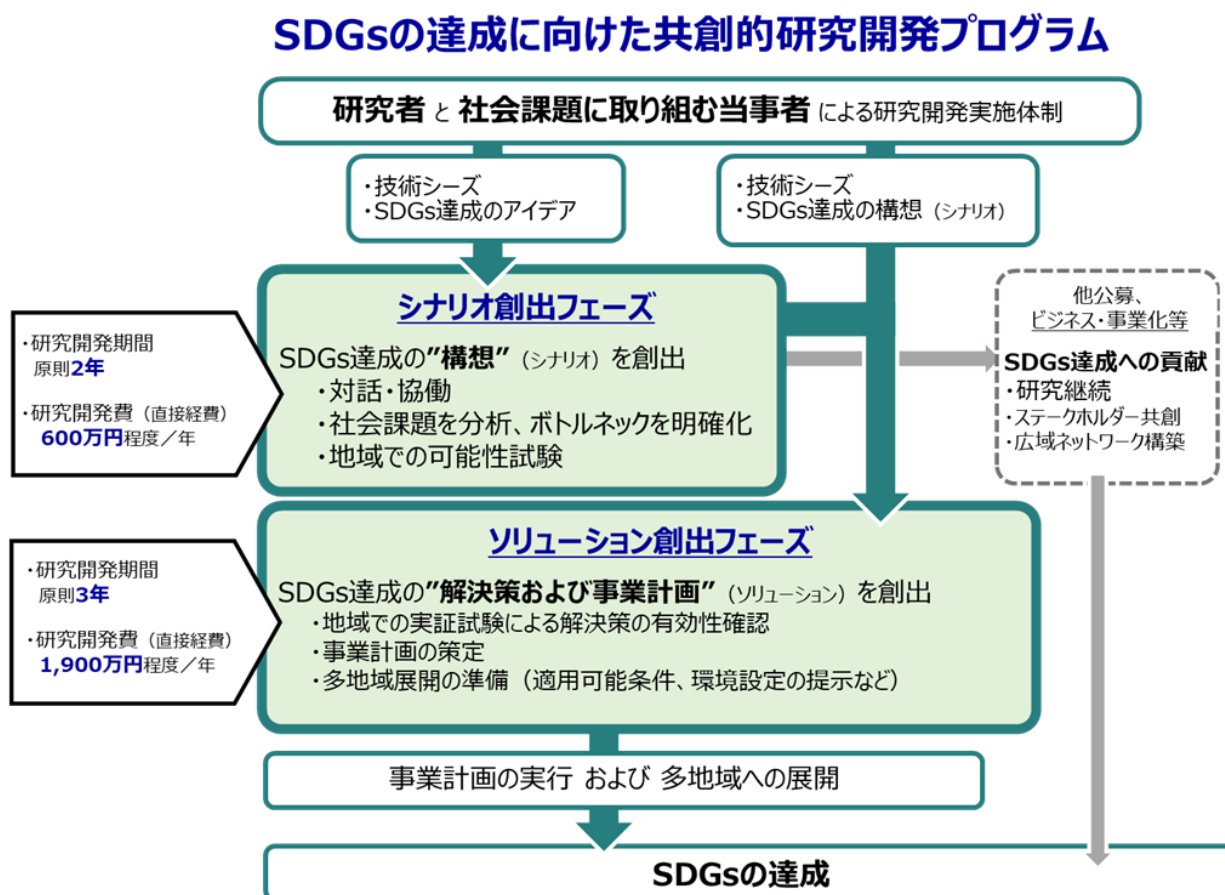


Figure: Overview of the Research & Development Phases

### 3.2.3 Notes on Proposals and the Conduct of Research and Development

This program attaches importance to cooperation with the industry, the Cabinet Office's SDGs Future City, the SDGs for Regional Revitalization Public-Private Partnership Platform, and activities to achieve the SDGs overseas. The Program Supervisor, Assistant Program Supervisor, Program Advisor and Secretariat may propose cooperation between the project and these organizational entities according to the progress of the project. If possible, we would also like to promote interaction with diverse entities including those overseas outside of the team in the project.

Moreover, we believe it is especially important to expand the base of young and female researchers who participate in interdisciplinary R&D aimed at solving regional issues while having an international perspective through this program. To that end, we look forward to active efforts to appoint young people and women to contribute to personnel development.

Moreover, problems of COVID-19 significantly impacted our social life. It is also important to tackle such urgent social issues and other issues that may impact us in the future.

#### (Management of the Program)

JST RISTEX will operate this program using the following structures and methods.

- ① A Program Supervisor is put in charge of operating the program and provides overall management.
- ② Assistant Program Supervisors are appointed to act on behalf of Program Advisors for some part of their tasks.
- ③ Program Advisors are appointed to give specialist advice to the Program Supervisor.
- ④ Together, the Program Supervisor, Assistant Program Supervisor, Program Advisor, and the secretariat conduct the call for projects and its selections and implement meetings or initiatives necessary for effective program management (e.g., advising on research and development, conducting site visits, etc.).
- ⑤ The Program Supervisor will conduct reviews as necessary, including the adjustment of research and development budgets and the restructuring and consolidation of projects.
- ⑥ In running the program, we will respond flexibly, considering the social situation and international trends, which includes changes of emphasis and amendments to the call and selection policy.
- ⑦ In running the program, we will actively conduct various projects to promote exchange,

cooperation and interaction among the projects selected and set up opportunities for discussion with internal and external parties that have a cross-sectional and bird's-eye view of the projects (e.g., program-wide meetings). We will also conduct outreach activities about R&D outcomes (such as meetings for reporting outcomes and disseminating information on the Web.).

#### 3.2.4 Deployment after the End of the Project

##### <Scenario creation phase>

Using the R&D in the scenario creation phase as a foothold, we aim to (1) develop into the solution creation phase, (2) continue R&D with public or private funds other than those in (1) that can contribute to the achievement of the SDGs, and commercialize the R&D. In order to realize it, we hope to see the construction of a wide-area network involving various stakeholders, the deployment of the project results in other regions, strengthening of collaboration between the Principal Investigators and the Collaborators and exploring a new form of collaboration and co-creation, with an eye toward business and social implementation.

We ask that you apply to the call to participate in the solution creation phase in the same way as other proposals from the perspective of fairness to conduct R&D in the solution creation phase. Adoption or rejection will be determined in response to selection made under the same conditions and process as the other proposals. If you apply for the solution creation phase in the final year of the scenario creation phase (during the R&D period) and your proposal is adopted, you can continue your R&D without interruption.

##### <Solution creation phase>

We are looking for proposals that will be able to widely deploy the solutions proven in regions in Japan to other regions after the end of the R&D project. Furthermore, we are seeking proposals aimed at achieving the SDGs.

In addition to being deployed on the United Nations platform (e.g., the Online Platform of the Technology Facilitation Mechanism) as a tool to communicate with diverse stakeholders, we expect proposals to attract ESG and impact investments, boost the Cabinet Office's SDGs Future City initiative and lead to other R&D projects.

## Chapter 4 Call for R&D Proposals and Selection

### 4.1 Call Period and Selection Schedule

The main schedule for selection is as follows.

Applications will be made through the Cross-ministerial R&D Management System (e-Rad) (Please refer to “4.6 Application Method”). As the application deadline approaches, heavy demands on the e-Rad system could slow the application process and even cause the application deadline to be missed. Please give yourself enough time to complete application of proposal. A withdrawal of an application through e-Rad after the deadline cannot be processed. JST will not accept proposals for which the application process has not been completed in e-Rad by the deadline for any reason.

The name and affiliation of the Proposer in e-Rad should match that provided in the research proposal. The application of a research proposal uploaded to e-Rad will not be accepted if it contains defects. A defect making the review of the proposal difficult refers to omission of proposal application forms, serious character corruptions that make it difficult to read, and omissions of important items on the application forms.

Furthermore, JST is not responsible for any defects in a research proposal that may occur before the submission deadline, regardless of whether the proposal was received or not. Therefore, Proposers must understand that JST will not require or request the Proposer to make any revisions to their research proposals before the research proposal submission deadline.

Call begins	Wednesday, April 10, 2024
Briefings of Solicitation	Thursday, April 25, 2024, Online Meeting Details will be posted on the proposal application website. ( <a href="https://www.jst.go.jp/ristex/proposal/proposal_2024.html">https://www.jst.go.jp/ristex/proposal/proposal_2024.html</a> )
Application deadline *1	12:00 (noon, Japan time) on Wednesday, June 5, 2024 (No delays accepted)
Document screening period	June to July (planned)
Notification of document screening results	Notice will be provided at least one week prior to interview screening
Interview screening*2	Scenario creation phase: Friday, August 2, 2024 Solution creation phase: Monday, July 29, 2024

Candidate Interview with the Program Supervisor	Tuesday, August 20 and Wednesday, August 21, 2024
Notification and announcement of selection results	Late September 2024 (planned)
Start of R&D	Early October 2024 (planned)

\*1 Deadline for submitting applications through the Cross-ministerial R&D Management System (e-Rad).

\*2 Interview selection will be held online using Zoom. Please cooperate for the advance connection test.

#### 4.2 R&D Period

Scenario creation phase: In principle, 2 years or less

Solution creation phase: In principle, 3 years or less

- a. The R&D period will be adjusted according to the content of the proposal, the R&D plan, and the policy for adoption of proposals.
- b. In the case of the Solution Creation Phase, the R&D period can be extended until the end of the fiscal year in the period's final fiscal year. If your R&D starts in October 2024, the maximum R&D period will be three and one-half years until the end of FY2027 (March 2028).

#### 4.3 R&D Budget (Direct Costs)

One issue (project)

Scenario creation phase: Maximum of approx. 6 million yen per year (12 months)

Solution creation phase: Maximum of approx. 19 million yen per year (12 months)

- a. The R&D budget will be adjusted according to the content of the proposal, the R&D plan, and the policy for adoption of proposals.
- b. For FY2024, since it is assumed that R&D will start in October, please allocate expenses for 6 months until the end of the fiscal year.
- c. For details such as how the R&D budget (direct costs) and indirect costs will be used, refer to "5.5 R&D Budget" and "Chapter 8. Q&A on Call for R&D Proposals."
- d. JST will not directly employ Principal Investigators or other R&D personnel.

As per the Collaborative Research Agreement, JST will pay the institution implementing the project

for all R&D budget (direct costs) and indirect costs (in principle, 30% of direct costs). This will be paid as consigned research funds to the institution.

We may make adjustments according to management (e.g., grasping the project's progress situation) by the Program Supervisor, Assistant Program Supervisor and Program Advisor when determining the R&D fund to be allocated. For details, please refer to "5.5 R&D Budget".

#### **4.4 Number of Projects to be Selected**

Scenario creation phase: Approximately 3 projects

Solution creation phase: Approximately 3 projects

The number of projects to be adopted will be adjusted according to the contents conditions of the proposals for both phases.

#### **4.5 Requirements for Application**

Principal Investigators must have completed the educational program for research integrity at the time of proposal application!

Note that if completion of the program cannot be confirmed, the application will be disqualified for failing to meet the requirements. At the time of proposal application, it is acceptable if the Principal Investigator only completed the program. For details, please read "6.1 Enrolling in and Completing the Educational Program on Research Integrity" and "Chapter 8 Q&A on Call for Proposals."

Proposers, who will serve as Principal Investigator, will submit the proposal themselves. Requirements for proposal application are presented below. Please ensure you understand these requirements for your application.

\*In principle, if the determination is made that an application does not meet the requirements by the time of selection, the research proposal will either not be accepted or not be selected.

\*If an application is selected, the application requirements must be maintained for the entire duration of the period of R&D project. If the R&D project fails to meet the requirements during the research period, the research project will in principle be completely or partially suspended (i.e., be terminated early).

In addition, proposals must be submitted after understanding the matters herein as well as "Chapter 6. Key Points in Submitting Proposals."

#### 4.5.1 Multiple Applications

- (1) One person may only submit one proposal as Principal Investigator for one project only for one phase or the other.
- (2) Multiple applications will not be permitted for those applying to the FY2024 call for R&D proposals for “Responsible Innovation with Conscience and Agility”, “Solution-Driven Co-creative R&D Program for SDGs: Social Isolation & Loneliness”, and “Solution-Driven Co-creative R&D Program for SDGs: Trust Formation from Social Aspects in the Information Society”.
- (3) Current Principal Investigators of the RISTEX R&D Programs cannot submit proposals (excluding cases where the R&D implementation period ends during FY2024).

#### 4.5.2 Requirements for Proposers

Please make your proposal jointly signed by the following two people.

**Person in charge of R&D (Principal Investigator)**

**Representatives of parties working on social issues (Collaborator)**

The Principal Investigator and Collaborator will play a central role in promoting the project.

The Principal Investigator will be the person in charge of the project overall. We require this person to be someone who can take responsibility for all the R&D and promote it as the person in charge of R&D.

The person who will be the Principal Investigator should please make the proposal using the Cross-ministerial R&D Management System (e-Rad). The Principal Investigator can apply once for either the scenario creation phase or the solution creation phase.

The JST will support the organization conducting the R&D by paying the expenses necessary in the R&D (R&D fund). When applying, the Principal Investigator should please obtain the consent of the head of the organization that will conduct the R&D or the organ to which the organization that will conduct the R&D belongs.

We ask that the Principal Investigator composes a structure with researchers in the natural sciences and humanities/social sciences looking to solve specific social issues and the Collaborators who will be the recipients of the solution created.

The purpose of the R&D on technologies for society is to produce innovation to solve social issues.

This program targets specific regions. Therefore, the cooperation of people in the region is essential in this program. To that end, agreements must be reached on what is the purpose of the proposal, who will be the beneficiaries of the solution, how the purpose of the proposal will be achieved and what effect it will have and by when.

Accordingly, we assume that a collaborative process to form these agreements already exists. The R&D is not an activity to be conducted solely by a group of experts in a specific area like a university or research institution. Instead, you must proceed with the project while obtaining the cooperation of a diverse range of people including researchers in other fields, those who are familiar with the actual setting, the beneficiaries and government officials. You will need the flexibility and organizational structure to accept those people according to the requirements of the moment. You will need to add collaborating persons as members from the start of the R&D.

The Collaborator will be the representative of parties working on social issues. The Collaborator will represent the group or organization which directly faces those social issues, and which wishes to solve them in collaboration with researchers. However, we assume that the group or organization will be substantially represented and will actually tackle the social issues. This means that the Collaborator does not need to be a representative as a job title.

In principle, the JST will enter into the Collaborative Research Agreement with the research institution to which the Principal Investigator and Lead Implementer (Collaborator or another research group leader) belong. If the institution to which the Lead Implementer belongs does not require the consigned R&D fund from the JST, it will also be possible to participate in the project by appropriately entering into an agreement with the institution to which the Principal Investigator belongs. This does not prevent the work of the Principal Investigator and Collaborator from being undertaken by one person at the same time. However, it is very important that person can sufficiently execute the roles of both people with different personalities. Please also refer to “8. Q&A on Call for Proposals.”

In addition, it is necessary for either the Principal Investigator or Collaborator at least to belong to a university etc.\*

\*University etc. is the general term for the research institutions given below:



- i) Incorporated educational institution (e.g., national university, public university or private university)
- ii) Public research institution (e.g., national public research institution, public testing and research institution or independent administrative corporation)  
\*This includes the National Technical College
- iii) An institution with a public character (e.g., public-service corporation) and which is approved by JST

Other requirements for proposers are presented below.

- a. The Proposer must be able to head up the R&D project members and exhibit leadership in implementing the project in order to realize the concept.
- b. The Proposer who will serve as Principal Investigator must belong to a domestic Japanese research institute and be able to organize and implement R&D at that institution.

Furthermore, persons who correspond to the following can also apply as Proposers.

- Researchers who have foreign citizenship, but who are affiliated with a domestic Japanese research institution.
- Researchers who are not currently affiliated with a research institution, or are affiliated with an overseas research institution, and, if selected as a Principal Investigator, must be able to organize and pursue project as a researcher affiliated with a domestic Japanese research institution.
- A Japanese national who currently resides overseas, and, if selected as Principal Investigator, must be able to organize and pursue project as a researcher affiliated with a domestic Japanese research institution.

\* Domestic Japanese research institution indicates universities, national R&D corporations, specified non-profit corporations, public interest corporation, companies, and local governments, etc. that have legal personality in Japan. However, the prescribed conditions must be satisfied. For more details, please refer to “5.9 Responsibilities of Research Institutions.”

\* This also covers those affiliated with private sector companies and other non-university research institutions.

\* Must not be in breach of restrictions of application requirements related to improper accounting

practices and misconduct in research.

- c. Able to assume responsibility for the entire project as the Principal Investigator throughout the entire period of the project. For details, please refer to “5.8 Responsibilities of Principal Investigator and Lead Joint Researchers.” For example, during the project period, the Principal Investigator must reside in Japan and the Principal Investigator must be able to fulfill his/her responsibilities for a long period of time without interruptions, such as overseas business travel and other reasons.
- d. Have already completed the educational program for research integrity at his/her affiliated research institution or will complete the JST- designated educational program by the application deadline. For details, refer to “6.1 Enrolling in and Completing the Educational Program for Research Integrity.”
- e. The Proposer must make the following four pledges upon application of his/her proposal.
  - Understand and comply with “Guidelines for Responding to Misconduct in Research” (decided by the Minister of Education, Culture, Sports, Science and Technology on August 26, 2014).
  - Understand and comply with “Guidelines on Management and Audit of the Public Research Expenses in Research Institutions (Implementation standards)” (decided by the Minister of Education, Culture, Sports, Science and Technology on February 15, 2007; revised on February 1, 2021).
  - If the research proposal is accepted, the Principal Investigator and other R&D participants must not engage in misconduct in their research (fabrication, manipulation, and plagiarism) nor in inappropriate usage of research funds.
  - The Proposer must not have engaged in misconduct in the past to achieve the research results that are mentioned in the submitted research proposal.

\*The above verification will be part of the e-Rad Application Information Entry screen.

#### 4.5.3 Requirements for Research Institutions

Only Japanese research institutions can promote R&D in this program (can enter into the Collaborative Research Agreement). However, it does not matter if this entity is a private company, one of various organizations, an NPO, a university, a research institution or otherwise. Please also refer to “5.10 When a Person Belonging to an Overseas Institution Participates as the Lead Joint Researcher.”

Research Institutions must fully understand that the research funds are public funding, ensure compliance with related laws, and make efforts to implement the research effectively. Any research organization that cannot perform the responsibilities described in “5.9 Responsibilities of Research Institutions.” will not be approved to conduct research. Therefore, be sure to obtain prior approval from the Research Institution at which you plan to conduct your R&D before your application.

We may investigate and confirm the administrative management structure and financial status of each research institution prior to the adoption of the project, before entering into the Collaborative Research Agreement and during the period of the agreement. Institutions deemed to need appropriate execution and management of the consigned research fund as a result may be subject to a reduction in the R&D fund, a research suspension, a shortening of the agreement period, cancelation of the agreement and other measures even if the agreement is withholden or it is during the agreement period. This is in addition to having to follow the consignment method designated by JST.

If it is not possible to enter into the agreement, it may not be possible for the said research institution to conduct the R&D. In that case, we may ask the Proposer to review the implementation structure.

It is not a problem if the organization that will conduct the R&D newly organizes for the proposal. However, at the time of selection, we will consider whether the organization will exist for the period necessary to solve social issues and whether it has the organizational structure to be able to continue operations even after the end of the project.

#### **4.6 Application Method**

Applications will be submitted using the Cross-ministerial R&D Management System (e-Rad).

Please note that applications using paper media (postal email, express parcel delivery, hand delivery, etc.) or made by email will not be accepted.

For details, please refer to “Chapter 7. Submission via the Cross-ministerial R&D Management System (e-Rad).”

(1) Registration of research institution and Principal Investigator

An e-Rad log-in ID and password must be issued for the Proposer (Principal Investigator only).

When an e-Rad log-in ID and password are newly issued, the institution the Proposer is affiliated with must carry out the following registration in advance.

- ① If unregistered, the institution must first register as a “Research Institution”
- ② The Proposer must be registered in “Researcher Information”

Furthermore, if the Proposer is not affiliated with a specific domestic Japanese research institution at the time of application, the Proposer him/herself must register under 2. Above only (however, it is assumed the person plans to be affiliated with a domestic Japanese research institution after adoption).

For details about registration method, please refer to the e-Rad portal site.

Please complete registration procedures at least two weeks prior to the deadline because the registration process may take several days to complete.

Once registration is complete, the Proposer does not need to register again when submitting applications for programs or projects implemented by other ministries and agencies. In addition, if registration has been completed for programs or projects implemented by other ministries and agencies, the Proposer does not need to register again. Institutions and Proposers who have never submitted a proposal for competitive research funds or received such funds (specified non-profit corporation, administrative institutions, institutions of private sector companies and affiliated individuals) should pay particular attention.

## (2) Preparation and submission of proposal

The Proposer should please personally prepare the proposal document and then apply to this program. Please download the proposal document format from the e-Rad portal site (<https://www.e-rad.go.jp/en/>) or this program’s proposal application website (<https://www.jst.go.jp/ristex/proposal/>) and complete the proposal document based on the explanation found in “Chapter 9. Guide to Completing the Proposal.”

Please be sure to complete the proposal using objective statements wherever possible using language that is simple and not overly specialized.

Please submit the proposal document via the e-Rad site.

The proposal document’s format and where to submit it differ depending on what phase you are applying for (the scenario creation phase or the solution creation phase). Please pay particular

attention to this.

## **4.7 Selection Method**

### **4.7.1 Selection Process**

Selection will be determined comprehensively based upon “4.8 Notes on Selection” following a review of proposal documents and interview of Proposers that passed the document selection process.

- (1) After the document screening, the Proposers selected for interviews will be notified in writing and will also be informed of the interview procedures, schedule, and additional materials to be submitted. During the interview, the Proposer him/herself will be asked to explain the concept of his/her project specifically.
- (2) The results of the document screening and interview screening will be notified to the Principal Investigator regardless of whether the proposal is accepted.
- (3) For the selection schedule, please refer to “4.1 Call Period and Selection Schedule.” Details and changes in the plan will be posted on the program’s call for R&D proposals website.
- (4) In addition to the above, please make sure that your e-mail address, phone number and address registered in e-Rad, and the contact information provided in application form 1, as JST may contact the applicant.

### **4.7.2 Selection System and Management of Conflicts of Interest**

A Program Supervisor will make selection with the cooperation of the Assistant Program Supervisor and Program Advisor. Based on the results, JST will select Principal Investigator and projects to implement. In addition, JST may obtain the cooperation of outside reviewers as needed.

The following conflicts of interest will be managed according to JST’s regulations, from the perspectives of fair and transparent evaluations and allocation of research funding.

#### **(1) Management of conflicts of interest of persons involved in selection**

To ensure fair and transparent evaluations, the following persons or parties who have conflicts of interest will be excluded from the selection process. If the Proposer has any concern about conflicts of interest between the Proposer and persons and parties involved in the selection process of the research proposal, the Proposer should describe it specifically in the [Notice] section of the

application forms 1.

- a. Persons, who are relatives of the Proposer.
- b. Persons affiliated with the same faculty or department of a university or other research institutions as the Proposer, or directors of the university, etc., to which the person subject to evaluation belongs or of the legal entity that administers the university, and those deemed to be involved in its administration, and persons acting externally on behalf of such an entity.
- c. Persons who are affiliated with the same company as the Proposer or persons who are affiliated with the parent company of the company to which the person subject to evaluation belongs.
- d. Persons, who are conducting a close collaboration in a research work with the Proposer. (For example, persons who are recognized as those practically affiliated with a research group with which the Proposer is affiliated, such as those who are conducting a joint research project or have co-authored a paper with the Proposer, researchers pursuing the same research objectives as the Proposer, or researchers in the Proposer's project.)
- e. Persons in a close teacher-student relationship, or in a direct employer-employee relationship.
- f. Persons in relationships of direct competition with the Proposer.
- g. Persons in other relationships judged by JST to represent conflicts of interest with the Proposer.

## (2) Management of conflicts of interest of Principal Investigator

A conflict of interest could arise with Principal Investigator when a Principal Investigator appoints Lead Joint Researchers from an institution that is related to the Principal Investigator and allocate research funds of JST to these institutes. Therefore, management for conflicts of interest between Principal Investigator and his/her related institution will be conducted in light of necessity, rationality, and reasonableness of the relationship, in order to avoid any doubt of any third party.

“An organization that is related to the Principal Investigator” refers to any of the organizations that fall under the following categories. Items “a” and “b” are applicable not only to the Principal Investigators but also to the spouse and the relatives in the first degree of the Principal Investigator (hereinafter referred to collectively as “the Principal Investigator, etc.”).

- a. An organization established based on the R&D achievement of the Principal Investigator, etc. (Including the case in which the Principal Investigator, etc. is not directly involved in the business management but is merely given a title such as technical consultant and the case in which the Principal Investigator, etc. owns the organization's stock.)
- b. An organization in which the Principal Investigator, etc. is a director (including a CTO but excluding a technical consultant).
- c. An organization in which the Principal Investigator owns its stock.
- d. An organization in which the Principal Investigator is rewarded for implementation.

For a research proposal in which a researcher who belongs to the related organization of the Principal Investigator, is assigned as a Lead Joint Researcher, it will be strictly judged from the viewpoint of necessity, rationality, and relevance.

Therefore, if a researcher from an institution related to the Principal Investigator is to be a Lead Joint Researcher including Collaborator, please describe it specifically in the Notice section of the application.

Furthermore, in conducting management of conflicts of interest of Principal Investigator, it may be requested to submit other materials separately.

### (3) Management of conflicts of interest of JST

Adopting a company that JST has invested in (hereinafter "invested company") for this program and allocating research funds may be considered a conflict of interest with JST (conflict of interest as an organization). Therefore, to avoid any doubt of any third party, JST implements management of conflicts of interest between JST and the invested companies.

With respect to the proposals that assigns an invested company of JST as a research institution, JST will assess the necessity, rationality, and adequacy of the applicable invested company.

For that purpose, if the institution is an invested company of JST, the application must complete the Notice section of the application form 1 to declare that an invested company is included in research institutions.

Furthermore, this management is implemented to guarantee the fairness and transparency of the process on the side of JST. It is not disadvantageous to have accepted funds from JST in the process of the adoption in this program. Proposers are asked to be cooperative in JST's management of

conflicts of interest.

\*Refer to the following website for invested companies of JST. Furthermore, companies for which investment has been completed are not subject to management of conflicts of interests; thus, reporting is not required.

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

\*The declaration base date is the date the call for R&D proposals of this program begins. Please declare companies that have disclosed an investment from JST as of this date. There is no need to report companies for which an investment has not been disclosed even if an unofficial decision has been made because it is a confidential matter internally for JST.

Please refer to the following website for JST's disclosure of investments.

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

#### **4.8 Notes on Selection**

The selection process will decide on which proposals to adopt following a comprehensive review of social impacts while emphasizing the following points (Refer to “Chapter 2. Concept of Program Supervisor in Solicitation and Selection” and “Chapter 3. Overview of R&D”). (Please also refer to “8. Q&A on Call for Proposals” when preparing the proposal document (preparation of the proposal document in line with the intent of this program)).

<Points Common to the Scenario Creation Phase and Solution Creation Phase>

- (1) The proposed content (e.g., issues, goals and R&D plan) should agree with the intent of this program. The specific social issues to be solved and vision to be realized by 2030 (a sustainable society) should be clarified.
- (2) The relationship with the 17 goals and 169 targets of the SDGs should be organized.
- (3) The proposal should be an inclusive initiative in line with the SDG's philosophy of leave no one behind.
- (4) KPIs (easy-to-understand indicators to measure the effect) should be established and shared and PDCA should be taken into consideration with the participation of key stakeholder.



- (5) In grappling with social issues, plans that can be continually implemented in multiple regions (solutions) and basic processes to serve as the foundation for that (scenarios) are proposed with the participation of stakeholders, including those who stand to benefit, and a co-creative cooperative system is developed focused on research representatives and collaborators.
- (6) The multiple regions to serve as fields for R&D must be clear. The current situation of key stakeholders involved in the project must be accurately analyzed. And the value co-created through cooperation with those regions must be indicated.
- (7) The Principal Investigator and the Collaborator should have sufficient experience, clear motivation, and enthusiasm to promote the proposed R&D. They must actively establish contacts while respecting diverse stakeholders and must be able to conduct R&D while taking responsibility as the focus of governance in co-creation activities.
- (8) People who can play the leading role in implementation are positioned as collaborators.
- (9) An appropriate financing plan should be taken into consideration as use of the R&D fund.
- (10) There should be an R&D plan and structure in which the person responsible for the results (e.g., a representative of parties working on social issues) continues to tackle the social issues even after the end of the project.

<Scenario creation phase>

- (1) The vision for achieving the SDGs and the importance of co-creation to achieve that vision should be recognized and shared among key stakeholders.
- (2) The applicable social issues and the status of their examination should be indicated.
- (3) The network building and activity status through stakeholders engaging in dialogue and collaboration should be indicated.
- (4) There should be specific and effective proposals with regards to the technology seeds to solve the social issues and ideas for the approaches and techniques to solve them.
- (5) The feasibility test implementation plan should be specific.
- (6) For scenario creation and beyond, R&D plans with specific milestones including multi-regional content, concrete vision of potential leaders, and deployment methods are formulated, and prospects for development of project designs are clarified.
- (7) The specific efforts of the coordinator, which will be the driving force of the project, should

be assumed.

<Solution creation phase>

- (1) The vision towards 2030, value created by its realization, scenarios for it (\*), already available content, specific candidate sites, and deployment methods are clarified, and the roadmap for solving social issues by solutions is logical and realistic.
- (2) The technology seeds (science and technology results) to be utilized should be appropriate as specific means to solve the issues and should be in the stage at which it is possible to conduct a demonstration experiment during the period.
- (3) The demonstration experiment plan should be specific (e.g., size, participants, and location).
- (4) The coordinator, the person responsible for establishing the solution strategy and the person responsible for deploying it to other regions should be clarified in the (Proposal Document Form 6) business concept (scenario). They should be appropriate for the scenarios to establish the R&D plan and solution and to realize deployment to other regions.
- (5) You should formulate your R&D plan for solution creation by taking into account risk hedging, milestones, and other considerations. You should clearly present your plan's prospects for business plan development, including your vision for establishing a nationwide system.
- (6) The people who will benefit as the targets of the solution should be identified. The effect of that solution should be clear. At the same time, the potential to deploy it to other regions should be indicated specifically.

We will consider the following points as additional factors when proposals are evaluated equally in the document screening and interview screening processes. Please check "(Cooperation with Overseas Institutions)" in "8. Q&A on Call for Proposals" for the description of cooperation with overseas institutions. If applicable, please describe young and female researchers in the prescribed section on Form 1.

- It should be possible to expect an international expansion in activities through cooperation with overseas institutions in regard to the results of the project.

- Young and female researchers and implementers should be proactively hired from the point of view of promoting diversity and training personnel. Furthermore, it should be possible to expect that they will play a major role in the planning and operation of the project.
- \* Constituent elements of a scenario (project concept) include the following. For details, check "Chapter 8: Q&A on Calls for Proposals" and make a proposal by filling out "[Solution] Form 6".
- Organizational system for implementing and firmly establishing solution strategies
  - System for deploying solution strategies to other regions
  - Envisioning candidate regions for multi-region deployment, perspectives for selection of candidate regions, etc.

#### **4.9 Transitioning to the R&D Phase in the Selection Process**

If a proposal among the applications for the solution creation phase has generally excellent content but we deem it to be lacking in terms of the analysis of the social issues, the construction of a specific structure to demonstrate the solution and the progress of the R&D, we may select it as an R&D project in the scenario creation phase.

If you agree to transition to be selected in the scenario creation phase in the selection process with an issue you applied for to the solution creation phase, please check the prescribed points when recording the application information on Proposal Form 1. Please note that we will ask you to submit additional materials in the selection process when transitioning between phases.

#### **4.10 Other Considerations**

\*Proposal documents with defects may not be reviewed by JST.

\*Whether the R&D budget corresponds to unreasonable duplication and excessive concentration is an element of the selection. For details, please refer to "6.2 Measures against Unreasonable Duplication and Excessive Concentration."

## Inquiries and Other Matters

### (1) Posting of Application Guidelines and where to submit the proposal

Application Guidelines and latest information	Proposal application website for Co-creative R&D program for achieving SDGs (Scenario creation phase, Solution creation phase)  <a href="https://www.jst.go.jp/ristex/proposal/">https://www.jst.go.jp/ristex/proposal/</a>  <a href="https://www.jst.go.jp/ristex/solve/index.html">https://www.jst.go.jp/ristex/solve/index.html</a>
Application Guidelines and <u>submission of proposals</u>	Cross-ministerial R&D Management System (e-Rad) website  <a href="https://www.e-rad.go.jp/en/">https://www.e-rad.go.jp/en/</a>

### (2) Inquiries

<u>Questions concerning the Call</u>  Programs, and procedures for preparation of application documents and submission, etc.	JST Research Institute of Science and Technology for Society (RISTEX) (person in charge of calls for proposals)  <b>please send inquiries by e-mail.</b>  E-mail: <a href="mailto:boshusolve@jst.go.jp">boshusolve@jst.go.jp</a>  (Office hours: 10:00 -12:00, 13:00 - 17:00 / Except on Saturdays, Sundays, and holidays)
<u>Questions concerning the Cross-ministerial R&amp;D Management System (e-Rad)</u>  Registration of research institution or researcher, or how to operate e-Rad, etc.	e-Rad helpdesk  Tel: 0570-057-060 (navi dial)  (9:00-18:00/Except on Saturdays, Sundays, holidays, and the year-end and new year period)

\*JST will not answer any questions regarding the status of review or acceptance.

\*JST and the e-Rad helpdesk will be extremely busy before the application submission deadline (proposal deadline). Be sure to make inquiries with adequate time until submission.

# Chapter 5 Promotion of R&D after Adoption

## 5.1 Implementation Plan

- a. Once a proposal has been selected, the Principal Investigator must prepare an overall R&D plan covering the entire period of the R&D project. The Principal Investigator must also prepare annual R&D plans for each year of the project. R&D plans should contain both budgets and the composition of R&D teams. Proposed R&D budgets are examined during the selection process. Actual R&D budgets will be decided after gaining confirmation and approval by the Program Supervisor in formulating R&D plans.
- b. R&D plans (overall R&D plans and yearly R&D plans) will be decided after gaining approval by the Program Supervisor. Based upon advice from the Assistant Program Supervisor and Program Advisor, the Program Supervisor is to exchange opinions with the Principal Investigator, monitor the day-to-day progress of the project, perform site visits, provide advice and coordination for the R&D plan, and provide guidance to the Principal Investigator as required.
- c. The Program Supervisor may, in order to achieve the overall aims of this program, make adjustments between separate projects when determining project plans.
- d. The period of the project may be shortened, and the R&D budget may be reduced or canceled at the discretion of the Program Supervisor.

\* R&D team compositions and budgets set forth in R&D plans may be revised during the research project period in response to the overall R&D program budget conditions and management actions taken by the Program Supervisor.

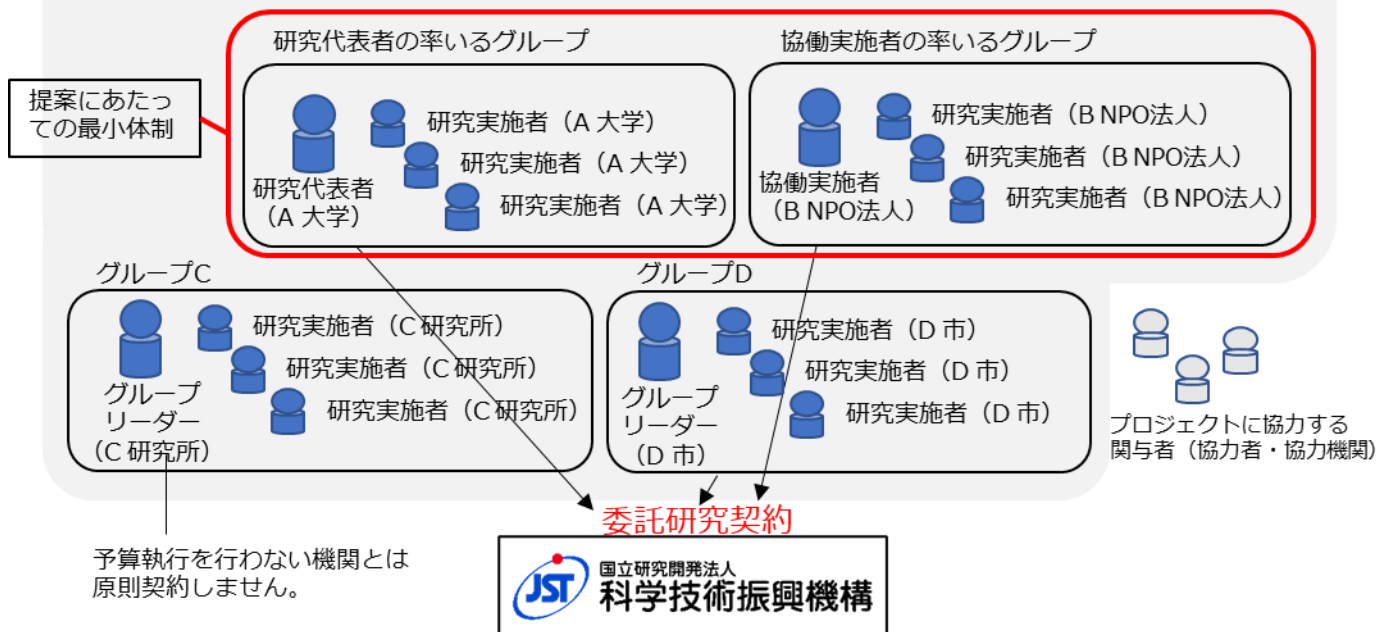
## 5.2 Implementation Team Composition

- a. The Principal Investigator will lead R&D activities. In order to realize research initiatives, the Principal Investigator may have individuals engaged in problem resolution participate as project members (from several to around 20 individuals) in order to construct an ideal organization (group) for the project's implementation. The project members may also consist of individuals from institutions other than the Principal Investigator's affiliated institution.
- b. When constructing implementation teams, it is required to clarify each group's roles and the content of the R&D to be conducted before start of the project.

- c. JST will enter into a Collaborative Research Agreement with the institution that the executor of the budget (Principal Investigator or Lead Joint Researcher) is affiliated with.
- d. If necessary, as R&D progress, new project members (or other assistants, etc.) may be employed to participate in the project within the scope of the R&D budget.

## 研究開発プロジェクトの実施体制（イメージ）

JSTは、予算執行のある実施機関と委託研究契約の締結を行います。



※プロジェクトの研究者等が所属する大学、地方自治体等のうち、JSTと委託研究契約を締結せずにプロジェクトに参加する機関については、秘密保持、個人情報の取り扱い、研究開発成果の帰属等について研究代表者の所属する機関とあらかじめ協定書等で定めておくことが求められます。

### 5.3 Place of Implementation

In principle, the R&D will be implemented at the research institutions that the R&D participants are affiliated with.

### 5.4 Collaborative Research Agreement

- a. After adoption, JST will enter into a Collaborative Research Agreement with the R&D institutions that those leading the research (Principal Investigator and Lead Joint Researcher) are affiliated with.
- b. If it is not possible to enter into a Collaborative Research Agreement with the research institution or create the management and audit systems required in connection with the use of public funds, or if the institution is conspicuously financially unstable, it may not be possible to pursue R&D at

the research institution in question. For more details, please refer to “5.9 Responsibilities of Research Institutions.”

- c. In principle, patents and other intellectual property rights resulting from research shall, in accordance with the terms of the Collaborative Research Agreement, reside with the affiliated research institution under the condition that the institution abides by the items provided in Article 17 (Japanese version of the Bayh-Dole Act) of the Industrial Technology Enhancement Act.
- d. A Collaborative Research Agreement will be signed with foreign research institutions. Intellectual property rights will be shared equally with JST, on the condition that the expenses for purposes such as application and maintenance are also shared equally. (If an institution does not agree to this condition, all rights will belong to JST.) Inventions, etc. that could be subject to intellectual property rights need to be reported promptly (within 10 business days) to JST. For details such as other responsibilities, refer to “5.10 When a Person Belonging to an Overseas Institution Participates as the Lead Joint Researcher”.

#### (Supplement) Differences Between Commissioned Projects and Subsidized Projects

This program is implemented as commissioned projects by concluding Collaborative Research Agreements between JST and the institutions. In “commissioned projects,” the Japanese government (in this case, JST) entrusts projects which should be originally conducted by themselves to other third-party including universities and private firms by concluding Collaborative Research Agreements with them, when it is assumed to produce more beneficial results rather than by being conducted by themselves. In this situation, the institution consigned to do the project has an obligation to appropriately perform all consigned duties in line with the Collaborative Research Agreement and administrative manuals, and those who consigned will confirm this.

By comparison, “subsidized projects” refers to having the government, etc., cover a portion of expenses incurred by the projects being performed by universities, private firms, or another third party, that are recognized to have some benefits to the public at large. In this situation, the party that received the subsidy implements the project independently.

### 5.5 R&D Budget

As per the Collaborative Research Agreement, JST will pay the institution implementing the project for all R&D budget (direct costs) and indirect costs (in principle, 30% of direct costs). This will be

paid as consigned research funds.

#### 5.5.1 R&D Budget (Direct Costs)

The R&D budget (direct costs) directly relates to R&D required to implement the project and can be used for the following items.

- a. Commodities: Cost of purchasing new facilities (\*1), equipment, consumable supplies, etc.
- b. Travel Expenses: Expenses for travel by the Principal Investigator, Collaborator, Lead Joint Researcher, and other R&D participants listed on the research plan created after adoption. Expenses covered include all direct costs for travel, as well as all invitations for travel, etc. directly related to pursuing the R&D in question.
- c. Personnel Expenses: Salaries (\*2) and honorariums for all researchers, technicians, research assistants, etc. (excluding Collaborator and Lead Joint Researchers), directly required to implement the research in question, as well as honorariums for speakers at lectures, etc.
- d. Other Expenses: Costs for presenting research results (research paper submission fees, etc.), costs for leasing and transferring equipment, etc. (\*2)

Note: The following are examples of items not handled as research costs (direct costs).

- Costs for items not consistent with the research objectives
- Costs that are considered to be more appropriately treated as overhead costs (indirect costs)
- Costs that JST determines are not appropriate when settling consigned research funds. (\*3)

\*1 The purchase of new research equipment and apparatuses shall proceed according to “Research Equipment and Apparatus Sharing Systems for Research Organization Units” (hereinafter referred to as “apparatus sharing systems”), which are indicated to be operated in “Introduction of New Research Equipment and Apparatuses Operating Integrally with Research Organization Management” (Advanced Research Fundamentals Working Group, Scholarship Commission, November 2015). Please refer to “6.12 Promotion on Effective Use of Research Facilities and Equipment”.

\*2 In principle, at universities and other institutions, JST enables to pay for personnel expenses of the Principal Investigator (hereinafter referred to as “PI”) of projects funded by JST competitive research funding programs and for costs related to others to execute non-research operations on behalf of the PI (Buyout Expenses) only when specific requirements



are met.

For more details, refer to the JST official administrative manuals at the URL below.

“Review to Enable Payment of Expenses for Others to Execute Non-research Operations from Direct Costs (Buyout System Introduction) and Payment of the Personnel Expenses of the Principal Investigator (PI) from Direct Costs (Contact)” (September 17, 2020)

<https://www.jst.go.jp/osirase/2020/pdf/20200917.pdf>

Please refer to the following URL for the policy on the scope of eligibility, expenditure ceiling, etc. for the RISTEX R&D Programs.

[https://www.jst.go.jp/ristex/funding/funding\\_outline/for\\_researcher.html](https://www.jst.go.jp/ristex/funding/funding_outline/for_researcher.html)

\*3 JST has established rules and guidelines specific to this program for some items, based on the Collaborative Research Agreement, administrative manuals, and the Cross-ministerial Expenses Handling Partitioned Table, etc. Handling may differ between universities, etc. (universities, public R&D institutions, public interest corporations, etc. approved by JST) and companies, etc. (mainly R&D institutions other than universities, etc., such as private enterprises). For more details, refer to the JST official administrative manuals at the URL below.

JST Collaborative Research Agreement Administrative Manuals

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

Cross-ministerial Expenses Handling Partitioned Table (JST RISTEX R&D Programs)

[https://www.jst.go.jp/contract/download/2024/2024\\_ristex\\_betten9.pdf](https://www.jst.go.jp/contract/download/2024/2024_ristex_betten9.pdf)

### 5.5.2 Overhead (Indirect) Costs

Overhead (indirect) costs are costs required for the management, etc. of research institutions pursuing R&D; they are, in principle, capped at 30% of direct costs. According to “Common Guidance for the Execution of Indirect Expenses of the Competitive Fund” (agreed upon by the coordination committees of relevant ministries and agencies on April 20, 2001, and amended on May 31, 2023), a research institution shall create a policy on use, etc. and shall systematically and properly execute the policy to ensure that use of indirect costs is transparent.

### 5.5.3 Multiple-year Contracts and Carryover

JST allows for multiple-year contracts, as well as for consigned research funds and procurement contracts to be carried over into subsequent fiscal years. This is from the perspective of ensuring research expenses are used effectively and efficiently to maximize research results and to prevent unauthorized use. However, different conditions apply for universities and businesses when performing carryovers (there may be cases where concluding a multi-year contract and carrying over research expenses are impossible at some institutions due to incompatible administration systems).

## 5.6 Reports

The fiscal year and final reports form the basis of the reports to be made in writing. However, we may ask for separate reports as necessary. In addition, please note that the annual report also affects approval of the plan in the next fiscal year.

Moreover, depending on the progress of the project, if, for example it becomes difficult to continue R&D or if it becomes possible to execute the business plan at an earlier stage than the initial R&D plan, so that support from JST is no longer necessary, we may ask you to revise your R&D plan or to change your R&D period (including the discontinuation of R&D) through management by the Program Supervisor, Assistant Program Supervisor and Program Advisor.

We also place importance on reports and public relations in a form that is widely open to diverse stakeholders in addition to those for the Program Supervisor, Assistant Program Supervisor, Program Advisor, and the Secretariat in regard to project progress reports. Please consider building a structure in which it is possible to disseminate information in a timely manner using booklets and social networking sites.

## 5.7 Evaluation of the Project

For all projects, a post-evaluation will be conducted by the Program Supervisor in cooperation with the Assistant Program Supervisor and Program Advisor and others when the R&D have been completed.

A follow-up survey will be conducted after a certain period following the completion of the R&D.

## 5.8 Responsibilities of Principal Investigator and Lead Joint Researchers

(1) The Principal Investigator and Lead Joint Researchers are obliged to conduct their research, honestly and effectively, fully understanding that their research is funded by tax revenues collected from citizens.

(2) After their projects are approved, Principal Investigator and Lead Joint Researchers must agree to fulfill the following duties presented to them at JST briefings, etc., and submit a written agreement to JST.

a. Comply with requirements for application guidelines and regulations of affiliated institutions.

b. Understand that JST R&D budgets are funded by tax revenues. For this reason, they must avoid any research misconduct, including fabrication, falsification, and plagiarism, and/or the improper use of R&D funds.

c. Ensure that all implementers and other individuals participating in the R&D project are fully informed of the JST designated educational program for research integrity and have enrolled in and completed the program. For details, refer to “6.1 Enrolling in and Completing the Educational Program for Research Integrity”.

Note that failure to complete the educational program for research integrity in c. will result in the suspension of the R&D budget until it has been completed, and this has been confirmed by JST.

(3) The Principal Investigator and other R&D participants must complete the JST designated educational program for research integrity.

(4) Project promotion and management

These individuals are also entirely responsible for project progress and management. After clarifying the roles and responsibilities within the project, the Principal Investigator and Lead Joint Researchers will play a leading role in steadily promoting the project and coordinating unified results. These individuals will need to submit required plans and reports, etc. to JST (including the Program Supervisor), conduct project strategy meetings or site visits to confirm the strategy and progress of the project, and respond to evaluations, etc. The Principal Investigator and Lead Joint Researchers will also need to submit reports on the progress of the R&D when requested by the Program Supervisor.

(5) R&D budget management

The Principal Investigator is responsible for managing R&D costs for the entirety of the project

(spending plans and progress, etc.) together with the research institution implementing the project. In the same manner, the Lead Joint Researchers are also responsible for managing the R&D budget for their groups along with the institution implementing the project.

(6) Considerations regarding R&D participants hired as part of the project

Please ensure that necessary consideration is given to the working conditions for implementers recruited to participate in the project, especially those employed using the R&D budget. Factors should include the R&D environment, working environment, and conditions of work.

(7) Participation in program activities

Active involvement in JST-organized program activities designed to meet the goals of the program (events including on-site lodging and symposiums) and cross-project initiatives is required.

(8) Outreach activities for R&D results

Since R&D activities are funded by the government, active disclosure of R&D results is expected both within Japan and overseas, taking into account the acquisition of intellectual property rights. If the results obtained are to be published in newspapers or magazines, or in a thesis, etc., details about the implementation of the project, as well as a statement stating that they are the results of the RISTEX R&D Programs must be provided. Participation in and presentations of findings at workshops and symposiums hosted or backed by JST in Japan and around the world is also required.

Participation in RISTEX's "Human Network for Collaboration Between Researchers and Collaborators to Solve Social Problems" is required, along with cooperation relating to disseminating and sharing information, as well as planning and holding workshops and symposiums, etc.

(9) All matters related to the project must be performed in-line with the contract between JST and the research institution, along with JST's rules and regulations.

(10) Cooperation with project evaluations, JST accounting audits, and national audits is also required.

(11) Information must be provided, and interviews conducted that allow for the assessment of programs (both interim and post-evaluation) and follow-up investigations conducted after a certain period of time has elapsed since the completion of the project.

## **5.9 Responsibilities of Research Institutions**

Research institutions must fully recognize that consigned research funds are paid using public

money. They must ensure compliance with related laws and make efforts to implement R&D effectively. Research institutions that cannot perform their responsibilities, as described below, will not be permitted to conduct R&D. Researchers are therefore requested to obtain consent from all research institutions where their R&D is going to be implemented before applying.

- a. Research institutions are obliged to enter into a Collaborative Research Agreement with content provided by JST. They are also required to properly implement their R&D in accordance with the Collaborative Research Agreement, administrative manuals, and R&D plan. The research institution shall not be permitted to perform R&D if it cannot enter into a Collaborative Research Agreement with JST, or it is determined that it cannot suitably perform the R&D in question.

※ A model of the Collaborative Research Agreement can be found at the following URL:

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

- b. Research institutions are responsible for creating a framework to manage and audit public research funds. They are also obligated to properly execute their consigned research funds in accordance with the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)” (decided by the Minister of Education, Culture, Sports, Science and Technology on February 15, 2007; revised on February 1, 2021). In addition to reporting the status of their management and audit system for public research budgets to the Ministry of Education, Culture, Sports, Science and Technology (MEXT), research institutions are also obliged to cooperate with any investigations into the implementation of their system. (See: 6.27(1) Implementation of Management and Audit Systems Based on the “Guidelines for the Management and Audit of Public Research Funds in R&D Institutions (Practice Standards)”).

[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1343904\\_21.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1343904_21.htm)

- c. In accordance with the “Guidelines for Responding to Misconduct in Research” (adopted by the Minister of Education, Culture, Sports, Science and Technology on August 26, 2014), research institutions are responsible for implementing regulations and systems required to prevent misconduct. Research institutions are also responsible for cooperating with any investigations relating to these systems based on these guidelines. (See: 6.28(1) Consideration on “Guidelines for Responding to Misconduct in Research”)

[https://www.mext.go.jp/b\\_menu/houdou/26/08/1351568.htm](https://www.mext.go.jp/b_menu/houdou/26/08/1351568.htm)

- d. Research institutions are responsible for ensuring that those participating in R&D are aware of the content of the guidelines described in b. and c. above and are provided with training based upon educational materials related to research integrity provided by JST.
- e. Research institutions shall manage spending/management of R&D budgets properly in accordance with the regulations of the research institution while still maintaining reasonable flexibility. Institutions must also follow any special expenditure rules for the project defined in administrative manuals, etc., provided by JST. (Research institutions receiving Grants-in-Aid for Scientific Research may deal with consigned research funds for which there are no definitions in the administrative manuals, based upon the Grants-in-Aid guidelines for the institution in question.)
- f. Research institutions must enter into contracts with researchers who will be implementing R&D and will be inventors of intellectual property relating to the R&D. This is to ensure the properties are transferred from these researchers to the institutions. In particular, appropriate action must be taken when an individual who is not subject to the Research institution's regulations regarding inventions (such as a student who is not an employee of the institution) participates in the R&D. This could include entering into a contract with the student in advance to ensure that intellectual property rights pertaining to inventions (including their conception) produced by the student during the R&D belong to the research institution (except in cases where it is clear that the student cannot become the inventor). Conditions of compensation for the transfer of intellectual property rights should not be unfavorable to the student who made the invention.

In principle, the prior approval of JST is required to transfer or provide exclusive licenses to use intellectual property to other persons or parties, etc. A prior report to JST is also needed when applying for, registering, implementing, or renouncing property rights.

JST must be notified of intellectual property produced by research institutions through the contract for R&D with JST. Any required reports and applications must also be made, as per Article 17 of the Industrial Technology Enhancement Act. This applies even after the contracted R&D period ends. Research institutions are required to establish an appropriate management and reporting system.

- g. Research institutions are responsible for cooperating with accounting investigations performed

by JST and with government accounting audits.

- h. Research institutions are obliged to obey measures pertaining to changes to methods of payment of consigned research funds as well as decreases in R&D budgets decided by JST, based on JST's investigations of their administrative management systems, financial conditions, etc.

In addition, if project evaluations performed at the end of the JST's mid- to long-term target period requires that JST be dissolved or reduced in size, or if changes to the government's budgetary measures are made, as per the special terms in the Collaborative Research Agreement, the contract may be canceled, or reductions in consigned research funds may be made. Based on the results of the mid-term evaluations of the project, measures such as increases or decreases in consigned research fund payments, changes to the contract period, cancellation of research, etc., may be made. If JST judges that the continuation of research is not appropriate, JST may take measures such as canceling the contract, regardless of any remaining time left in the contract itself. Research institutions are required to follow these measures.

- i. If the research entering into the Collaborative Research Agreement is a national or municipal organization, the institution itself is responsible for ensuring that necessary budgetary measures are put in place prior to the start of the Collaborative Research Agreement period. (If it becomes clear that these required procedures were not performed after the agreement is entered into, the Collaborative Research Agreement may be canceled, with any consigned research funds to be repaid.)
- j. As part of its efforts to prevent misconduct in R&D activities, JST requires researchers who will take part in newly approved research projects and are affiliated with their research institution to complete one of the programs or educational materials listed below:
- “eAPRIN” provided by the Association for the Promotion of Research Integrity
  - “eL CoRE” provided by Japan Society for the Promotion of Science
  - “For the Sound Development of Science -The Attitude of a Conscientious Scientist-” by Japan Society for the Promotion of Science
  - “Responsible Research Practices to Learn from Cases - A Casebook to Instill Awareness and Learning” by Japan Agency for Medical Research and Development
  - “A Compendium of Near-Miss Incidents Related to Research Integrity” by Japan Agency

for Medical Research and Development

- Other research ethics education programs and training deemed equivalent to the above by your affiliated research institution.

(If the research institution deems it equivalent, the video material “Gaps in Ethics” provided by JST is also acceptable.)

If it is difficult for researchers to enroll in an educational program for research integrity at their affiliated organization, for example, if the organization does not provide an educational program for research integrity, they can receive the eAPRIN program (e-learning materials operated by the Association for the Promotion of Research Integrity [APRIN]) via JST.

If these individuals fail to complete the program as stipulated despite repeated reminders by JST, JST instructs to the research institution to halt, partially or entirely, the payment of consigned research funds. The institution is to stop all use of the R&D budget and must not recommence using them until further notice from JST is given.

- k. Necessary measures are to be put in place regarding intellectual property, confidentiality, etc., such as joint research agreements, with research institutions participating in the project, to the extent that these do not infringe on the Collaborative Research Agreement with JST. This is to prevent impediments to the appropriate implementation of R&D and the utilization of R&D results.
- l. As consigned research funds are government resources, proper processes should be put in place to ensure they are used economically, efficiently, effectively, legitimately, and accurately, in a way that allows for accountability regarding this usage. Funds should be used in a planned manner. Procurement for the purpose of using any remaining budget at the end of the R&D period or at the end of the fiscal year is to be avoided.

#### **5.10 When a Person Belonging to an Overseas Institution Participates as the Lead Joint Researcher**

Individuals belonging to overseas research institutions can participate in the project while being based at the overseas institution (however, the Principal Investigator is required to belong to a domestic research institution. Please refer to “4.5 Requirements for Application” for more details) Research institutions that cannot perform their required responsibilities will not be permitted to conduct R&D. Researchers are therefore requested to obtain consent from the institutions where



their R&D is going to be implemented before applying.

- a. If the individual is deemed to be crucial for the Principal Investigator's research initiative and it will be difficult (not possible to) implement the project without the overseas institution's participation.
- b. Research institutions are obliged to enter into a Collaborative Research Agreement with the Collaborative Research Agreement form provided by JST. (We may adjust the agreement terms for matters for which it is considered that there are reasonable grounds to do so in consideration of the characteristics of the research content.) Indirect costs paid will be a maximum of 30% of direct costs. They are also obliged to properly implement their R&D, in accordance with the Collaborative Research Agreement and R&D plan. The research institution shall not be permitted to perform research if it cannot enter into a Collaborative Research Agreement with JST, or it is determined that it cannot suitably perform the R&D in question.
- c. In cases where either the Collaborative Research Agreement and JST specify separate guidelines, etc., the research institution will be responsible for managing expenditure and research expenses in an appropriate manner based on these guidelines. The institution is also required to prepare and submit a detailed statement of expenses (equivalent to an income and expenditure book for domestic institutions) in English that provides details of research expenses. The research institution must, even during the period of the agreement, cooperate with all investigations into expenses, etc., by JST, as requested.
- d. For other details on conditions, see the latest Collaborative Research Agreement form.

\*Due to Security Export Controls, JST may not enter into Collaborative Research Agreements with institutions published on the "Foreign User List<sup>1</sup>" by the Japanese Ministry of Economy, Trade, and Industry (METI).

## 5.11 Other Considerations

### 5.11.1 Systems for Childbirth, Childcare, Caregiving

As part of its efforts to promote equal participation from men and women, JST has implemented

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\*1 METI has issued the "Foreign User List" with the aim of strengthening the effectiveness of a catch-all control on goods related to weapons of mass destruction. The list provides information on foreign organizations that have sparked unalloyable concern that they may be developing or otherwise handling weapons of mass destruction, etc.  
<https://www.meti.go.jp/policy/anpo/law05.html#user-list>

support systems for childbirth, childcare, and caregiving. This system provides a “Gender Equality Promotion Fund” (Amount obtained by multiplying standard sum of 300,000 yen by the number of months of support) for R&D projects, etc., with the aim of enabling full-time researchers who are employed through projects being funded by JST (excluding indirect costs) to continue their research in the midst of life events (childbirth, childcare, nursing care), or to continue their careers from the time they return to research if they have to suspend their research.

Please see the following website for details:

<https://www.jst.go.jp/diversity/about/research/child-care.html>

#### 5.11.2 Using the JREC-IN Portal

The database of researchers and research staff (JREC-IN Portal <https://jrecin.jst.go.jp/>) is the largest website for recruiting researchers in Japan. The service contains information on human resources, including researchers, supporting staff, as well as engineers involved in research. The database is completely free to browse.

The database currently holds more than 20,000 pieces of information on human resources from universities, public research organizations, and private business firms, and has more than 140,000 registered users. In addition, it is possible to simplify the management of the application documents by using the Web application function of the JREC-IN Portal. At the same time, this can also reduce the burden on job applicants. We hope you’ll make use of the JREC-IN Portal to search for human resources (postdoctoral, researchers, and so on) with high levels of knowledge when recruiting for research projects.

JREC-IN Portal is linked with researchmap, and its resume and achievement list creation function enable you to easily create resumes using the information registered in researchmap.

## Chapter 6 Key Points in Submitting Proposals

### 6.1 Enrolling in and Completing the Educational Program for Research Integrity

The Principal Investigator must complete the educational program for research integrity as a prerequisite for application. Note that if completion of the program cannot be confirmed, the application will be disqualified for failing to meet the requirements (Enrollment in and completion of the educational program for research integrity by the time of application is not a prerequisite for those other than the Principal Investigator.)

To enroll in the educational program for research integrity and to submit a declaration of completion, follow either procedure (1) or (2) below. For application instructions using e-Rad, refer to “Chapter 7. Submission via the Cross-ministerial R&D Management System (e-Rad).”

(1) For Proposers who have completed an equivalent program at their institution

Proposers, who have already completed an e-learning program or educational seminar on various aspects of research integrity (including eAPRIN (ex-CITI Japan) e-learning program and JSPS e-Learning Course on Research Ethics) at their institution by the time of their application, are requested to make the declaration of it on the e-Rad application information input screen.

(2) For Proposers who have not completed an equivalent program at their institution (including Proposers at institutions who do not have such a program)

a. Proposers who have in the past completed eAPRIN (ex-CITI Japan) e-learning program in a JST program: Proposers who have in the past completed eAPRIN (ex-CITI Japan) e-learning program in a JST program by the time of their application are requested to make the declaration of it on the e-Rad application information input screen.

b. For other Proposers for whom a. above does not apply: Proposers who find it difficult to enroll in the educational program for research integrity because their institution does not offer such a program or for other reasons may enroll in and take a digest version of eAPRIN (ex-CITI Japan) e-learning program offered through JST. Please attend from the URL below.

<https://edu2.aprin.or.jp/ard/>

No cost is needed for completing the program, which will take one to two hours to complete. After enrolling and completing the digest version promptly, Proposers are expected to declare completion in the e-Rad application information input screen.

■Contact for consultation on the educational program for research integrity

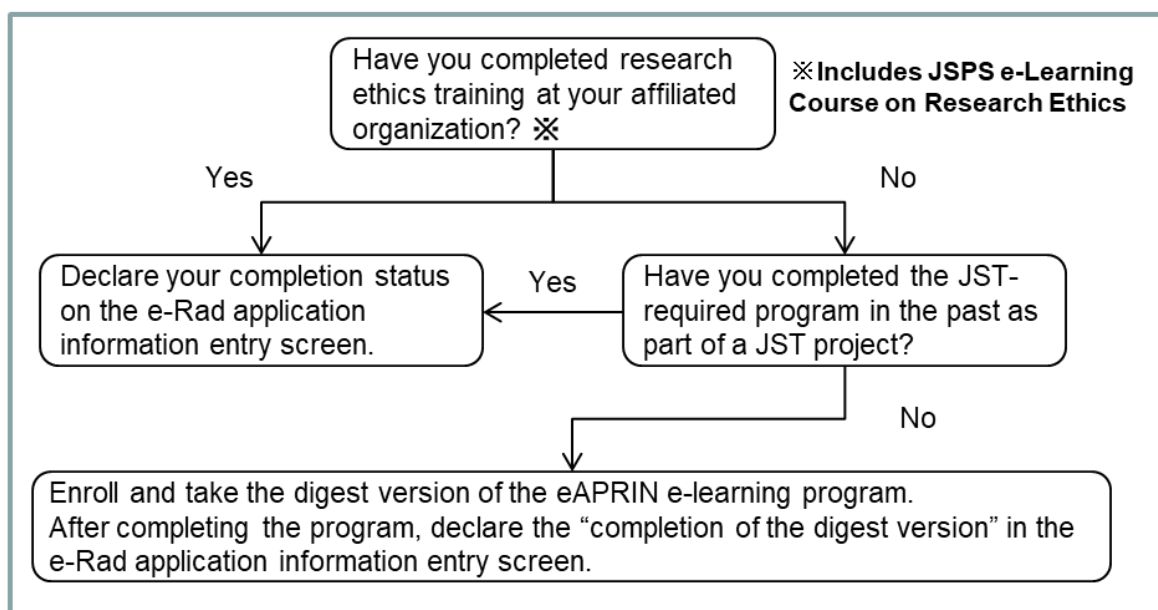
Research Integrity Division, Department of Legal Affairs and Compliance,  
Japan Science and Technology Agency (JST)  
E-mail : [rcr-kousyu@jst.go.jp](mailto:rcr-kousyu@jst.go.jp)

■Contact for consultation on the call for R&D proposals

JST RISTEX E-mail : [boshu@jst.go.jp](mailto:boshu@jst.go.jp)

\* Include the program name, e-Rad's proposal ID, Proposer and project name in the body of email.

### <Flow Chart for Reporting Completion of Education Programs for Research Integrity>



JST requires researchers participating in this program to complete either one of the programs or educational materials listed below:

- “eAPRIN” provided by the Association for the Promotion of Research Integrity
- “eL CoRE” provided by Japan Society for the Promotion of Science
- “For the Sound Development of Science -The Attitude of a Conscientious Scientist-” by Japan Society for the Promotion of Science
- “Responsible Research Practices to Learn from Cases – A Casebook to Instill Awareness and Learning” by Japan Agency for Medical Research and Development
- “A Compendium of Near-Miss Incidents Related to Research Integrity” by Japan Agency for Medical Research and Development
- Other research ethics education programs and training deemed equivalent to the above by your affiliated research institution.

(If the research institution deems it equivalent, the video material “Gaps in Ethics” provided by JST is also acceptable.)

If it is difficult for researchers to enroll in an education program for research integrity at their affiliated organization, for example, if the organization does not provide an education program for research integrity, they can receive the eAPRIN program (e-learning materials operated by the Association for the Promotion of Research Integrity [APRIN]) via JST.

The same measures will be implemented in this fiscal year. Therefore, if accepted, all researchers participating in R&D (including Lead Joint Researchers) are required, in principle, to complete the research ethics education programs or educational materials designated by JST shown above (except when the researchers have already completed the research ethics education programs or

educational materials designated by JST shown above at their affiliated institutions, in JST's projects, and others).

## **6.2 Measures against Unreasonable Duplication and Excessive Concentration**

### **○Measures against “Unreasonable Duplication”**

If a given R&D project by a given researcher (i.e. the name and content of the R&D project are the same, and the R&D project is receiving competitive research funding) is unnecessarily receiving multiple competitive or other research funds (all current research funds for individual research subjects, such as subsidies, grants, joint research funds, contract research funds, etc., including those from overseas (\*)), and any of the following applies, the R&D projects may be rejected, canceled or reduced (hereinafter referred to as “rejection of R&D projects”) depending on the degree in this program.

- Cases where simultaneous applications have been made to more than one competitive or other research fund for substantially the same research project (including cases where the contents overlap to a considerable degree; the same shall apply hereinafter), and where these research projects are redundantly adopted.
- Cases where an application has been made again for substantively the same research project as another one that has already been adopted, and for which the allotment of competitive or other research funds has already been completed.
- Cases where there is overlap in the use of research funds among more than one research project.
- Other cases equivalent to the above.

At the application stage for this program, there are no limitations regarding the submission of proposals to other competitive or other research funds. If an R&D project is selected by another competitive or other research fund, report this promptly to JST at the contact address ([boshu@jst.go.jp](mailto:boshu@jst.go.jp)). If reporting is omitted, the approval decision for the R&D project may be revoked.

\* Excludes basic expenses or internal funds that are allocated within the institution to which the company belongs, commercial activities stipulated by the Commercial Code, and financing through direct or indirect financing.

### **○Measures against “Excessive Concentration”**

Even if the content of the research proposed for this program differs from the content of another

research being carried out under another competitive or other research fund, in the case that the overall research funding allocated to the same researcher or research group (hereinafter referred to as “researchers”) in relevant fiscal year exceeds an amount that can be utilized effectively and efficiently and can be used within the research period, in this program, the R&D projects may be rejected in accordance with the degree of the following cases.

- Cases where, in light of the abilities of the Researchers and the research methods, excessive research funds are allotted.
- Cases where, in comparison with the effort (the allocation rate (%) of the time necessary to carry out the said research activities with respect to the entire working time of researcher) that is being allotted to the research project in question, excessive research funds are allotted.
- Cases where the purchase of unnecessarily expensive equipment is carried out.
- Other cases equivalent to the above.

For this reason, after submitting your application to this program, if you submit proposals to other competitive or other research funds, and the R&D project is selected by them, or if any information provided in your application changes, please report this promptly to JST at the contact address (boshu@jst.go.jp). If reporting is omitted, the approval decision for the R&D project may be revoked.

\*The total work time of a researcher includes the time not only for research activities but also for teaching activities, management assignments, and other activities substantially equivalent to work.

#### ○How to Eliminate Unreasonable Duplication and Excessive Concentration

To eliminate unreasonable duplication and excessive concentration of competitive research funds, ensure transparency in research activities, and ensure appropriate efforts, Proposers shall provide the following information at the time of application.

(i) Information on the current application / acceptance status of other competitive or other research funds including those of other ministries, and all current affiliated institutions / positions.

At the time of application, regarding the Principal Investigator / Lead Joint Researchers, the current application / acceptance status of other competitive or other research funds including those of other ministries (program name, R&D subject, implementation period, budget amount, effort, etc.) (Hereinafter referred to as “information on research funds”) and information on all current affiliated institutions / positions (including side jobs, participation in foreign recruitment programs,

honorary professors without employment contracts, etc.) (hereinafter referred to as “information about your institution / position”) are required to be provided in the application documents and the Cross-ministerial R&D Management System (hereinafter referred to as “e-Rad”). If the application documents or e-Rad contain false statements, the R&D project may be rejected.

Of the information on research expenses, information on joint research with which confidentiality agreements have been signed will be handled as follows in consideration of individual circumstances so that activities such as industry-academia collaboration will not be shrunk.

- Only the information necessary to confirm whether the submitted R&D project does not result in unreasonable duplication or excessive concentration of research funds and can appropriately secure the effort related to the execution of the R&D project (in principle, information of the joint research such as only the name of the partner institution, the amount of research funds accepted, and information related to effort) will be requested.
- However, if it is difficult to submit the name of the partner institution and the amount of research expenses accepted due to unavoidable restrictions such as the confidentiality agreement that has already been concluded, it is possible to submit the application without the information. Even in that case, JST may make inquiries to the institution to which you belong if necessary.
- In addition to the affiliated institution, information may be shared between distribution institutions and related ministries and agencies, but even in that case, it will be shared only by those who have a duty of confidentiality.

When concluding a non-disclosure agreement, etc. in the future, please consider assuming that you may submit only the necessary information when applying for competitive research funds. However, if both contracting parties agree on the scope of information to be kept confidential and its legitimate reason (such as when it is considered to be extremely important in corporate strategy and highly confidential), it is possible to make a contract that does not assume the confidential information will be submitted.

(ii) Other information necessary to ensure transparency in all research activities in which one is involved.

To ensure transparency in all research activities in which you are involved, JST requests a pledge that we are properly reporting the necessary information on research expenses, affiliated institutions and job titles, and support for facilities and equipment other than donations and funds\*

to the institution to which you belong based on the relevant regulations. If it is found that an appropriate report has not been made in violation of the pledge, the R&D project may be rejected.

Information on the acceptance status of facilities / equipment, etc. that are not used for the R&D project of the application but are used for the research that is separately engaged does not relate to unreasonable duplication or excessive concentration. However, from the viewpoint of confirming whether an R&D project can be sufficiently carried out or not, in addition to the pledge, JST may ask the affiliated institution to submit the status of grasping and managing the information.

\* Includes cases where articles such as research facilities, machines, and equipment are supplied, and services are provided even in the manner of free of charge

#### ○ **Provision of Information on Proposal Contents to Eliminate Unreasonable Duplications and Excessive Concentration**

In order to eliminate unreasonable duplication and excessive concentration, to the extent necessary, the information of some proposals (or selected projects/programs) may in some cases be provided through e-Rad to other departments in charge of competitive research funds, etc. including those of other government ministries.

### **6.3 Ensuring Research Integrity against New Risks Associated with Internationalization and Openness of Research Activities**

In order to promote the creation of science, technology and innovation in Japan, it is necessary to continue to strongly promote international joint research with various partners, with open science as the main principle. At the same time, in recent years, it is pointed out that there are new risks associated with the internationalization and openness of research activities which may impair the values that form the basis of the research environment, such as openness and transparency, and there are dangers that researchers unintentionally fall into conflicts of interest and responsibilities. Under these circumstances, building an internationally reliable research environment as Japan is indispensable for promoting necessary international cooperation and exchanges while preserving the values that form the basis of the research environment.

Therefore, universities, research institutes, etc. have stated that "the policy for ensuring research integrity against new risks associated with the internationalization and openness of research activities (decided by the Integrated Innovation Strategy Promotion Council on April 27, 2021). Based on this,



establish rules and management systems related to conflicts of interest and responsibilities, and autonomously ensure the soundness and fairness (research integrity) of research at researchers, universities, research institutes, etc. Is important.

From this point of view, we are confirming whether we can appropriately secure efforts while eliminating unreasonable duplication and excessive concentration of competitive research funds and ensuring transparency in research activities. We may make inquiries to the institution to which you belong, as necessary, regarding the status of maintenance of regulations and the status of grasping and managing information.

#### **6.4 Measures against Inappropriate Usage of Research Funds**

Inappropriate use and reception (referred to as “inappropriate usage” hereinafter) of research budgets related to the ongoing R&D projects are strictly treated as described below.

##### **○Measures Taken in the Case that Inappropriate Usage of Research Expenses are Found**

###### **( i ) Measures to Cancel Contracts**

The Collaborative Research Agreement contract is cancelled or altered if issues of inappropriate usage are found, and a request is made for refunding all or part of the entrusted funds. Contracts for the following year and subsequent years may not be concluded.

###### **( ii ) Measures to Restrict Application and Participation Eligibility<sup>\*1</sup>**

Restriction measures set out in the table below, depending on the levels of inappropriate usage, are taken against the application and participation eligibility of researchers<sup>\*2</sup> (including researchers who conspired, referred to as (“researchers who conspired to inappropriate usage”)) who exercised inappropriate usage of research expenses of this program or those whose involvement in inappropriate usage is not proven but who violated due care of a prudent manager. Or, they are otherwise reprimanded.

Furthermore, the outlines of pertinent inappropriate usage (names of researchers who exercised inappropriate usage, project names, affiliations, research issues, amounts of budget, fiscal year of research, contents of inappropriate usage, contents of measures taken, etc.) are provided to persons in charge of the competitive research funds of other ministries, who may restrict application and participation of the researchers in their competitive research funding programs.

※1 “Application and participation” refers to proposing, registering for, and/or applying for a new project, newly participating in research as, e.g., a Joint Researcher, and/or participating in an ongoing research project (continuing project) as a Principal Investigator, Joint Researcher, etc.

※2 “Researchers who violate due care” refers to those whose involvement in inappropriate usage is not proven but who violated the duty of due care of prudent manager they should exercise.

Classification of person who committed or is involved in misconduct in use of research budget	Extent of maliciousness in misconduct	Period of ineligibility for applying to competitive research fund, deemed to be reasonable(*3,4)	
A researcher who committed a misconduct or a researcher who was in conspiracy with a person who committed a misconduct *1	1. Use of a research budget to make a private profit	10 years	
	2. Other than 1.	① Impact of the misconduct on the society is substantial and maliciousness of the misconduct is judged to be high	5 years
		② Neither ① or ③	2-4 years
		③ The impact of the misconduct on the society is small and the maliciousness of the misconduct is judged to be low.	1 year
A researcher who used a fabrication and other dishonest means to receive a competitive research fund or etc. and a researcher who was in conspiracy with the person who committed this misconduct		5 years	
A researcher who did not commit or was not involved in a misconduct, but used a research budget, inappropriately, failing to fulfill his/her duty of due care of prudent manager *2		1 to 2 years (in maximum) in accordance with the degree of failure of fulfilling his/her duty of due care of prudent manager	

\*3 A strict warning is issued under any of the following conditions without restricting application or eligibility for participation.

- Refers to instances in (\*1) in the table where the action is considered to have a negligible impact on society and exhibit a low degree of malicious intent, and the amount of inappropriately used research funds is small.
- Refers to instances in (\*2) in the table where the action is considered to have a negligible impact on society and exhibit a low degree of malicious intent.

\*4 In principle, the application restriction period will be calculated from the fiscal year following the fiscal year when the unauthorized use is recognized and the research funds are refunded. Also, ineligible in the fiscal year in which inappropriate usage of research funds are identified.

### (iii) About Public Announcement of a Case of Inappropriate Usage

Regarding those who are involved in an inappropriate usage of the program's research funds or researchers whose eligibility of application to or participation in this program is restricted among those who failed to fulfill their duty of due care of prudent manager, information of the outline of their misconduct (name of research institution, name of program, fiscal year in which the misconduct took place, details of misconduct, amount of research expenses illegally spent, number of researchers involved in the misconduct and other details) will be disclosed in principle by JST. In principle, the details will also be disclosed by MEXT.

Furthermore, according to the "Guidelines for the Management and Audit of Public Research Funds in R&D Institutions (Practice Standards)," once misconduct is determined as the outcome of an investigation of an institute, it will be the responsibility of the R&D institution to announce the results of the investigation; hence, we request that each institution deal with the matter appropriately, following the guidelines.

[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1364929.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1364929.htm)

## **6.5 Measures taken for Researchers whose Application and Participation Eligibilities are Restricted in Another Competitive Research Fund System**

Researchers on whom restriction is imposed for the reason of inappropriate usage of research expenses in another competitive research fund system (\*) including those managed by other ministries are not eligible to apply to or participate in this program while their qualifications are restricted for application in the competitive research fund system.

"Other competitive fund systems" include those systems that newly start a call for proposals from FY2024 onwards and those that finished in FY2023 and before.

\* Refer to "R&D proposal funding system" (<https://www8.cao.go.jp/cstp/compefund/>)

## **6.6 Measures Taken to the Violation of Related Guidelines**

Violation of related laws or guidelines, etc., in conducting research may result in penalties and sanctions being applied to persons and organizations that committed the violation, and the suspension or cancellation of research funding.

## 6.7 Carryover of Research Expenses

Making a carryover of research expenses until the end of next fiscal year for a maximum, may be permitted if the delay of the progress in the project occurs, and it is difficult to conclude within the fiscal year due to unavoidable circumstances such as difficulties to determine in advance the research or study method of the experimental research, restrictions associated with planning, weather-related conditions, limited availability of materials, and others.

## 6.8 Cross-ministerial Expenses Handing Partitioned Table

The expense items of research costs specific to this program are determined on the basis of “Cross-ministerial Expenses Handing Partitioned Table.” As for research expenditure, refer to the “Cross-ministerial Expenses Handing Partitioned Table” on the following website.

Cross-ministerial Expenses Handing Partitioned Table (JST RISTEX R&D Programs)

[https://www.jst.go.jp/contract/download/2024/2024\\_ristex\\_betten9.pdf](https://www.jst.go.jp/contract/download/2024/2024_ristex_betten9.pdf)

Currently, in response to the “6th Science, Technology and Innovation Basic Plan”, the “Integrated Innovation Strategy 2023” and the “Comprehensive Package for Strengthening Research Capabilities and Supporting Young Researchers”, the system for competitive research funding is being improved. Based on this, this program makes it possible to spend personnel expenses of the research representative of the project (hereinafter referred to as “PI”), expenses related to agency work other than research (buyout expenses) from direct expenses. When spending PI personnel expenses and expenses related to agency work other than research (buyout expenses), please refer to the following necessary requirements and paperwork procedure.

In addition, in line with the “Common Guidelines for the Development of a Competitive Research Funding System from the Perspective of Gender Equality and Human Resource Development” (February 8, 2023, Liaison Conference of Relevant Ministries and Agencies on Competitive Research Funding), this program allows for the allocation of direct expenses to support the development of human resources in science and engineering that will support the next generation.

- “Review to Enable Payment of Expenses for Others to Execute Non-research Operations from

Direct Costs (Buyout System Introduction) and Payment of the Personnel Expenses of the Principal Investigator (PI) from Direct Costs (Contact)” (September 17, 2020)

<https://www.jst.go.jp/osirase/2020/pdf/20200917.pdf>

Please refer to the following URL for the policy on the scope of eligibility, expenditure ceiling, etc. for the RISTEX R&D Programs.

[https://www.jst.go.jp/ristex/funding/funding\\_outline/for\\_researcher.html](https://www.jst.go.jp/ristex/funding/funding_outline/for_researcher.html)

### **6.9 Exchange of Direct Costs between Expense Items**

Direct costs of different expense items can be exchanged under certain condition. Exchanges are allowed without approval from JST when the amount of direct costs to be exchanged does not exceed 50% of the total direct costs (5 million JPY if the 50% of total direct costs is less than 5 million JPY).

### **6.10 Securing Research Period until the End of Fiscal Year**

In order to enable researchers to continue their research work until the end of a fiscal year, statements below should be followed in every JST competitive research funds.

- (1) JST makes inspections on the completion of the project and the achievements of the research.
- (2) Submit the accounting report by May 31.
- (3) Submit the report on the research achievements by May 31.

Each research institute should make efforts to organize necessary systems at the institute based on the fact that the purpose of those practices is to secure the research period that continues by the end of a fiscal year.

### **6.11 Indirect Costs**

Research institutions receiving indirect costs are required to formulate a policy for the use of these funds under the supervision of the institution representative, to execute systematic and appropriate implementation in accordance with the policy, and to ensure transparency in the use of such costs by providing explanations to researchers or by other means. Research institutions must also appropriately manage indirect costs and retain receipts and other supporting documents that demonstrate the appropriate use of indirect costs for a period of five years from the year following the completion of the project.

Research institutions that have received indirect costs are required to submit an annual report detailing the actual use of these funds through e-Rad by June 30 of the following fiscal year (in cases where a research institution has received two or more competitive research funds, it should report the total of all indirect costs associated with those funds). If you are unsure of how to use e-Rad for reporting purposes, please consult the e-Rad operation manual for guidance ([https://www.e-rad.go.jp/manual/for\\_organ.html](https://www.e-rad.go.jp/manual/for_organ.html)) or FAQ (<https://qa.e-rad.go.jp/>).

According to the revised “Common Guidelines for the Allocation of Indirect Expenses from Competitive Funds” (April 20, 2001, Liaison Conference of Relevant Ministries and Agencies on Competitive Research Funding), only projects funded by grants or management funds from independent management agencies are allowed to use the funds to replace depreciable assets they own, in accordance with accounting standards.

## **6.12 Promotion on Effective Use of Research Facilities and Equipment**

According to “Reform on Competitive Research Funds for Sustainable Creation of Research Achievements (Midterm Summary)” (Examination Meeting on the Reform of Competitive Funds, June 24, 2015), it is considered appropriate that facilities/equipment which are comparatively large in scale and have high general applicability should in principle be shared, under the assumption that the original research objectives are sufficiently accomplished.

In addition, the “6th Science, Technology and Innovation Basic Plan” (approved by the Cabinet on March 26, 2021) and the “Integrated Innovation Strategy 2023” (approved by the Cabinet on June 9, 2023) call for measures such as promoting the maintenance and sharing of research equipment and facilities, establishing an institutional system for introducing, updating and utilizing research equipment (core facility), and formulating and publishing a sharing policy.

In March 2022, MEXT established the “Guidelines for the Sharing and Promotion of Research Equipment and Apparatuses” for purposes such as promotion of strategic establishment, operation and sharing of research equipment and apparatuses by institutes such as universities.

Based on the above, for research facilities/equipment which are purchased by this program, and particularly for large scale, general purpose items, positive efforts for sharing should be made in accordance with the equipment sharing system at the affiliated institution or organization, including sharing which does not hinder the progress of the project, use of research facilities and equipment purchased with other research funds within the scope of their management conditions, and purchase

and sharing by combining multiple research funds. In such cases, it is important to be aware that sharing is also possible during the project period and consider further sharing. Among other reasons, this will strengthen research capabilities by facilitating the use of the latest research equipment and apparatuses. Please note that it is necessary to strike a balance between management as shared equipment/facilities and accomplishment of the research purpose of the project.

Moreover, participants are asked to promote the sharing of research facilities and equipment beyond the framework of individual research organizations and institutes by positively cooperating with the “Inter-University Network for Common Utilization of Research Equipment,” which was implemented for the purpose of the mutual use of facilities in the National Institutes of Natural Sciences, and the sharing system constructed thanks to the “New Shared System Introduction Support Program” and the “Core Facility Construction Support Program” in each university.

- “Reform on the Competitive Research Funds for Sustainable Creation of Research Achievements (Midterm Summary)” (Examination Meeting on the Reform of Competitive Funds, June 24, 2015).  
[https://www.mext.go.jp/b\\_menu/shingi/chousa/shinkou/039/gaiyou/1359306.htm](https://www.mext.go.jp/b_menu/shingi/chousa/shinkou/039/gaiyou/1359306.htm)
- “6th Science, Technology and Innovation Basic Plan” (approved by the Cabinet on March 26, 2021).  
<https://www8.cao.go.jp/cstp/kihonkeikaku/6honbun.pdf>
- “Integrated Innovation Strategy 2023” (approved by the Cabinet on June 9, 2023) .  
[https://www8.cao.go.jp/cstp/tougosenryaku/togo2023\\_honbun.pdf](https://www8.cao.go.jp/cstp/tougosenryaku/togo2023_honbun.pdf)
- “Unification of Usage Rule of Competitive Research Funds” (amended on May 24, 2023).  
[https://www8.cao.go.jp/cstp/compefund/toitsu\\_rule\\_r50524.pdf](https://www8.cao.go.jp/cstp/compefund/toitsu_rule_r50524.pdf)
- “The Purchase of Shared Facilities Using Multiple Research Fund Systems (Use of Combined Total)” (September 10, 2020, Agreement between the institutions allocating funds and the relevant supervising government bodies)  
[https://www.mext.go.jp/content/20200910-mxt\\_sinkou02-100001873.pdf](https://www.mext.go.jp/content/20200910-mxt_sinkou02-100001873.pdf)
- “Guidelines for the Sharing and Promotion of Research Equipment and Apparatuses” (established March 2022)  
[https://www.mext.go.jp/content/20220329-mxt\\_kibanken01-000021605\\_2.pdf](https://www.mext.go.jp/content/20220329-mxt_kibanken01-000021605_2.pdf)  
(Reference: Summary on YouTube) [https://youtu.be/x29hH7\\_uNQo](https://youtu.be/x29hH7_uNQo)

- Inter-University Network for Common Utilization of Research Equipment.

<https://chem-eqnet.ims.ac.jp/>

- New Shared System Introduction Support Program.

<https://www.jst.go.jp/shincho/program/sinkyoyo.html>

- Core Facility Construction Support Program.

<https://www.jst.go.jp/shincho/program/corefacility.html>

### **6.13 Improving the Treatment of (latter-stage) Doctoral Students**

The “6th Science, Technology and Innovation Basic Plan” (approved by the Cabinet on March 26, 2021) set a numerical target to triple the number of doctoral students who receive the amount equivalent to living expenses (equivalent to about 30% of students enrolled in the doctoral program receiving the amount equivalent to living expenses), improving financial support for graduate students, especially doctoral students (second semester), in order to attract excellent students and working people from inside and outside of Japan. In addition, the Basic Plan states that in order to promote the payment of salaries to doctoral students (second semester) at an appropriate level for research assistants (RA) from competitive research funds and joint research funds, the government will formulate rules for the payment of RA expenses relating to employment and remuneration for RAs at each business and university, and implement them sequentially from FY2021, urging the expansion of the employment of doctoral students as RAs and their improved treatments at universities and R&D agencies.

Moreover, in relation to doctoral students (second semester), the “Guidelines for the Employment and Training of Postdoctoral Researchers” (December 3, 2020, Committee on Human Resources, Council for Science and Technology) note that “while they are students, they also possess aspects of researchers, and it is a key obligation of universities that train researchers to guarantee their treatment and maintain an environment in which they can carry out research activities”; “it is particularly important to treat them based on appropriate evaluations of their contributions, including paying them according to the hours they have worked under appropriate work management by determining compensation commensurate with the nature and content of their duties”; and “in your application for competitive research funds, there is a need to include the expenses required as direct costs if you are employing an RA in a university, and you should review the university’s rules to ensure that you can pay your RA(s) an appropriate level of compensation.”



Based on the above, in this program, please actively employ doctoral students who are necessary for the execution of your research as RAs, etc., and pay them according to the hours they have worked under appropriate work management by setting a unit price commensurate with the nature and content of their duties, while aiming for the salary level to be equivalent to the cost of living. In addition, when applying for this program, please apply with a financial plan that also takes into account the costs of the above-mentioned doctoral students.

(Notes)

- Under the “6th Science, Technology, and Innovation Basic Plan”, the amount equivalent to living expenses of doctoral students is set as a minimum of 1.8 million yen per year. In addition, in order for excellent doctoral students to focus on their research without financial concerns, it also states a significant expansion of the number of beneficiaries receiving about 2.4 million yen per year that is equivalent to the stipend paid through the JSPS Research Fellowship for Young Researchers (Doctoral Course Students (DC)) program.
- With regard to the treatment of doctoral students who have been hired to carry out a research project, the “Guidelines for the Employment and Training of Postdoctoral Researchers” state that “the standard pay for a specially-appointed assistant professor employed with competitive research fund is considered to be around 2,000 yen to 2,500 yen per hour (\*), taking average amounts of pay into account.”

(\*) The standard pay for a specially-appointed assistant professor employed with competitive research funds, etc. is considered to be around 2,000 yen to 2,500 yen per hour in the case of a doctoral student, taking average amounts of pay into account. (Calculated based on the median monthly salary (between 400,000 and 450,000 yen) of specially-appointed assistant professors according to the Survey on Instructor Employment at Research Universities (Preliminary Report) published August 2020 divided by the number of working hours per day (between 7 hours 45 minutes and 8 hours) for actual days worked (between 19 and 20 days), excepting weekends and holidays, and multiplying by 0.8 in light of their status as doctoral students.)

- The specific amount and period of payment will be determined by the research institution. There is no restriction on the amount of payment above or below the level mentioned above.

- When employing students as RAs, etc., please pay attention so that they do not work excessive hours, and consider the balance between work time and the doctoral students' own research and study time.

#### **6.14 Securing an Independent and Stable Research Environment for Young Researchers**

The “Guidelines for the Employment and Training of Postdoctoral Researchers” (December 3, 2020, Committee on Human Resources, Council for Science and Technology) note that “while many postdoctoral students are employed for less than three years, their employment term must enable them to focus on the same research activities for a reasonable period of time, as an overly short term of employment could impede them from building a career,” and “an employment term of three to five years at each post is ideal in light of the fact that postdoctoral students should ideally proceed to the next step in the period of three to seven years between the time they have gained postdoctoral experience in one or two locations and their late 30s.”

Concerning National University Corporations and Inter-University Research Institute Corporations, “Guidelines for Personnel Salary Management Reform for National University Corporations, etc.: Toward the Establishment of Attractive Personnel Salary Management that Contributes to the Improvement of Educational and Research Capabilities” (Ministry of Education, Culture, Sports, Science and Technology (MEXT), February 25, 2019) states that “to achieve the two goals of fostering young faculty members and stabilizing employment, a system should be implemented which incorporates the perspective of developing researchers while maintaining flexibility, such as securing employment terms of a certain length — 5 to 10 years — by using expenses with a high degree of freedom of use, such as indirect expenses and endowments, even if the researchers have a fixed term of employment.”

Based on these considerations, when hiring young researchers such as specially appointed faculty members and postdoctoral fellows for this program, applicants are advised to check with the staff in charge of the human resources and accounting of your department in ensuring that the length of the researchers' employment term is the same as that of their R&D periods. It is also advised to secure the particular length of their employment term by utilizing indirect expenses of other external funding awards, essential expenses, endowment, etc. as far as possible so that their employment term will not be too short.

## **6.15 Equal Participation of Men and Women and Measures for Promotion of Human Resource Development**

The “Science, Technology and Innovation Basic Plan” (approved by the Cabinet on March 26, 2021), “Basic Plan for Gender Equality” (approved by the Cabinet on December 25, 2020) and “Policy Package regarding Education and Human Resource Development toward the Realization of Society 5.0” (approved by the Council for Science, Technology and Innovation on June 2, 2022) aim to foster a research environment that enables both men and women to continue their research activities even in the midst of major life events such as childbirth, childcare, and eldercare responsibilities and to facilitate the appointment of outstanding women researchers as Principal Investigators. In addition, the plans seek to increase the enrollment of women in science and engineering master’s and doctoral programs by promoting the attractiveness of these fields to female junior and senior high school students, as well as their guardians and teaching staff. This initiative aims to address the existing disparity in women’s participation in Ph.D. natural science programs and to expand the pool of potential knowledge holders in Japan.

Moreover, failure to take gender differences into account in the R&D process, which must take such considerations into account, could have inappropriate consequences in the societal implementation phase. Therefore, it is imperative to conduct research and technological development efforts that take appropriate account of gender differences, including differences in physique, body structure and function.

Building on the above, this program will also prioritize initiatives aimed at fostering the engagement of women researchers and broadening the talent pool of individuals ready to lead future endeavors in science and technology.

## **6.16 Self-motivated Research Activities by Young Researchers Employed to Carry Out Projects**

With regard to young researchers employed in this program, based on the “Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds” (revised on December 18, 2020, Agreement of the Liaison Meeting of Related Government bodies on Competitive Research Funds), if the Principal Investigator, etc. judges that it will not hinder the progress of a project but help it, and permission is obtained from the research institution with which they are affiliated, researchers may use some of their efforts working on this program

for self-motivated research activities and/or activities that will improve their research and management capabilities, while using program funds for personnel expenses. Please see the following for more information.

- “Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds” “Liaison Conference of Relevant Ministries and Agencies on Competitive Research Funds” (revised on December 18, 2020)

<https://www8.cao.go.jp/cstp/compefund/jisshishishin.pdf>

Please refer to the following URL for the policy on the scope of eligibility, etc. for the RISTEX R&D Programs.

[https://www.jst.go.jp/ristex/funding/files/senjukanwa\\_houshin.pdf](https://www.jst.go.jp/ristex/funding/files/senjukanwa_houshin.pdf)

### **6.17 Support for Diverse Career Paths for Young Researchers with Doctoral Qualifications**

The “6th Science, Technology and Innovation Basic Plan” (approved by the Cabinet on March 26, 2021) also sets targets regarding “environments that provide excellent young researchers with prospects for activities in various fields, including academia, industry and government”. Furthermore, the “Guideline for the Employment and Training of Postdoctoral (December 3, 2020, the Committee on Human Resources, Council for Science and Technology Policy) states that “it is essential that doctorate human resources with high-level specialization and advanced research skills should help drive innovation by contributing in a wide range of positions, including at venture companies and global corporations, and accordingly, initiatives are needed for the diversification of career paths after the completion of the postdoctoral period.” Based on this, when a project is selected in this call for R&D proposals and young researchers such as specially appointed researchers and postdoctoral researchers are to be employed with public research funds (competitive or other research funds, or public invitation-type education research funds for universities), the institution concerned should make active efforts to support those researchers in securing diverse career paths.

Institutions should also consider using indirect funds in these efforts.

### **6.18 Securing Management Personnel of URA, etc.**

In the “6th Science, Technology, and Innovation Basic Plan” (approved by the Cabinet on March

26, 2021), the importance of efforts to ensure professional quality and improve treatment has been pointed out for making URA and other management personnel to be attractive positions. In addition, the need of establishing career paths for management personnel, URA and engineers, etc., is indicated in the “Comprehensive Package to Strengthen Research Capacity and Support Young Researchers” (Council for Science, Technology, and Innovation on January 23, 2020).

Based on the above, when management personnel employed by the research institution, or newly hired URA, etc., is engaged in the management of this research program, the research institutes should secure a term of office for a certain period as much as possible by utilizing indirect expenses, basic expenses, donations, etc., of other external funds, not limited to this program, so that their employment term will not be too short.

At the same time, as support for securing career paths of the management personnel, please take positive efforts for providing opportunities to participate in URA training, etc. Please consider utilizing indirect costs for such efforts.

#### **6.19 Security Export Control (Measures against Leakage of Technology Internationally)**

Many advanced technologies are studied at research institutions. Particularly at universities, there is a heightened risk of leakage of advanced technologies and research-related materials/equipment or misuse in development/manufacture of weapons of mass destruction owing to the increased number of international students and foreign researchers due to internationalization. For this reason, an organizational response by the research institution is required when a research institution conducts research activities, including the relevant contract research, so that research results with potential military applications are not passed to groups or individuals considering activities of concern, such as terrorist groups and developers of weapons of mass destruction.

In Japan, export controls (\*1) are imposed based on the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949; hereinafter, “Foreign Exchange Act”). Accordingly, when attempting to export (provide) goods or technologies controlled under the Foreign Exchange Act, in principle, a license from the Minister of Economy, Trade and Industry (METI) is necessary. All those participating in this program must comply with the Foreign Exchange Act and all other laws, ordinances, guidelines, notifications, etc. of the national government. In addition to legal action and penalties, distribution of research funds may be stopped and the decision to allocate research funds may be cancelled if research is conducted in violation of the relevant laws, ordinances, guidelines, etc.

\* 1 Currently, based on international agreements, etc., Japan enforces two types of security export control: (1) a system that requires approval from the Minister of Economy, Trade and Industry for the export (provision) of goods (technology) that exceeds certain specifications and functionalities, such as carbon fiber and numerically controlled machine tools (List Control); (2) a system that requires approval from the Minister of Economy, Trade and Industry for the export (provision) of goods (technology) that do not fall under the List Control and meet certain requirements (application requirements, consumer requirements, or informed condition) (Catch-All Control).

Not only the export of cargo but also the provision of technology is subject to the regulation of the Foreign Exchange Law. When providing list regulation technology to non-residents (including residents who fall under a specific type (\*2)), or when providing it in a foreign country, permission is required prior to the provision. Provision of technology includes not only providing technical information, such as design drawings, specifications, manuals, samples, and prototypes in storage media, such as paper, e-mail, CD, DVD, or USB memory, but also providing work knowledge through technical guidance, training or technical assistance in seminars.

In addition, activities such as hosting foreign students and engaging in collaborative research may involve significant technology exchanges that fall under the regulatory scope of the Foreign Exchange Law. Please be aware that the export (provision) of technology obtained through this program, or the transfer of technology already owned for use in this program, may also be subject to controls.

\* 2 Refers to the types of residents who are strongly influenced by non-residents, which are specified in 1.(3)サ①～③ of “transactions or acts providing technology that requires permission based on the regulations of Foreign Exchange and Foreign Trade Law, Article 25, Paragraph 1, and the Foreign Exchange Order, Article 17, Paragraph 2.”

The Foreign Exchange Law requires the establishment of a security export control system when exporting List Control goods or providing List Control technology to another country (\*3). For this reason, it is necessary to confirm, prior to the conclusion of the contract, whether the project intends

to provide, as part of this program, goods, or technology subject to export control under the Foreign Exchange Law. If so, it should be checked whether a control system is established or not at its research institution via e-Rad. If the project intends to provide such goods/technology and its research institution does not have a control system in place, the research institution is required to establish such a system prior to the provision of such goods/technology or prior to the completion of the project, whichever is earlier. It is required to report on the status of the confirmation if requested by METI. In addition, if it is found that the technology acquired through the project violates the regulations related to the Foreign Exchange Law, the contract may be canceled in whole or in part.

\* 3 Exporters, etc. are obliged to comply with the “Exporter Compliance Standards” stipulated in Article 55-10, Paragraph 1 of the Foreign Exchange Law. In addition, the security trade management system here is based on the management system in the “Exporter Compliance Standards”, and refers to the internal control system of an organization to prevent illegal exports by appropriately exporting list-regulated cargo or providing list-regulated technology to foreign countries.

Details of security trade management are available on the websites of the Ministry of Economy, Trade and Industry (METI), etc.. See below for details.

- METI : Security Trade Management (general)  
<https://www.meti.go.jp/policy/anpo/>
- Security Export Control Handbook by METI  
<https://www.meti.go.jp/policy/anpo/seminer/shiryu/handbook.pdf>
- METI : Guidance on sensitive technology management related to security trade (for universities and research institutes)  
[https://www.meti.go.jp/policy/anpo/law\\_document/tutatu/t07sonota/t07sonota\\_jishukanri03.pdf](https://www.meti.go.jp/policy/anpo/law_document/tutatu/t07sonota/t07sonota_jishukanri03.pdf)
- Center for Information on Security Trade Control  
<https://www.cistec.or.jp/export/jisyukanri/modelcp/modelcp.html>
- Transactions or acts involving the provision of technology that requires permission based on the regulations of Foreign Exchange and Foreign Trade Law, Article 25, Paragraph 1, and the Foreign Exchange Order, Article 17, Paragraph 2  
[https://www.meti.go.jp/policy/anpo/law\\_document/tutatu/t10kaisei/ekimu\\_\\_tutatu.pdf](https://www.meti.go.jp/policy/anpo/law_document/tutatu/t10kaisei/ekimu__tutatu.pdf)

## **6.20 Strict Adherence to United Nations Security Council Resolution No. 2321**

In response to the nuclear test and repeated launching of ballistic missiles by North Korea in September 2016, The United Nations Security Council (hereinafter referred to as “Security Council”), adopted Security Council Resolution No. 2321 on November 30, 2016, that substantially increased and strengthened sanctions against North Korea. Accordingly, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) issued the Request for Strict Adherence to United Nations Security Council Resolution No. 2321 (2016 MEXT document No. 98) on February 17, 2017.

“Scientific and technical cooperation” in the section 11 in the main text of the Resolution is not limited to technologies regulated under the Foreign Exchange and Foreign Trade Act, but includes all cooperation with the exception of medical exchange. Accordingly, it is important to remember that the research institution must adhere to this Resolution in all research activities, including the relevant commissioned research.

See the following link for more information on Security Council Resolution No. 2321.

- Ministry of Foreign Affairs of Japan: United Nations Security Council Resolution No. 2321, Japanese translation (Ministry of Foreign Affairs Notice No. 463 (issued on December 9, 2016))  
<https://www.mofa.go.jp/mofaj/files/000211409.pdf>

## **6.21 Dialogue and Collaboration with Public Stakeholders**

“Promotion of Science and Technology Dialogue with the People (Basic Initiative Policy)” (decided by the Minister of State for Science and Technology Policy and a member of the Diet on June 19, 2010), states that, in order to constantly achieve the excellent results of science and technology and create and further develop Japan’s science and technology, it is essential to return the results of science and technology to the people, gain the understanding and support of the people, and promote science and technology together. If your project is selected for this open call, we request that you actively engage in “scientific and technical dialogue with the people” such as public lectures on research results, symposiums, continuous distribution of research results on the Internet, and round table conferences that involve various stakeholders.

- Promotion of “Science and Technology Dialogue with the People” (Basic Initiative Policy)  
[https://www8.cao.go.jp/cstp/stsonota/taiwa/taiwa\\_honbun.pdf](https://www8.cao.go.jp/cstp/stsonota/taiwa/taiwa_honbun.pdf)



In addition, the "6th Science, Technology, and Innovation Basic Plan" (approved by the Cabinet on March 26, 2021) calls for the co-creation of knowledge and the enhancement of science and technology communications through the participation of diverse entities, including citizen participation. JST provides the following examples of "opportunities for interactive dialogue and collaboration among diverse entities."

- Science Agora

  - <https://www.jst.go.jp/sis/scienceagora/>

- Miraikan

  - <https://www.miraikan.jst.go.jp/en/>

## **6.22 Research Data Management**

In April 2017, JST announced the basic policy regarding the handling of research results for the promotion of open science. This was amended in April 2022. This policy stipulates the basic concept of making research results papers open access and storing, managing, and disclosing research data in the research activities of this project.

As a general rule, researchers participating in this project are requested to publish their research papers through institutional repositories and open-access publications. In particular, a peer reviewed research paper should in principle be published within 12 months. In addition, based on the data policy of the research institution, researchers create a data management plan that describes the policy and plan regarding the storage / management, disclosure / non-disclosure of research data generated as a result of research activities. Please submit it to JST and carry out the research activities after storing, managing, and disclosing the research data based on this plan. This plan can be changed during the course of conducting research.

In addition, the project is required to create metadata (\*1), according to the rules set by JST, on the controlled research data listed in the Data Management Plan, etc. The project is requested to appropriately deposit controlled research data with metadata in an institutional repository designed by the respective research institution, NII Research Data Cloud operated by National Institute of Informatics, or other sources.

Refer to the following for more details.

- JST's Basic Policy Regarding the Handling of Research Results for the Open Science Promotion

<https://www.jst.go.jp/all/about/houshin.html#houshin04>

- JST Basic Policy Operation Guidelines for Handling Research Results to Promote Open Science

[https://www.jst.go.jp/pr/intro/openscience/guideline\\_openscience\\_r4.pdf](https://www.jst.go.jp/pr/intro/openscience/guideline_openscience_r4.pdf)

(\*1) The items to be noted in the Data Management Plan and metadata items are shown in the above guideline.

- Management and Use of Research Data Using Public Funds (Cabinet Office)

<https://www8.cao.go.jp/cstp/kenkyudx.html>

- Basic Idea of the Management and Use of Research Data Using Public Funds (Council for Science, Technology and Innovation)

<https://www8.cao.go.jp/cstp/tyousakai/kokusaipen/sanko1.pdf>

- Common metadata items in the “Basic Idea of the Management and Use of Research Data Using Public Funds” (draft) (as of March 31, 2023)

[https://www8.cao.go.jp/cstp/common\\_metadata\\_elements.pdf](https://www8.cao.go.jp/cstp/common_metadata_elements.pdf)

JST analyzes statistical data such as the number of data modules, data types, disclosure types, storage locations, etc. for the purpose of grasping the contents of the description in the Data Management Plan, supporting researchers, and reflecting these contents in (revising) in the basic policy. JST intends to release analyzed statistical data but will not release individual personal data or data containing identifiable names.

\* For life science data, please refer to “6.23 Data Disclosure from NBDC”.

## 6.23 Data Disclosure from NBDC

The National Bioscience Database Center (NBDC) (<https://biosciencedbc.jp/>) in JST has carried out the Life Science Database Integration Project by promoting the integrated use of databases in the life sciences field created by various R&D institutions and others.

In “Progress and Future Direction of the Integration of Life Science Database Project” (January 17, 2013), the object projects that receive provision of data and databases are to be expanded,

centering on the project promotion division of the NBDC (originally the NBDC as a whole).

Based on these points, program participants are asked to cooperate in disclosure of the following types of data and databases related to the life sciences field that are obtained from this program.

No.	Type of Data	Place of Disclosure	URL
1.	Overview of databases constructed for disclosure	Integbio Database Catalog	<a href="https://integbio.jp/dbcatalog/?lang=en">https://integbio.jp/dbcatalog/?lang=en</a>
2.	Data in the databases constructed for disclosure	Life Science Database Archive	<a href="https://dbarchive.biosciencedbc.jp/index-e.html">https://dbarchive.biosciencedbc.jp/index-e.html</a>
3.	Of items in 2, data related to human beings	NBDC Human Database	<a href="https://humandbs.dbcls.jp/en/">https://humandbs.dbcls.jp/en/</a>

#### 6.24 Description of Systematic Numbers in the Acknowledgments of the Papers, etc.

When submitting the research results obtained in this program, please indicate that you have received the grant from this program.

In the Acknowledgment of the paper, please include “JST RISTEX Grant Number 10 Digit Systematic Number.” The systematic number of the project consists of JPMJRS + alphanumeric 4 digits. The systematic number will be announced at the time of adoption.

The following is an example of the Acknowledgment in the paper.

**【English】**

This work was supported by JST RISTEX Japan Grant Number JPMJRSxxxx.

**【Japanese】**

本研究は、JST、RISTEX、JPMJRSxxxx の支援を受けたものです。

\* If there are two or more programs related to the paper, please list the program names and systematic numbers.

#### 6.25 Research Support Service Partnership Certification System (A-PRAS)

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) established the “Research Support Service Partnership Certification System (A-PRAS)” in FY2019 to improve the research environment for researchers, accelerate the promotion of science and technology and the creation of innovation in Japan, and support the development of various efforts related to research support services. The system accredits research support services provided by private businesses

that meet certain requirements as “research support service partnerships” by the Minister of Education, Culture, Sports, Science and Technology. Eight services have been certified as of April 2023. Researchers are encouraged to explore the wide range of services offered, including finding collaborators, promoting and commercializing research results, and obtaining research funding and equipment.

The details of each certified service can be viewed on the MEXT website below.

[https://www.mext.go.jp/a\\_menu/kagaku/kihon/1422215\\_00001.htm](https://www.mext.go.jp/a_menu/kagaku/kihon/1422215_00001.htm)

## **6.26 Items Noted Regarding the Reformation of Competitive Research Funds**

At the present time, based on the “6th Science, Technology and Innovation Basic Plan,” “Integrated Innovation Strategy 2023,” and “Comprehensive Package to Strengthen Research Capacity and Support Young Researchers,” the government is holding discussions about improving systems related to competitive research funds so as to enable the more efficient and effective use of research funds. If, within the period of this call for submissions, policies common to all competitive research fund programs are announced regarding the improvement of funding systems and the use of funds, you will be notified about these policies when they apply to submissions for this program and the use of program funds.

## **6.27 Consideration on “Guidelines for the Management and Audit of Public Research Funds in R&D Institutions (Practice Standards)”**

(1) Implementation of Management and Audit Systems Based on the “Guidelines for the Management and Audit of Public Research Funds in R&D Institutions (Practice Standards)”

In applying to this funding program and conducting research activities, R&D institutions must stringently observe the “Guidelines for the Management and Audit of Public Research Funds in R&D Institutions (Practice Standards)” (revised on February 1, 2021) (\*).

There is a need for R&D institutions, having implemented a system for managing and auditing public research funds, to take responsibility for making every effort to properly disburse the contract research funds in line with the aforementioned guidelines.

If the Ministry of Education, Culture, Sports, Science and Technology (MEXT) finds deficiencies in the organization’s system implementation as a result of an examination of system implementation based on the guidelines, the research institution may be subject to measures including a reduction

in indirect expenses of the whole competitive research funds, etc. distributed by MEXT and by independent administrative agencies under its jurisdiction.

\* Please refer to the following URL for the details of the “Guidelines for the Management and Audit of Public Research Funds in R&D Institutions (Practice Standards).”

[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1343904\\_21.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1343904_21.htm)

(2) Response to and submission of the “Self-evaluation Checklist for Implementation of Proper Systems” based on the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)”

In concluding a contract for this program, the research organization must establish a management and auditing system for research expenses based on said guidelines and respond/submit the “Self-evaluation Checklist for Implementation of Proper Systems” (hereinafter, “Checklist”), which is a report on the situation (research undertaking will not be approved unless the checklist is responded/submitted).

After April 1, 2024, institutions are urged to review the information provided on the MEXT website listed below and respond to and submit the Checklist according to the instructions provided on the website prior to concluding a collaborative research agreement.

Contracts will be approved for research institutions that have already submitted the FY2023 Checklist regardless of the above. Your organization is requested to complete and submit the FY2024 Checklist procedures by December 1, 2024, if it falls into this category.

The response and submission process must continue throughout the period in which competitive research funding or similar support from JST is received and administered.

On the other hand, institutions that do not receive competitive funding from MEXT or administrative agencies under its jurisdiction are not required to submit or respond to a Checklist.

For more information on this matter, including the above, please refer to the MEXT website shown below.

[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1324571.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1324571.htm)

As these guidelines incorporate the concept of “encouraging the dissemination and exchange of information,” research institutions are invited to actively disseminate information about misconduct prevention measures, for example, by posting such information on their websites.

## **6.28 Consideration on “Guidelines for Responding to Misconduct in Research”**

(1) Administrative System based on the “Guidelines for Responding to Misconduct in Research”

In applying to this funding program and conducting research activities, R&D institutions are required to adhere to the “Guidelines for Responding to Misconduct in Research” (decided by the Minister of Education, Culture, Sports, Science and Technology (MEXT) on August 26, 2014, hereinafter referred to as the “guidelines” )<sup>\*</sup>.

In the case that MEXT finds defects in the approach of organizations as a result of a survey of the situation, based on the guidelines, the Ministry may take measures for the pertinent organization including reduction of indirect expenses of the whole competitive research funds distributed by MEXT and independent administrative agencies under its jurisdiction.

<sup>\*</sup>Refer to the following webpage for the guideline.

[https://www.mext.go.jp/b\\_menu/houdou/26/08/1351568.htm](https://www.mext.go.jp/b_menu/houdou/26/08/1351568.htm)

(2) Submission of the “Self-evaluation Checklist” Based on the “Guidelines for Responding to Misconduct in Research”

Each R&D institution needs to submit the checklist on the status of implementation in accordance with “Guidelines for Responding to Misconduct in Research” (hereinafter referred to as the “Research Misconduct Checklist”). (The R&D institution that fails to submit the checklist cannot conduct R&D activities).

Accordingly, after April 1, 2024, research institutions are requested to review the content of the website below, download the FY2024 version of the Research Misconduct Checklist from e-Rad, complete it, and submit (upload) it via e-RAD to the Research Integrity Promotion Office, Research Environment Division, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT).

Institutions that do not receive funding or budgetary measures from MEXT or administrative agencies under its jurisdiction are not required to submit the Research Misconduct Checklist.

See the website of MEXT below for details of the method for Research Misconduct Checklist submission.

[https://www.mext.go.jp/a\\_menu/jinzai/fusei/1420301\\_00005.html](https://www.mext.go.jp/a_menu/jinzai/fusei/1420301_00005.html)

\*1: A perfect environment for using e-Rad is necessary for checklist submission. Note that the registration of an R&D institution for e-Rad requires approximately two weeks. See the URL below in addition to the URL given above for details of the procedure related to the use of e-Rad.

<https://www.e-rad.go.jp/organ/index.html>

\*2: Institutions that conduct research activities with competitive funding or budgetary measures from MEXT or administrative agencies under its jurisdiction are required to submit the Research Misconduct Checklist for the duration of the research activity before September 30 of each fiscal year (or the immediately preceding business day if September 30 falls on a Saturday, Sunday, or holiday).

### (3) Measures Taken for Misconduct in Research Activities Based on the “Guidelines for Responding to Misconduct in Research”

Misconduct in research activities in this program is treated strictly as described below.

#### (i) Measures to Cancel the Contract

In the case that a specific misconduct (fabrication, falsification, and plagiarism) is found in the R&D project of this program, the Collaborative Research Agreement is cancelled or altered and a refund of all or part of the entrusted expenses is requested. Furthermore, there may be cases in which no agreement is concluded in the following years.

#### (ii) Measures to Restrict Application and Participation Eligibility

Measures given in the table below, depending on the level of inappropriateness and responsibility of specific misconduct, to restrict application to and participation in this program are imposed upon researchers involved in certain misconduct in research papers or reports of this program and those whose involvement has not been established but who are found responsible to an extent for the violation of the duty of due care as a distinct manager of pertinent papers and reports.

Furthermore, in the case that such restriction measures are taken on qualification for application and participation, information is provided to pertinent sections of other competitive research fund systems distributed by the Ministry of Education, Culture, Sport, Science and Technology (MEXT) and independent administrative agencies under its jurisdiction (referred to as “competitive research fund system related to MEXT” hereinafter) and to pertinent sections of competitive research fund systems distributed by other ministries and their independent administrative agencies (referred to as

“competitive research fund systems related to other ministries” hereinafter), which may similarly restrict qualification for application and participation in other competitive research fund systems related to MEXT and to other ministries.

\* “Application and participation” refers to proposing, registering for, and/or applying for a new project, newly participating in research as, e.g., a Joint Researcher, and/or participating in an ongoing research project (continuing project) as a Principal Investigator, Joint Researcher, etc.



Classification of person ineligible to apply to competitive research funds, being involved in specific research misconduct		Degree of maliciousness in specific research misconduct	Ineligible period of application(*)	
Person who was involved in a research misconduct	1. Especially malicious person, who, from the beginning of research, had an intention to commit a specific research misconduct		10 years	
	2. The author of a research paper, which is a product of a research where a specific research misconduct was committed	The authors of the paper, who are responsible for the whole content of it. Namely, they are the supervisor and the representative author of the paper or others who are identified to be equivalently responsible for the paper.	The misconduct has a substantial impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be high. The misconduct has a small impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be low.	5-7 years 3-5 years
		The authors of the paper other than those described above.		2-3 years
		3. Persons who conducted a specific research misconduct other than those of 1 and 2.		2-3 years
	Person who has not been involved in a specific research misconduct but is a responsible author of a paper relevant to a research where a specific research misconduct was committed, being the supervisor or representative author of the paper, or a person, who is identified to be equivalently responsible for the paper.		The misconduct has a substantial impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be high.	2-3 years
The misconduct has a small impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be low			1-2 years	

\* In principle, the application restriction period will be calculated from the fiscal year following the fiscal year when the specific fraudulent activity is determined. Eligibility for participation is also restricted for the fiscal year in which a specific misconduct is determined as such.

(iii) Measures Taken to Researchers Whose Qualification is Restricted for Application to and Participation in the other Competitive Research Fund System and Base Expenses

Qualification is restricted for application to and participation in this program for researchers whose qualification is restricted for application to and participation in other competitive research fund related to MEXT; management grants to national university corporations, inter-university research institute corporations and independent administrative agencies under MEXT; base expenses including private school subsidies; or competitive research fund systems related to other ministries during the period the restriction is in effect.

“Competitive research fund systems related to MEXT” and “competitive research fund systems related to other governmental ministries” include those systems that started a new call for proposals after FY2024 and those that ended in or before FY2023.

(iv) Public Announcement of Misconduct

If misconduct occurs in research activities under this program, JST will, in principle, disclose the details of the project (name of the misconduct case, type of misconduct, project name, outline of misconduct and measures taken by JST). In principle, the details will also be disclosed by MEXT.

The said guidelines state that an R&D institution shall announce the survey result immediately. Each organization is requested to handle the case accordingly.

[https://www.mext.go.jp/a\\_menu/jinzai/fusei/1360483.htm](https://www.mext.go.jp/a_menu/jinzai/fusei/1360483.htm)

## **6.29 Duty to Complete Education on Research Ethics and Compliance**

Researchers who participate in the project of this R&D program shall receive training on research ethics education for the prevention of misconduct in research activities as per the “Guidelines for Responding to Misconduct in Research” and on compliance education as per the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions.”

During the process of concluding a Collaborative Research Agreement after the selection of a proposed R&D project, it is necessary for all researchers participating in the R&D project, including

the Principal Investigator and Lead Joint Researchers, to receive training on research ethics education and compliance education and submit a document to confirm their understanding of the contents of the training.

### **6.30 Handling of Information on the e-Rad System**

Information on e-Rad about individual projects that have been selected for adoption (name of the program, name of the R&D project, name of the affiliated R&D institution, name of the Principal Investigator, budget amount, implementation period and the summary of the R&D project) is considered “information intended to be made public” under Article 5, Paragraph 1, Item (a) of the “Act on Access to Information Held by Independent Administrative Agencies” (Act No. 140 of 2001). Once the proposal has been accepted, this information will be made available to the public through the JST Project Database (hereinafter, “PDB”, <https://projectdb.jst.go.jp/>), which is administered by JST, as well as through this program’s website and the Integrated Research Proposal Search (GRANTS, <https://grants.jst.go.jp/>), as appropriate. Also, research reports and other documents submitted by researchers that can be made public may be disclosed to the public through the PDB.

### **6.31 Provision of Information on the e-Rad System to the Cabinet Office**

The “6th Science, Technology and Innovation Basic Plan” (approved by the Cabinet on March 26) states that EBPM for policy making based on objective evidence will be thoroughly implemented in science, technology, and innovation administration. The information registered in e-Rad is used for appropriate evaluation of R&D with national funds, effective and efficient comprehensive strategy, planning of resource allocation policy, etc.

For this purpose, it is required to enter all updates to information regarding research outputs and accounting of the selected project and any use of indirect expenses related to competitive funding awards in e-Rad every year.

The information necessary for macroscopic analysis, including information on research achievements and accounting performance, will be provided to the Cabinet Office.

### **6.32 Registration of Researcher Information to “researchmap”**

The “researchmap” (<https://researchmap.jp/>) is a Japanese researcher information database with over 300,000 entries. Achievement information can be managed and disclosed here. In addition,

researchmap works with e-Rad and faculty databases of many universities. The registered information can be used in other systems, so it also leads to efficiency by eliminating the repeated registration of same achievements in various application forms and databases.

The information in researchmap is utilized effectively for surveying national academic or S&T plans, as well as for statistical purposes. Researchers involved in this program are advised to register at researchmap.

### **6.33 Patent Applications by JST**

In case an R&D institution does not acquire rights to an invention, JST may acquire those rights in some cases. Therefore, if an R&D institution does not foresee acquiring rights to an invention, the researcher should notify JST promptly, providing information concerning the said invention, etc. in any appropriate format. (The above “information concerning the said invention” means information necessary for JST to determine whether an application for intellectual property rights is possible or not, for example, a copy of the notification of invention used in the R&D institution.)

JST will conduct a study based on the received notice, and if JST judges, based on the results, that an application for the said invention, etc. is possible, a separate “Patent Rights Transfer Agreement” will be concluded between the R&D institution and JST.

#### **\* System for Non-Disclosure of Patent Applications**

The purpose of the patent system is to provide patent rights and to conduct uniform public disclosure of inventions for which a patent application has been filed. This is intended to encourage further technological progress and to prevent duplication of R&D efforts. On the other hand, prior to the implementation of the System for Non-Disclosure of Patent Applications, the Japanese patent system required that the contents of a patent application be disclosed to the public one year and six months after filing, regardless of whether the invention should be kept confidential for security reasons. In many countries, it is common practice to keep patent applications for such inventions closed to the public. Consequently, Japan established the System for Non-Disclosure of Patent Applications under the “Act on the Promotion of Ensuring National Security through Integrated Implementation of Economic Measures” (Law No. 43 of 2022) (hereinafter, “the Economic Security Promotion Act”), which suspends patent disclosure procedures in certain cases to prevent dissemination.

Under the Economic Security Promotion Act, if the description etc., of a patent application includes an invention that, if made known to the public, would be highly likely to create a situation involving

undermining the security of the nation and its citizens through actions taken from the outside, the patent procedures, such as publication of the application, decision of patent grant and decision of refusal, are suspended by a procedure established as “security designation.” In addition, during this period, disclosure of the invention’s contents, including public disclosure, and use of the invention that could lead to similar results are generally prohibited. Withdrawal by filing a withdrawn patent application is also prohibited. Researchers are requested to comply with national laws, guidelines, and notices including the Economic Security Promotion Act.

The details of the System for Non-Disclosure of Patent Applications can be viewed on the Cabinet Office website. See below for details.

- Cabinet Office: System for Non-Disclosure of Patent Applications

[https://www.cao.go.jp/keizai\\_anzen\\_hosho/patent.html](https://www.cao.go.jp/keizai_anzen_hosho/patent.html)

## Chapter 7 Submission via the Cross-ministerial R&D Management System (e-Rad)

### 7.1 Cross-ministerial R&D Management System (e-Rad) \*

The Cross-ministerial R&D Management System (e-Rad) is a cross-ministerial system that provides a series of on-line processes to manage the publicly funded research programs under the jurisdiction of ministries and agencies (Acceptance of applications → Screening → Selection → Management of selected project → Registration of research results and accounting performance → Report on research achievements).

\* “e-Rad” is the abbreviation of the Cross-ministerial R&D Management System, which is created by adding the capital letter of “e” of “Electric” to the capital letters of “Research and Development” for science and technology.

### 7.2 e-Rad Usage Notes

Applications for this funding program should be submitted through e-Rad.

To apply, refer to the e-Rad portal site (hereinafter, “the portal site”) (<https://www.e-rad.go.jp/en/>).

\*Paper documents are generally not accepted in the various application procedures for use of e-Rad. Please perform the various procedures on the e-Rad portal site.

\*Please check the recommended operating environment ([https://www.e-rad.go.jp/en/operating\\_environment.html](https://www.e-rad.go.jp/en/operating_environment.html)) first.

Additionally, pay particular attention to the following points when applying.

- (1) Proposers are required to pre-register information on the R&D institution and its researchers. Please refer to “7.5 (1)” for details.
- (2) Proposers are required to register information on research integrity in e-Rad in advance. Please refer to “7.5 (2)” for details.
- (3) Please allow several days (or more) before the application deadline for inputting information into e-Rad: Input of information into e-Rad takes a minimum of around 60 minutes. Furthermore, on the day of the application deadline, there is a risk that the e-Rad system may be congested

and inputting may take a long time. Please allow sufficient time before the application deadline to commence inputting information into e-Rad.

- (4) It is possible to “temporarily save” input information. It is possible to discontinue input of and temporarily save application information part way through.
- (5) “Retraction” on e-Rad system is possible: Up to the application deadline, it is possible for researchers to retract and re-edit their R&D proposals. However, do NOT “retract” R&D proposals on the day of the application deadline. On the day of the application deadline, there is a risk that the e-Rad system may be congested and re-editing and re-submitting the proposal after retraction may take a very long time. R&D proposals cannot be “retracted” after the application deadline. For details, please refer to e-Rad operation manual ([https://www.e-rad.go.jp/en/manual/for\\_researcher.html](https://www.e-rad.go.jp/en/manual/for_researcher.html)).

### 7.3 Application Method Using e-Rad

- (1) Registration of information on R&D institution, researcher, and research integrity.

Researchers without a log-in ID and password must be registered by the administration staff of the R&D institution.

↓

- (2) Obtain required application guideline and R&D proposal forms.

Please check the list of Calls for Proposals in the e-Rad portal site and download the application guideline and the proposal format. Please ensure to choose the proposal format corresponding to the program/phase as each proposal format is different.

↓

- (3) Prepare an R&D proposal (Maximum file size: 5 MB).

↓

- (4) Enter application information into the e-Rad system.

Enter the necessary information into the e-Rad system. It takes approximately 60 minutes.

↓

- (5) Submit your R&D proposal. (Upload file to e-Rad for submission)

Please ensure to submit your proposal to the correct program.

## 7.4 Others

### (1) Where to direct questions on how to use the e-Rad system

Questions about the program itself are answered by the person in charge of the program. Questions about e-Rad operation methods are answered by the e-Rad Help Desk. Before asking questions, be sure to read both the website outlining the call for R&D proposals and the e-Rad Portal site carefully.

JST will not answer any questions regarding the status of review or acceptance.

Questions concerning the Call Programs, and procedures for preparation of application documents and submission, etc.	<b>For questions, please contact us by e-mail.</b> <b>Research Institute of Science and Technology for Society (RISTEX),</b> <b>Japan Science and Technology Agency (JST)</b> E-mail : <a href="mailto:boshusolve@jst.go.jp">boshusolve@jst.go.jp</a>
Questions concerning The Cross-ministerial R&D Management System (e-Rad) Registration of institution or research, or how to operate e-Rad, etc.	<b>e-Rad helpdesk</b> Tel: 0570-057-060 (navi dial) Office hours: 9:00-18:00 ●Except on Saturdays, Sundays, holidays, and the year-end and the new year period.

- RISTEX “Call for R&D Proposals” website (<https://www.jst.go.jp/ristex/proposal/>)

- e-Rad portal website (<https://www.e-rad.go.jp/en/>)

### (2) Availability of e-Rad

Basically, e-Rad operates 24 hours a day, 365 days a year, but may stop the service for system maintenance. This will be announced in advance on the e-Rad portal site.

## 7.5 Operating Instructions and Notes

### (1) Pre-registration for use of e-Rad



(<https://www.e-rad.go.jp/organ/index.html>) (<https://www.e-rad.go.jp/en/researcher/index.html>)

R&D institutions and their researchers have to be pre-registered on e-Rad by the time of application. Once registration has been completed, subsequent registrations are not required for systems and projects managed by other ministries, agencies, etc. Additionally, R&D institutions and/or researchers who are already registered in a system or project managed by another ministry, agency, etc. do not need to register for e-Rad.

#### ① Registration of an R&D institution

An R&D institution must assign a representative for e-Rad, and this representative must complete the procedure on the “Apply for Registration of an R&D Institution” page (<https://www.e-rad.go.jp/organ/entry.html>). Registration may take several days. Allow at least two weeks for this procedure.

#### ② Registration of department information, administrator information, work information, and researcher information

The representative logs in to e-Rad using the ID and password they obtained in step ①, registers department information, administrator information, work information, and researcher information, and issues IDs and passwords for administrators and researchers. Lead Joint Researchers other than Principal Investigators do not need to register in order to apply, but will need to obtain an ID by the time their project is adopted.

For details on how to register, refer to “10. Procedure for R&D institutions”, “11. Procedure for administrators at R&D institutions”, and “12. Procedure for researchers” in the manual for representatives of R&D institutions on the e-Rad portal site ([https://www.e-rad.go.jp/manual/for\\_organ.html](https://www.e-rad.go.jp/manual/for_organ.html)) (<https://www.e-rad.go.jp/en/researcher/index.html>).

#### (2) Registration of research integrity information

\*Be sure to register this information if it has not been input since the amendment of e-Rad (March 15, 2022). If it has already been registered, it does not need to be registered again.

To eliminate unreasonable duplication and excessive concentration of competitive research

funds, ensure transparency in research activities, and ensure appropriate efforts, Proposers shall provide information on the current application/acceptance status of other competitive research funds including those of other ministries and other research funds (program name, R&D subject, implementation period, budget amount, effort, etc.) and information on all current affiliated institutions / positions (including side jobs, participation in foreign recruitment programs, honorary professors without employment contracts, etc.) according to the amendment of the Guidelines on Competitive Research Funds on December 17, 2021.

(3) Points to note when uploading a proposal to the e-Rad system

- Please check these application guidelines thoroughly when creating a proposal document.
  - Please ensure to use the format provided for the Program in the fiscal year of the application. Applications using formats for other programs and/or for other fiscal years will not be accepted.
  - The proposal document needs to be converted to PDF before uploading it to e-Rad. This can be done in the menu displayed after logging in to e-Rad.
  - Please make sure that the size of the proposal PDF submitted is no more than 5MB.
  - Please delete all the track change records.
  - Please do not set a password to the PDF file of the proposal.
  - Please check that the file converted to PDF has the page numbers inserted
  - Please make sure to check the converted PDF file as following errors could occur.
- \* The use of external characters or special characters may cause corrupted text in the page or file concerned (please refer to “e-Rad operation manual” (can be downloaded from the e-Rad Portal site) regarding the use of characters permitted to use).

For details, please refer to the call for R&D proposals in Japanese.

## Chapter 8 Q&A on Call for Proposals

### ■ Enrolling in the educational program for research integrity

#### Content of the Educational Program for Research Integrity

Q What content must be included in the educational program for research integrity conducted by affiliated institutions?

A Educational programs for research integrity are the responsibility of each research institution. JST does not specify the specific teaching material to be used in such programs.

(Reference)

According to the “Guidelines for Responding to Misconduct in Research Activities” (August 26, 2014, adopted by the Minister of Education, Culture, Sports, Science and Technology), research institutions are required to implement a structure for preventing misconduct—such as the installation of a “Research Integrity Education Manager”—and conduct education at the institutional level. Further, the allocating institution is also required to confirm researcher enrollment in the institution’s educational programs for research integrity.

Note, however, that the details in the referenced guidelines focus on misconduct related to academic papers and does not cover bioethics and conflicts of interest, which are different topics.

If you have any questions, please contact JST Office of Research Integrity.

Research Integrity Division, Department of Legal Affairs and Compliance,

Japan Science and Technology Agency (JST)

E-mail: [rcr-kousyu@jst.go.jp](mailto:rcr-kousyu@jst.go.jp)

#### Program Completion Certification

Q Is it necessary to submit documentation certifying completion of an educational program for research integrity?

A No, submission is not necessary at proposal.

#### Deadline for Completing the Program

Q I cannot complete the educational program for research integrity before the application deadline. Can I complete the program after the deadline?

A Completion of the educational program for research integrity by Principal Investigator is a prerequisite for applying. Enrollment and completion of this program will not be permitted after the solicitation deadline. For details, please refer to “6.1 Enrolling in and Completing the Educational Program for Research Integrity”.

#### Declaration of Completion

Q. I have completed the eAPRIN (formerly CITI) digest version in the past for this program (or another JST program) proposal. Do I need to take the course again?

A. You do not need to complete the program again. Please declare the “completion of the digest version” in the e-Rad application information input screen.

#### Availability of an English Version of the eAPRIN (ex-CITI Japan) Digest Version

Q Since I have not taken the program offered by my institution, I am planning to enroll in the digest version of eAPRIN (ex-CITI Japan). What options are there if my native language is not Japanese, which makes taking the course in Japanese difficult?

A. Please take the English digest version of eAPRIN (ex-CITI Japan).

#### ■ Others

##### Requirements for Proposers

Q. Is there an age limit?

A. There is no specific age limit, but it is necessary that the Principal Investigator and Collaborator (Proposers) be able to create a structure that can perform the research at an organization or the like in Japan and carry out the R&D projects throughout the project period.

Q. Can I be both the Principal Investigator and Collaborator?

A. Yes, you may be both. However, as you are taking on the roles of both “the person in charge of research and development” and the “representative of parties working on social issues” at the same time, your ability to secure sufficient effort and to balance both roles are subject to evaluation. If you will be taking on both roles in the solution creation phase, you will also provide a business plan for the institution that will bear responsibility for the establishment and dissemination activities after the completion of the project.

Q. When multiple institutions participate as parties addressing social issues, does each institution need a “representative of parties working on social issues”?

A. This is not necessary. However, one representative must be decided per application, and must be submitted jointly with the “the person in charge of research and development.”

#### Technology Seeds

Q. This program requires the utilization of Technology Seeds that have already been obtained, but which Technology Seeds are these? Is there any scope or restrictions?

A. Technology Seeds based on natural science are envisioned, so please make applications within this expected scope. When making selections, we will take the various definitions of natural science into account.

Q. Must all Technology Seeds be included in the application if there are many?

A. Please include up to three representative Technology Seeds.

## Multiple Applications

Q. I previously submitted a proposal for a different JST project. Can I also submit a proposal in this program?

A. Yes, you may submit another proposal. However, Proposers may not submit an application for this program together with 2024 calls for the “Responsible Innovation with Conscience and Agility (RInCA)”, “Solution-Driven Co-creative R&D Program for SDGs: Social Isolation & Loneliness”, or “Solution-Driven Co-creative R&D Program for SDGs: Trust Formation from Social Aspects in the Information Society.” In addition, in cases where the Principal Investigator or Research Participants, etc. participate in multiple projects through any competitive research funding system operated by JST, adjustment may be made such as reducing the R&D budget according to the effort of the researchers or requiring researchers to select one project for implementation.

## Institutional Approval at the Time of Application

Q. Do I need to obtain approval from my affiliated research institution when I apply?

A. You do not need approval from your institution for applications submitted through e-Rad, but, please ensure that you obtain prior consent. After projects are selected, JST will enter into a Collaborative Research Agreement with the researchers’ affiliated research institutions. Please note that, if a Collaborative Research Agreement cannot be entered into, the R&D budget cannot be used, so please carefully read “5.9 Responsibilities of Research Institutions.” There is no need to submit an approval letter.

## Implementation by Foreign Institutions

Q. What criteria will be used to determine whether the performance of research would be impractical if not done at a foreign institution?

A Decision concerning whether research must be performed overseas are assumed as following.

- ① Required facilities do not exist in Japan and have been installed only in foreign institution.
- ② here is investigation and research that can be performed only by the research institution.
- ③ Research materials and data can be obtained only at a foreign research institution or foreign location and cannot be brought to Japan.

### Collaboration with Foreign Institutions

Q. Collaboration with foreign institutions gives extra points, but is such collaboration actively encouraged when conducting R&D?

A. This means we will evaluate issues with the future potential to be developed internationally through collaboration with foreign institutions and other means after the completion of research and development in this program. Collaboration with foreign institutions is allowed during the research period, but locations for the feasibility and verification tests are limited to regions within Japan.

### Interview Screening

Q. If I am not available on the day of the interview screening, can I change the interview screening date?

A. Please be aware that because the schedule is determined by coordinating the schedules of numerous evaluators, the schedule cannot be re-adjusted.

### R&D Budget

Q. Do the "R&D budget" written on the application include the amount of indirect costs paid to the institution when the Collaborative Research Agreement is concluded?

A. R&D budget refers to direct costs. They do not include indirect costs. Please write about only direct costs.

### Direct Costs

Q. After R&D commences, is it possible to change the detailed use of funds within the budget based on the progress and other factors (for example, using funds initially allocated to expenses for goods to travel expenses) (exchange of direct costs between expense items)?

A. The exchange of direct costs between expense items can be done under certain conditions.

- Conditions for shifting funds without requiring approval from JST:

If the amount of funds to be shifted from each expense items does not exceed 50% of the total direct costs in the relevant fiscal year (if 50% of the total direct costs does not exceed 5 million yen, then 5 million yen)

- Conditions for shifting funds after approval from JST (Program Supervisor) that it is necessary for research implementation

If the amount of funds to be shifted from each expense items exceeds 50% of the total direct costs in the relevant fiscal year and exceeds 5 million yen

Note that you are not allowed to exchange direct cost and overhead (indirect) cost.

#### Indirect Costs

Q. What types of expenditures can indirect costs be used for?

A. Indirect costs are funds for the research institution to allocate to the expenses required for improving the research environment of the implementers participating in a project selected for this program or for enhancing the overall functionality of the research institution. The “Common Guidance for the Execution of Indirect Expenses of the Competitive Fund” (agreed upon by the coordination committees of relevant ministries and agencies on April 20, 2001 and amended on May 31, 2023) gives the following examples as the main uses of indirect costs.

1) Expenses relating to management divisions

- Expenses for development, maintenance, and operation of management facilities and equipment

- Expenses necessary for management administration

Expenses for purchase of supplies and consumables, equipment lease expenses, miscellaneous expenses, personnel expenses, communications and transportation expenses, honoraria, domestic and overseas travel expenses, conference expenses, printing expenses, etc.

2) Expenses relating to research divisions

- Expenses relating to goods used in common

Expenses for purchase of supplies and consumables, equipment lease expenses, miscellaneous expenses, communications and transportation expenses, honoraria, domestic and overseas travel expenses, conference expenses, printing expenses, newspaper and periodical expenses, utility expenses



- Expenses necessary to promote research activities through applications of the relevant research etc.

Personnel expenses for researchers and research support staff, Expenses for purchase of supplies and consumables, equipment lease expenses, miscellaneous expenses, communications and transportation expenses, honoraria, domestic and overseas travel expenses, conference expenses, printing expenses, newspaper and periodical expenses, utility expenses, Research paper submission fees (paper publication fees)

- Patent related expenses
- Research building development, maintenance, and operation expenses
- Experimental animals facility development, maintenance, and operation expenses
- Researcher interaction facility development, maintenance, and operation expenses
- Facility development, maintenance, and operation expenses
- Network development, maintenance, and operation expenses
- Large-scale computing (including supercomputer) development, maintenance, and operation expenses
- Large-scale computing building development, maintenance, and operation expenses
- Library development, maintenance, and operation expenses
- Field development, maintenance, and operation expenses, etc.

### 3) Expenses relating to other relevant operation divisions

- Expenses relating to dissemination of research results
- Expenses relating to publicity, etc.

Even in cases other than the above, indirect costs may be used in cases where the head of the research institution makes a determination that the expenses are necessary to improve the research and development environment of researchers who received competitive funds or to enhance the overall functionality of the research institution. However, this does not include funds that are to be allocated to direct costs.

Research institutions that receive distributions of indirect costs shall properly manage indirect costs and appropriately retain receipts and the like evidencing the proper use of indirect costs for

five years from the fiscal year after the fiscal year in which the project is concluded. Furthermore, research institutions that receive distributions of indirect costs shall report the results of annual indirect cost use to JST by June 30 of the following fiscal year via the Cross-ministerial R&D Management System (e-Rad). If the method of making reports via e-Rad is not clear, please refer to the e-Rad user manual ([https://www.e-rad.go.jp/manual/for\\_organ.html](https://www.e-rad.go.jp/manual/for_organ.html)) or the FAQs (<https://qa.e-rad.go.jp/>).

#### Other Grants

Q. It is required to write about grants received or being applied for “including those from overseas organizations” in form 5. What should I specifically write about research funds received or being applied for from overseas institutions?

A. When applying, the Proposer is required to provide a wide range of research funds received or being applied for. Please be sure to fill in all research funds accepted from foreign institutions, such as competitive research funding, subsidies from private foundations, contract research expenses from companies, and joint research expenses, etc.

#### Outsourcing

Q. Is it possible to subcontract software preparation and other such work to external companies, etc.?

A. If it is required as a matter of advancing the project, it is possible. However, there is a premise that such subcontracting of work to outside parties is based on “subcontracting agreements” that exclude R&D work. In principle, the subcontracting of R&D work is not permitted.

#### Personnel Transfers after Proposal Selection

Q. If a Principal Investigator experiences a change in position (promotion, transfer to a different research institution, etc.) while conducting research, will the Principal Investigator be permitted to continue research activities?

A. As long as it is possible to continue research activities unhindered by the change in position, research activities may be continued.

## Subcontracting

Q. Do the Collaborative Research Agreements between JST and the R&D participants' affiliated research institutions take the form of "subcontract" (see note) via the Principal Investigator's research institution?

Note: "Subcontract" in the Collaborative Research Agreement means that JST concludes a research agreement only with a research institution with which the Principal Investigator is affiliated and the research institution with which the said Principal Investigator is affiliated concludes another research agreement with a research institution with which a Joint Researcher is affiliated.

A. In this program, Collaborative Research Agreements are not subcontracts. JST concludes Collaborative Research Agreement separately with each of research institutions with which the Principal Investigator and Lead Joint Researchers are affiliated.

## Lead Joint Researcher

Q. What is the meaning of Lead Joint Researcher and Group Leader?

A

Group Leader:

Research and development project comprises multiple research groups. The implementer who represents each group is referred to as the "group leader." Principal Investigators or Collaborators are group leaders.

Lead Joint Researcher:

JST contracts Collaborative Research Agreement separately with each of research institutions and disburses research and development funds, and the group leaders who belong to the research institution that contracts Collaborative Research Agreement with JST, other than Principal Investigator, is referred to as the "lead implementers." Collaborators are lead implementers too.

#### Registration on e-Rad by Lead Joint Researcher/Group Leader

Q. Other than the Principal Investigator or Collaborator, is it necessary to register anyone on e-Rad?

A. "Lead Joint Researcher" is a unique name used by JST and is not on e-Rad. Please register the "Lead Joint Researcher" as the group leader. It is not necessary to register the implementers.

Q. Some Collaborators and Lead Joint Researcher/Group Leaders do not have an e-Rad researcher number, but can they still register on e-Rad?

A. Only the Principal Investigator is required to have an e-Rad researcher number when applying. Collaborators and Lead Joint Researcher/Group Leaders do not need researcher numbers when applying. After project adoption, you will be asked to obtain e-Rad researcher numbers as required.

#### Coordinator and Bearer

Q. Can the Principal Investigator or Collaborator also be the coordinator, person in charge of establishing solutions, and person in charge of expanding solutions to other communities, as written in the application (Form 6) project concept of the solution creation phase?

A. The most appropriate people should be the coordinator, person in charge of establishing solutions, and person in charge of expanding solutions to other communities. We generally do not expect the Principal Investigator or Collaborators to have dual roles. However, exceptions may be made if it is optimal for the Principal Investigator or Collaborators to also be the coordinator, person in charge of establishing solutions, or person in charge of expanding solutions to other communities.

For example, it may be considered in the following cases.

- When the collaborator is a member of the local government, and the solution is to be institutionalized in the local government for it to be established (dual roles as Collaborator and person in charge of establishing solutions)
- When the Principal Investigator is a member of a nationally active NPO and will independently develop solutions after the completion of the R&D project (dual roles as Principal Investigator and person in charge of expanding solutions to other communities)

Furthermore, we will confirm that the background and roles of the coordinator, person in charge of establishing solutions, and person in charge of expanding solutions to other communities are consistent with the “R&D Plan” and the “Scenario for Establishing Solutions and Expanding Solutions to Other Communities” during selection.

#### Securing an R&D Period (R&D implementation) Until the End of the Fiscal Year

Q. When does a research results report need to be submitted?

A. JST has made the following arrangements so that R&D participants can make the most use of R&D period to conduct R&D.

- The deadline for submitting the report on the research achievements, “Results Report” for the fiscal year is May 31 of the following fiscal year.
  - The deadline for submitting the accounting report, “the Collaborative Research Results Report (and Income and Expenditure Settlement Report)” for the fiscal year is May 31 of the following fiscal year.
  - However, if the end of the R&D period for the last fiscal year is not the end of March of the relevant fiscal year, please submit the report above by the date designated by JST within 61 days after the end of the contract period.
- \* Each research institution shall establish the necessary internal structures considering that the objective of the above arrangements is to secure an R&D period (R&D implementation) until the end of the fiscal year.

## Adopted Proposals and Application Status

Q. Please let us know the status of proposals and applications for other RISTEX fields and programs in the last fiscal year.

A. Please refer to the following website.

1. FY2023 joint press release on adoption results of the three following programs:

<https://www.jst.go.jp/pr/info/info1642/index.html>

- Solution-Driven Co-creative R&D Program for SDGs: Scenario Creation Phase, Solution Creation Phase
- Solution-Driven Co-creative R&D Program for SDGs: Preventing Social Isolation & Loneliness and Creating Diversified Social Networks
- Responsible Innovation with Conscience and Agility (RInCA)

2. FY2023 press release on adoption results of the “Solution-Driven Co-creative R&D Program for SDGs: Trust Formation from Social Aspects in the Information Society”

<https://www.jst.go.jp/pr/info/info1646/index.html>

## English Version of the Application Guidelines

Q. Is it correct to assume that the content of the English version is the same as the Japanese version?

A. The English version of the application guidelines is a translation of the Japanese version. If there is any discrepancy between the English and Japanese versions, please refer to the Japanese version as the correct one.

Q. Can I prepare my application in English?

A. This program only accepts applications in Japanese.

## Preparation of Applications in Accordance with the Purpose of This Program

Q. Please tell me what I should pay particular attention to when preparing my application in accordance with the purpose of this program.

A. For calls in previous years, there were excellent applications that were not selected because they did not fit the purpose of the program. The following tendencies were seen as reasons for not being selected, so please refer to them when preparing or reviewing your application.

1) Reasons for not being selected that were often seen in the scenario creation phase

- More importance is placed on the research and development of Technology Seeds than on addressing social issues.

- There is little likelihood that the issue will be solved with Technology Seeds.

- There is almost no prospect of future expansion into other communities.

- The participation of important stakeholders, including beneficiaries, is not shown in the plan when conducting the proposed feasibility study.

- There is an unreasonable connection between the application content and the targeted social issue.

- The application content lacks novelty and originality, and has little social impact.

2) Reasons for not being selected that were often seen in the solution creation phase

- More importance is placed on the research and development of Technology Seeds than on addressing social issues.

- There is almost no prospect of expansion into other communities after completion of the project.

- The participation of important stakeholders, including beneficiaries, is not shown in the plan when conducting the proposed verification test.

Q. What is a scenario (project concept)?

A. A scenario (project concept) is a system for firmly establishing, in a specific region, a method for solving a social issue (solution strategy). For such a system, it is essential that feasibility studies based on hypotheses have been finished, and that the effectiveness of the solution strategy and bottlenecks in terms of social issues have been confirmed. There is a need not only for systems based on technical seeds, but also for efforts like close involvement of key stakeholders to maintain and develop those systems, as well as elucidation of issues for multi-region deployment and paths to solution of those issues.

## Chapter 9 Guide to Completing the Proposal

Please refer to the original Japanese version.

## Chapter 10 References

(Related websites)

■United Nations Information Centre

2030 Agenda

[https://www.unic.or.jp/activities/economic\\_social\\_development/sustainable\\_development/2030agenda/](https://www.unic.or.jp/activities/economic_social_development/sustainable_development/2030agenda/)

■Japan Business Federation

<https://www.keidanrensdcgs.com/>

■Sustainable Development Goals (SDGs) Promotion Headquarters

SDGs Action Plan 2023

[https://www.kantei.go.jp/jp/singi/sdgs/dai13/sdgs\\_actionplan2023.pdf](https://www.kantei.go.jp/jp/singi/sdgs/dai13/sdgs_actionplan2023.pdf)

■Cabinet Office

"Convergence of Knowledge" portal site

"Convergence of Knowledge: Basic Concept and Strategic Promotion Measures — Interim Summary"

<https://www8.cao.go.jp/cstp/sogochi/index.html>

■Ministry of Education, Culture, Sports, Science and Technology (MEXT)

[https://www.mext.go.jp/b\\_menu/shingi/gijyutu/gijyutu2/092/houkoku/1410641.htm](https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu2/092/houkoku/1410641.htm)

[https://www.mext.go.jp/a\\_menu/kagaku/kokusai/sdgs/1408737.htm](https://www.mext.go.jp/a_menu/kagaku/kokusai/sdgs/1408737.htm)

[https://www.mext.go.jp/a\\_menu/kagaku/kokusai/sdgs/1408738.htm](https://www.mext.go.jp/a_menu/kagaku/kokusai/sdgs/1408738.htm)

■JST

Science, Technology and Innovation (STI) for implementing the SDGs

<https://www.jst.go.jp/sdgs/actionplan/index.html>

"STI for SDGs" Award

<https://www.jst.go.jp/sis/co-creation/sdgs-award/>



## 【Inquiries】

**Questions concerning the call for R&D proposals are accepted by e-mail.**

**boshusolve@jst.go.jp**

**The latest information will be posted on the following RISTEX Website.**

<https://www.jst.go.jp/ristex/proposal/>

<https://www.jst.go.jp/ristex/solve/index.html>

Research Institute of Science and Technology for Society (RISTEX),

Japan Science and Technology Agency (JST)

Address: Science Plaza, 5-3 Yonbancho, Chiyoda-ku, Tokyo 102-8666, Japan

**【Questions concerning the Cross-ministerial R&D Management System (e-Rad)】**

e-Rad helpdesk: 0570-057-060 (Navi Dial)

Office hours: 9:00~18:00

※Except on Saturdays, Sundays, holidays and the year-end and new-year period