

Details of the R&D Focus Area/Program

FY2025

RISTEX R&D Programs

Solution-Driven Co-creative R&D Program for SDGs (SOLVE for SDGs)

: Trust formation from social aspects in the information society

Call for R&D Proposals

[Application Guidelines]

Application Call Period

Wednesday, April 9 ~ 12:00 (noon, Japan time) on Wednesday,

June 4, 2025

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.

Please refer to the separate guideline for general information. This section outlines the R&D supervisor's perspectives behind the Program's approach to calls for proposals and selection and provides a general overview of the Program. Be sure to read this section carefully before submitting your proposal.

https://www.jst.go.jp/ristex/proposal/proposal_2025.html



Japan Science and Technology Agency

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

April 2025

■ Selection Schedule

Call begins	Wednesday, April 9, 2025
Briefings of solicitation	Thursday, April 24, 2025, Online Meeting Details will be posted on the proposal application website. (https://www.jst.go.jp/ristex/proposal/proposal_2025.html)
Application deadline *1	12:00 (noon, Japan time) on Wednesday, June 4, 2025 (No delays accepted)
Notification of document screening results*2	Notice will be provided at least one week prior to the interview screening(planned).
Interview screening *3 (Held online)	Tuesday, August 1 and Saturday, August 2, 2025 (planned)
Candidates interview with the Program Supervisor	Wednesday, August 20 and Friday, August 22, 2025 (planned)
Notification and announcement of selection results	Late September 2025 (planned)
Start of R&D	Early October 2025 (planned)

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

*2 Candidates selected for the interview screening will be required to prepare and submit “Presentation Slides” and “Answers to the Pre-interview Confirmation Items” prior to their interview.

*3 The interview screening will be held online via Zoom. Your cooperation in participating in the pre-connectivity test is appreciated.

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Chapter1. Concept of Program Supervisor in Solicitation and Selection

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1.1 Current situation

Against the backdrop of the rapid development of artificial intelligence (AI) and information and communications technology (ICT), among other developments, digitalization is spreading throughout every aspect of society on a global scale. Japan's Fifth Science and Technology Basic Plan (FY2016-FY2020) (approved by the Cabinet on Jan. 22, 2016) proposed "a concept of Society 5.0, which will build a future society that brings affluence to people by fully utilizing ICT and integrating cyberspace and physical space." The Sixth Science, Technology, and Innovation Basic Plan (FY2021-FY2025) ((approved by the Cabinet on Mar. 26, 2021) clearly states the necessity of materializing this concept. In order to aggressively promote the digitalization of society, the Japanese government established the Digital Agency as the agency in charge in September 2021, and digital transformation aimed at realizing "human-friendly digitalization that leaves no one behind" is being promoted as a national strategy.

The digitalization of society will bring significant changes and benefits to people's lives, and it is expected that the level of convenience enjoyed in society will continue to improve in the future.

According to the "FY2023 Survey Report on Usage Time of Information and Communications Media and Information Behavior¹," conducted by the Institute for Information and Communications Policy of the Ministry of Internal Affairs and Communications, smartphone usage among survey participants in their teens to 60s has reached 97.5%, approaching 100%. As a result, smartphones have made information easily accessible to everyone, while social media services and apps have enabled users to share information themselves. This ease of connecting with others and sharing information online has significantly increased the amount of information people receive, making the online space an integral part of both economic and social activities.

In today's information society, the limited time individuals can devote to process the vast amount of information has made it increasingly difficult and risky to identify and utilize the information they really need. As society has moved from a model in which most people were passive recipients of information to one in which anyone can act as an information provider, the risk of becoming a victim of fraud or

¹ https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2024/6/21_4.html

crime - by participating in the spread of misinformation, whether intentional or accidental, and by impersonating an authentic information provider - has increased. Moreover, the rise of the attention economy and the rapid advancement of generative AI in recent years have further exposed the negative aspects of digitization, leading to social issues such as growing anxiety and disadvantages for citizens when acquiring and using information.

As the amount of information available continues to expand and exceed what individuals can handle, the need to capture attention and differentiate from competing information has become increasingly critical. Focusing on those who disseminate information - such as the media and online service providers including platform operators - their tendency to create content designed to attract attention and drive business performance further complicates efforts to tackle the aforementioned challenges. A key factor that has been identified as contributing to the negative aspects of the attention economy is the kind of advertising algorithms designed to maximize revenue, along with the complex monetization structures that support these systems. In addition, a growing number of individuals are exploiting the properties of the attention economy not only for commercial gain, but also by making extreme statements to gain attention, spreading provocative content for their own amusement, or seeking to manipulate public opinion. Information sharing that aims to elicit human emotions such as fear, anxiety, or anger - rather than prioritizing the accuracy or quality of information - represents a negative aspect of the attention economy that can undermine social stability and disrupt meaningful communication.

With these changes in the way information is disseminated and utilized, it is becoming difficult for the sender of information and the information itself to be trusted by the recipients of the information and society.

The concept of "trust" referred to here differs from "old trust," which is based on face-to-face human interactions and established interpersonal rules. Increasingly, trust is being challenged by factors beyond the scope of "old trust" - such as relationships that extend into virtual spaces, reliance on systems supported by complex technologies such as AI - often described as black boxes - the creation of fake images, video, and audio by AI technologies, and the growing sophistication of "deception techniques" such as account spoofing. Moreover, the inappropriate dissemination or use of information can create distrust and contribute to societal fragmentation, regardless of the presence of trust.

In 2024, elections were held in many countries and regions around the world, during which AI-generated fake images and videos were widely disseminated. In Japan, the number of people who collect information through social networking sites (SNS) continues to increase, highlighting the

growing need to maintain the integrity and reliability of the information space on SNS. In addition, there is mounting concern about the negative impact of using advertising on social networking sites (SNS), including fake ads created by third parties impersonating celebrities or well-known companies, and the proliferation of ad-intensive sites (made-for-advertising sites).

In response to these problems, research and development of "digital trust" on the technical side, such as information preservation and tampering prevention, improvement of communications safety and security, and ensuring information traceability, has been actively promoted. However, looking at information-related "trust," we can see that there are social aspects that cannot be resolved by technological development alone. For example, while AI-based content moderation and fact-checking technologies can be used to combat disinformation and misinformation, they can at times restrict freedom of expression and pose challenges to maintaining neutrality. Therefore, when introducing new rules and regulations, for example, it is necessary to take into account considerations for freedom of expression and speech, as well as concerns about the application of laws and regulations, including those outside Japan, and there are a wide range of academic fields and social fields that need to be addressed.

While technological advances and demonstration projects² are underway to combat disinformation and misinformation on the Internet, we believe the growing challenge of building trust in modern society requires a deeper approach. This includes addressing the negative aspects of the attention economy surrounding disinformation and misinformation, uncovering the mechanisms by which information captures attention and focus, and exploring how individuals perceive and interpret what they encounter. These are societal challenges that cannot be solved by technological development alone; they require approaches specifically tailored to the nature of each issue being addressed.

With the evolution of information technology and services due to the development of digital technology, new forms of crimes and disputes that were not envisioned when the laws were created are now emerging. In response to these issues, it may become necessary in the future to review laws and regulations in accordance with technology trends and other factors to ensure easier relief for victims while giving consideration to freedom of expression and confidentiality of communications. In a digital society that is changing at a dizzying pace, in order to realize "human-friendly digitalization that leaves no one behind," it is necessary for both the sender and recipient of information to acquire literacy, but the appropriate approach varies depending on the target, such as school education, reskilling of working adults, and the digital divide of the elderly.

² https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2024/7/2_1.html

When these issues are viewed from a bird's-eye perspective, they involve not only the recipient and sender side; people, organizations, and information services are also involved. By viewing this as an issue with the formation and maintenance of "trust" between the recipients and senders, and between recipients and information itself, and furthermore "trust" for the involved people, organizations, and information services, it is thought that more substantial problems can be solved which could not be achieved through technological development alone. Based on the above, this program promotes comprehensive initiatives, positioning "digital social trust" as "trust formation from social aspects in the information society," which differs from technological digital trust.

Through the sound formation of this "trust," we aim to create a society in which both the receiver and sender of information can enjoy the benefits of the development of information technology while interacting with each other.

1.2 Required research and development

Based on the trends and perceptions described above, we define "trust" as "a state in which one does not believe the other party will fall short of their expectations³," and have organized the issues in research and development to address this social issue and the direction of future research and development required as follows.

1.2.1 R&D that leads to problem solving in the field

Issues of trust in information span a wide range of fields - including law, economics, political science, psychology, informatics, education, AI, and security - yet there are few opportunities to bring together experts from these diverse disciplines for meaningful dialogue with those on the front lines to identify and address the challenges. Opportunities for problem-solving based on cross-disciplinary collaboration remain limited. In addition, access to data critical for R&D is often restricted because it is concentrated in certain operators and difficult for others to use. The situation is further compounded by attention economies and other issues related to the revenue structures of these companies. As a result of all these factors that have limited the number of researchers engaging with stakeholders at the field level, relatively few R&D projects are conducted in close collaboration with those directly facing these societal challenges, such as citizens, local governments, educational institutions, NPOs, media organizations, and platform operators.

³ For the definition of trust, see JST/CRDS Strategy Proposal "Formation of New Trust in Digital Society" CRDS-FY2022-SP-03, p.8

Therefore, it is necessary to have a program in which various people can participate to engage in exchange and expand personal networks while promoting research and development, and a program management structure with experts who understand each field and the circumstances of the people involved. Furthermore, it is important to be aware of the realization of mechanisms (research centers, research databases, etc.) to continue research and development after the program ends.

In recent years, the spread of the attention economy has driven significant societal change, making it increasingly urgent to address the resulting societal issues and rebuild the trust that surrounds them.

1.2.2 Necessity of R&D to identify issues in the field

The above describes the necessity of R&D that leads to the resolution of frontline issues, but we also recognize the need for problem-specific research to clarify whether the issues themselves were identified based on sufficient evidence in the first place and to elucidate the mechanisms that give rise to various challenges in the information space.

We believe that issues such as disinformation / misinformation and infodemics, etc., have not yet been sufficiently examined in the following areas:

- Mechanisms for the generation and spread of information that causes anxiety and disadvantage to people
- Ecosystems that generate economic benefits from the spread of information that causes anxiety and disadvantage
- Mechanism of trust formation between recipient and provider/mediator
- Hypothesis that people with high IT literacy are more likely to fall into the filter bubble
- Literacy education that takes into account the contamination of information surrounding people

In addition, when focusing on the attention economy, it is essential to verify the following:

- Elucidating the mechanisms by which information captures people's attention and interest / The cognitive mechanisms by which people come to trust information
- Elucidating the algorithms that drive the distribution and monetization of advertising

Misunderstanding of these issues can hinder the development of appropriate solutions. Therefore, research that identifies and explores these challenges is also considered essential.

In September 2022, the JST Center for Research and Development Strategy (CRDS) also made a strategic proposal⁴ titled "Formation of New Trust in Digital Society." Based on the awareness that with the advancement of digitalization there is a growing number of cases that cannot be completely covered by "old trust" that is supported by face-to-face human relationships and rules between people, resulting in the deterioration of the role of trust in society, the need for research and development related to the creation of new mechanisms to solve such problems has been proposed. In particular, the issue of information trust, as seen in the case of disinformation, misinformation, and "infodemics," is considered to be an urgent issue on many frontline sites due to its high degree of negative impact on society.

In addition, the following points also will need to be clarified:

- Verification of how appropriate the trust approach is
- Negative aspects of trust (e.g., division between those who formed trust and those who did not)
- Trust evaluation methods that go beyond mere authenticity judgment
- Methods for ensuring the costs and business feasibility of forming and maintaining trust (e.g., formation and maintenance of trust in fact-checking and continuity as a business)
- The mechanisms that lead to the formation of distrust.

1.2.3 Relationship with JST initiatives

In relation to the social issues targeted this time, RISTEX has been working in the Research and Development (R&D) Focus Area of "Human Information Technology Ecosystem (HITE) (FY2016-FY2023) to "reconsider information technology from a human-centric perspective and design systems and technologies in a collaborative manner in order to address the latent risks and concerns caused by advances in information technology" with the aim of conducting research to socialize such technologies. HITE focuses on upstream research that predicts the impact of information technology on society and discusses countermeasures based on ELSI/RRI.

In contrast, this program aims for research and development for implementation in society that will contribute to the resolution of problems on the frontlines, with a view to utilizing HITE research results and the research community. Specifically, the purpose of this program is to obtain verification findings for models (e.g., applicable regional characteristics and constraints) and methodologies for utilizing problem resolution measures in various organizations and regions, and the development and acquisition of those who will promote the measures.

⁴ JST/CRDS Strategy Proposal "New Trust Formation in Digital Society" CRDS-FY2022-SP-03
<https://www.jst.go.jp/crds/pdf/2022/SP/CRDS-FY2022-SP-03.pdf>

JST's CREST "Fundamental Technologies Supporting Trusted AI Systems" and Precursory Research for Embryonic Science and Technology "Fundamental Technologies for Trusted AI" are both research areas centered on technological development, and differ from research and development that creates social mechanisms for problem resolution through an interdisciplinary approach, such as this program. However, it is also very important to collaborate with these closely connected R&D programs in order to leverage the results of technological development. AIP (Advanced Integrated Intelligence Platform Project) Network Laboratory, which is composed of research areas related to Strategic Basic Research Programs, has published AIP Network Co-Lab, a database to search in an integrated manner for AI-related researchers involved in CREST, PRESTO, ACT-X, etc., which can be utilized to form R&D teams.

○AIP Network Co-Lab

<https://www.jst.go.jp/kisoken/aip/colab/researchers/>

1.3 Comprehensive knowledge approach subsuming problem understanding and problem solving, and research knowledge to frontlines knowledge.

In Japan, the Basic Act on Science and Technology, the law that forms the basis of the Science and Technology Basic Plan, was revised in June 2020, and the name was changed to the Basic Act on Science, Technology and Innovation in April 2021, and the promotion of Humanities and Social Sciences (HSS) and the creation of innovation were added to the scope of the law. The 6th Basic Plan for Science, Technology and Innovation (approved by the Cabinet on March 26, 2021) states that science, technology and innovation policy has become a policy that contributes not only to the promotion of science and technology (S&T), but also to the comprehensive understanding and problem solving of people and society through "comprehensive knowledge" that fuses HSS knowledge, which generates social value, and natural sciences knowledge. Subsequently, in April 2022, the "Basic Approach to Comprehensive Knowledge and Strategic Promotion Measures," which had been repeatedly discussed at the Council for Science, Technology and Innovation Advisory Panel since July 2021, was announced as an interim report.

(<https://www8.cao.go.jp/cstp/stmain/20220408.html>)

As mentioned thus far, it is difficult to say that an approach of comprehensive knowledge has been broadly taken for the issue of "digital social trust," which is the information-related trust that this program is working on, because of the wide range of related academic fields, as well as the ubiquitous presence of workplaces and stakeholders facing specific issues throughout society.

In this program, in regard to research and development focusing on trust-related issues, we

emphasize integration of research and development phases, such as the phase of developing measures for the understanding and problem identification of related mechanisms, and the phase of making efforts to implement them in society to solve problems, as well as fusing the research knowledge of interdisciplinary research that spans natural sciences, humanities and social sciences (HSS) and social sciences, with the frontlines knowledge of those facing specific issues. In order to implement problem solving in society, it is necessary to consider institutional design and social acceptance from the research and development stage, and since there can be multifaceted approaches such as the formation of rules in society such as regulations and rules, impact on the economy, and education such as literacy improvement, we expect proposals for progressive research and development in collaboration with various entities that can respond to these approaches.

Chapter2. Overview of R&D Program

2.1 Goal of the Program

Since FY2019, RISTEX has been conducting two types of activities, the Scenario Creation Phase and the Solution Creation Phase, under the title “Solution-Driven Co-creative R&D Program for SDGs (SOLVE for SDGs)” toward the goal of achieving the SDGs. This is an R&D program that seeks to create solutions to regional issues related to complex and wide-ranging themes by utilizing existing technology seeds, and to implement solutions in multiple fields. In addition, since social isolation and loneliness are one of the key aspects of the SDGs, we established "Prevention of Social Isolation and Loneliness and Building of Diverse Social Networks" under this program in fiscal 2021 and are promoting research and development.

Since the research and development on information trust issues, which is the topic of this program, aims to create solutions to social issues in the same way, we will promote research and development by establishing “Trust Formation from Social Aspects in the Information Society (Digital Social Trust).”

Regarding social issues such as people’s concern and disadvantages resulting from the acquisition and utilization of information generated by the development of an advanced information society, by identifying issues with trust between recipients and senders, or between recipients and information itself, as well as the formation of trust between the involved people, organizations, information technology, and services, this program aims to identify issues and develop solutions that will lead to more substantial problem solving.

To this end, we aim to create a society in which both the receiver and the sender can enjoy the benefits of the development of information technology while interacting with each other by promoting proposals and verification activities from research to implementation in society by taking approaches from multiple perspectives such as regulation, economics, technology utilization, and education, and utilizing "comprehensive knowledge" from related academic fields and the frontlines, and by forming sound "trust".

2.2 R&D targets

This program will support R&D addressing trust issues related to information, including disinformation, misinformation and infodemics, and other forms that have a negative impact on society. It will also support R&D that studies trust issues related to individuals and information circulating on digital platforms, such as SNS, as well as the societal changes and adverse effects caused by the rise of the attention economy. In addition, the program will support R&D on trust-related challenges

arising from the development of the information society, as well as R&D leading to solutions at the frontline, based on a multifaceted approach that goes beyond purely technological measures.

Specifically, we will use the three R&D elements shown in “2.3 R&D Elements”: (1) Understanding the mechanisms of trust formation and analyzing obstructive factors, (2) Development of measures based on the analysis results, and (3) Proposal of social implementation methods and effect measurement methods. We will promote research and development in a unified way so that it can be deployed in the areas of regulation, economy, technology utilization, and education.

This program places particular emphasis on the need for R&D that contributes to solving frontline issues through the R&D element (3), and supports the promotion of R&D aimed at achieving this goal. At the same time, we recognize the difficulty of implementing appropriate solutions to challenges related to problems that have a major negative impact on society - such as trust in information, disinformation, misinformation, infodemics, and attention economy - because the underlying mechanisms and disruptive factors have not yet been thoroughly analyzed. Therefore, in promoting R&D element (3), it is necessary that the R&D elements (1) and (2) are fully taken into account. Conversely, even if the content focuses on R&D element (1) for problems for which the understanding of the mechanism is not sufficient, we ask for proposals that take frontline problem solving into account so that research results can be appropriately linked to R&D elements (2) and (3).

In addition, in all R&D elements, the program aims to actively promote the use of convergence knowledge - combining academic research with real-world, practical insights, and drawing on interdisciplinary expertise from a broad spectrum of related fields such as law, economics, political science, psychology, informatics, education, AI, and security - rather than attributing problems solely to technical factors.

2.3 R&D elements

The program has established the following three R&D elements.

- (1) Understanding the mechanisms of trust formation and analyzing obstructive factors
- (2) Development of measures based on the analysis results
- (3) Proposal of social implementation methods and effect measurement methods

For R&D element (1) "Understanding the mechanisms of trust formation and analyzing obstructive factors," the program envisages initiatives that analyze the mechanisms of how trust is formed and maintained - or how distrust arises despite the formation or absence of trust - drawing on insights into the behavior, psychology and social background of individuals, organizations and communities

involved in information exchange. These initiatives will identify key challenges and gather supporting evidence, taking into account emerging societal changes such as advances in technology centered on ICT, the widespread use of information services, developments in relevant legal frameworks, and the growing influence of the attention economy. This element is positioned to establish the basic theories and knowledge required for problem solving in this program, and it is expected that research will be conducted to identify issues by analyzing mechanisms and obstructive factors from various perspectives. This requires an approach to promoting R&D that incorporates diverse perspectives - including law, economics, political science, psychology, informatics and education. as well as AI and security - while addressing fundamental questions such as: the “validity of addressing frontline issues through the lens of trust,” the “negative aspects of trust” (e.g., divisions between those who have formed trust and those who have not), the “costs and beneficiaries of building and maintaining trust,” the “ecosystem needed to support trust, and the “mechanisms that lead to distrust.”

For R&D element (2) "Development of measures based on the analysis results," measures will be developed to resolve issues identified through the understanding of trust formation mechanisms and obstructive factors. Specifically, this includes R&D on “regulation and economics” related to rule-formation and incentives for the distribution and transmission of information, “technology utilization” related to the development of services utilizing new ICT technologies, “education” on literacy and digital citizenship necessary for disseminating measures among people, and indicators for visualizing and evaluating the effectiveness of these measures. In doing so, it is important to take measures by social groups that utilize the connections between people and organizations in real world spaces, such as local governments and communities, as well as virtual spaces on the Internet.

For R&D element (3) "Proposal of social implementation methods and effect measurement methods," measures obtained through the development of measures based on the analysis results are evaluated and verified based on indicators. Specifically, there are various possible methods, such as building a prototype and conducting a Proof of Concept (PoC) on the frontlines to analyze verification data, or by simulation, but regardless of the method used, it is important to obtain a prospect of verifying the effectiveness of the measures at the frontlines sites facing the problem.

In addition, to elucidate these R&D elements, it is desirable to approach them through interdisciplinary collaboration involving researchers from diverse fields such as law, business administration, political science, behavioral economics, economics, social informatics, sociology, cognitive science, and education. In addition, the active participation of platform operators,

educational institutions, local governments, and other front-line organizations involved in problem solving would be essential.

2.4 Examples of topics

The results that this program aims to achieve are as described in “2.1 Goal of the Program”: “Regarding social issues such as people’s concern and disadvantages resulting from the acquisition and utilization of information generated by the development of an advanced information society, by identifying issues with trust between recipients and senders, or between recipients and information itself, as well as the formation of trust between the involved people, organizations, information technology, and services, this program aims to identify issues and develop solutions that will lead to more substantial problem solving.” The program will aim to achieve this objective by working on the following R&D topics.

2.4.1 R&D element (1): Understanding the mechanisms of trust formation and analyzing obstructive factors

Cross-disciplinary topics

- Understanding the actual situation of those involved in the generation and distribution of information (media operators, local governments, companies, industry groups, etc.), considering the ecosystem to be built, and analyzing the missing functions
- Consideration of trust to be established between recipients/senders/intermediaries (including organizations and systems) of information, analysis of obstructive factors to trust, analysis of mechanisms by which trust is formed and maintained
- Analysis of the neuroscientific and cognitive mechanisms and psychological changes involved in how people receive information and form trust in it.
- Analysis of mechanisms for the generation and spread of information that causes anxiety and disadvantage to people (including interactions not only in virtual spaces but also real world spaces)
- Analysis and verification of negative aspects of trust (e.g., division between those who formed trust and those who did not)
- Verification of how appropriate the trust approach is for resolving the social issues targeted by this program
- Prediction of new problems with the speed of technological progress also taken into account, and

proposals on more desirable social/economic systems

- Analysis of the mechanisms that lead to distrust

The following research topics can be given as examples of upstream research closely related to solving problems in the fields of “regulation and economics,” “technology utilization,” and “education.”

Regulation and economics

- Social impact of disinformation and misinformation, and classification methods
- The ideal way of thinking and approach to regulations and rules that take into account the freedom of expression, the right to know, and the global flow of information
- The state of, and approach to, rules for platform operators (for example, the creation of industry guidelines and policies on how to apply rules to operators outside Japan, etc.)
- Prediction of the impact of suppressing the negative aspects of the attention economy and cancel culture, and consideration of business models to replace the unfavorable attention economy. Research on the mechanism by which information gains consumer attention and on its negative effects.

Technology utilization

- Verification of hypotheses such as filter bubbles/echo chambers
- Understanding the actual situation of bias in intake information, analyzing its impact, and understanding the mechanism through which bias arises based on component analysis of information people take in.
- Analysis of user burden caused by the increasing advancement and complexity of information technology and services
- Trust evaluation methods that go beyond mere authenticity judgment
- Structural understanding of problems where correct information worsens the situation
- Analysis of information dissemination methods that damage trust, such as intentional transmission of disinformation or misinformation
- Prediction and analysis of new factors that will affect the formation and maintenance of trust in the future based on the latest technological trends (including both positive and negative effects)

Education

- Verification of the hypothesis that people with high IT literacy are more likely to fall into the filter

bubble

- Building a trust formation model between information senders / recipients / intermediaries based on the diversification of media, pollution of the information ecosystem, diversification of individual preferences, etc.
- Clarification of literacy necessary for each participant, such as literacy on the sender/intermediary side based on understanding of the psychology and behavior of the recipient, and analysis of obstructive factors to acquiring and improving it
- Analysis of the characteristics, thought patterns, and behaviors of people at high risk of being disadvantaged in disseminating and utilizing information, such as those who are susceptible to cybercrime, or people who are anxious or uncomfortable with the use of ICT, and providing a direction of response to minimize the disadvantages that such people may incur.

2.4.2 R&D element (2): Development of measures based on the analysis results

Regulation and economics

- Proposal of methods for voluntary rules for platform operators and individual contributors (e.g., incentive design methods)
- Proposal of methods for ensuring the costs and business feasibility of forming and maintaining trust (e.g., formation and maintenance of business trust in fact-checking and continuity as a business)
- Proposal of collateral methods for when trust is damaged (insurance, guarantee mechanism, etc.)
- Simulation of the impact of implementing various regulations such as laws, self-regulation, and joint regulation
- Proposal of methods to apply rules to platform operators outside Japan in addition to laws and regulations
- Proposal of methods to realize missing functions of the ecosystem

Technology utilization

- Development of measures for sound information acquisition and utilization in collaboration with platform operators, local governments, etc. based on component analysis of information taken in by people
- Development of mechanisms and tools that allow people to access appropriate information

without excessive burden

- Development of methodologies and standards that incorporate appropriate trust formation from the "planning and design stage" of information technology and services
- Development of information analysis services for the frontlines of infodemic countermeasures (disaster sites, public opinion surveys, corporate public relations, libraries and museums, etc.)
- Development of methods for determining trustworthy media and information
- Development of methods for disseminating and distributing corrected information that do not reduce the credibility of the media, and countermeasures in real world spaces such as local frontlines sites

Education

- Development of support methods based on analysis of the characteristics, thought patterns, and behaviors of people at high risk of being disadvantaged in disseminating and utilizing information, or people who are anxious or uncomfortable with the use of ICT
- Development of media information literacy education programs and teaching materials for recipients, senders, and intermediaries in response to changes in digital technology and pollution of the information ecosystem

In particular, measures to improve literacy for organizations and groups that handle information (local governments, advertising agencies, etc.) and people and organizations in charge of literacy education (educational institutions, community support groups, etc.)

2.4.3 R&D element (3): Proposal of social implementation methods and effect measurement methods

Regulation and economics

- Proposal of methods to realize and evaluate the missing functions of the ecosystem obtained in R&D element (2)
- Proposal of implementation in society of self-regulation rules and methods for verifying their effectiveness through collaboration with information disseminators such as platform operators, advertising companies, and advertisers
- Proposal of countermeasures against new risks (e.g., cyberattacks) that are difficult to effectively regulate under the current legislation

Technology utilization

- Proposal of diffusion methods for tools and services developed in R&D element (2), methods for confirming the diffusion status, and methods for evaluating efficacy

Education

- Proposal and demonstration of social implementation methods for educational services (support sites for the elderly in the community, recurrent education, correspondence education, etc.) for sites that support the improvement of media information literacy, and evaluation of efficacy in collaboration with the frontlines
- Visualization of learning effects, comprehension, and disparities using educational methodologies such as Instructional Design, and improvement of programs
- Proposal of methods for diffusing programs that enhance practical skills using social media itself, games, etc. methods for measuring effectiveness, and verification of their effectiveness
- Proposal of diffusion methods and effectiveness measurement methods for literacy acquisition tools for recipients, senders, and intermediaries developed in R&D element (2), and verification of their effectiveness

The following figure is a conceptualization of research that leads to specific problem solving for each R&D element being developed in each field (regulation, economy, technology utilization, and education). The above example topics and the figure below are examples only, and we expect that efforts will incorporate R&D elements suitable for the issues to be solved.

Field	(1) Understanding the mechanisms of trust formation and analyzing obstructive factors	(2) Development of measures based on the analysis results	(3) Proposal of social implementation methods and effect measurement methods
Regulation and economics / Technology utilization / Education	<p>Social Informatics, Informatics</p> <ul style="list-style-type: none"> ● Prediction of new social problems considering the speed of progress in information technology <p>Social Informatics, Sociology, Digital Communication, Psychology, Cognitive Science</p> <ul style="list-style-type: none"> ● Information, analysis of obstructive factors to trust, analysis of mechanisms by which trust is formed and maintained ● Understanding the actual situation of those involved in the generation and distribution of information (media operators, local governments, companies, industry groups, etc.), considering the ecosystem to be built, and analyzing the missing functions <p>Law</p> <ul style="list-style-type: none"> ● State of, and approach to, regulations that consider freedom of expression ● The state of, and approach to, regulations for platform operators (e.g., policies on how to apply rules to operators outside Japan) <p>Economics, Business Administration</p> <ul style="list-style-type: none"> ● Prediction of the impact of suppressing the attention economy, and consideration of business models to replace the attention economy <p>Social Informatics, Sociology, Psychology</p> <ul style="list-style-type: none"> ● Understanding the actual situation of bias in intake information, analyzing its impact, and understanding the mechanism through which bias arises based on component analysis of information people take in <p>Information Engineering, Cognitive Science</p> <ul style="list-style-type: none"> ● Analysis of user burden caused by the increasing advancement and complexity of information technology and services <p>Social Informatics, Educational Technology, Psychology, Cognitive Science</p> <ul style="list-style-type: none"> ● Building a trust formation model between information recipients/senders/intermediaries (including organizations and systems) of based on the diversification of media, pollution of the information ecosystem, diversification of individual preferences, etc. ● Clarification of literacy necessary for each participant, such as literacy on the sender/intermediary side based on understanding of the psychology and behavior of the recipient, and analysis of obstructive factors to acquiring and improving it 	<p>Law, Business Administration, Behavioral Economics, Economics, Platform Operators</p> <ul style="list-style-type: none"> ● Methods for voluntary regulations for platform operators and individual contributors (e.g., incentive design methods) ● Simulation of the impact of implementing various regulations such as laws, regulations, self-regulation, and joint regulation <p>Law, Business Administration, Sociology, Platform Operators, Consumer Groups, Financial Institutions</p> <ul style="list-style-type: none"> ● Methods for ensuring the business feasibility of forming and maintaining trust (e.g., feasibility of business continuity according to fact-checking) ● Collateral methods for when trust is damaged (insurance, guarantee mechanism, etc.) ● Proposal of development policy for missing functions in the ecosystem <p>Information Engineering, Social Informatics, Cognitive Science, Platform Operators, Local Governments</p> <ul style="list-style-type: none"> ● Development of measures for sound information acquisition and utilization based on component analysis of information taken in by people ● Mechanisms and tools that allow people to access appropriate information without excessive burden ● Information analysis services for the frontlines of infodemic countermeasures (disaster sites, public opinion surveys, corporate public relations, libraries and museums, etc.) ● Development of methods for disseminating and distributing corrected information that do not reduce the credibility of the media, and countermeasures in real world spaces such as local frontlines sites <p>Social Informatics, Educational Technology, Psychology, Cognitive Science</p> <ul style="list-style-type: none"> ● Development of support methods based on analysis of the characteristics, thought patterns, and behaviors of people at high risk in terms of the dissemination and utilization of information, or people who are anxious or uncomfortable with the use of ICT ● Development of media information literacy education programs and teaching materials for recipients, senders, and intermediaries in response to changes in digital technology and pollution of the information ecosystem. <p>In particular, measures to improve literacy for organizations and groups that handle information (fire departments, advertising agencies, etc.) and people and organizations in charge of literacy education (educational institutions, community support groups, etc.)</p>	<p>Law, Business Administration, Economics, Platform Operators</p> <ul style="list-style-type: none"> ● Proposal of implementation in society of self-regulation rules and methods for verifying their effectiveness through collaboration with information disseminators such as platform operators, advertising companies, and advertisers <p>Law, Business Administration, Sociology, Platform Operators, Consumer Groups, Financial Institutions</p> <ul style="list-style-type: none"> ● Proposal of methods to realize the missing functions of the ecosystem proposed in (2) <p>Information Engineering, Social Informatics, Sociology, Cognitive Science, Platform Operators, Local Governments</p> <ul style="list-style-type: none"> ● Proposal of diffusion methods for tools and services developed in (2), methods for confirming the diffusion status, and methods for evaluating efficacy <p>Educational Technology, Mobile Carriers, Educational Institutions, Local Governments</p> <ul style="list-style-type: none"> ● Educational services for frontline sites that support the improvement of media information literacy (support sites for the elderly in the community, recurrent education, correspondence education, etc.), and evaluation of efficacy in collaboration with the frontlines <p>Educational Technology, Cognitive Science, Behavioral Economics, Educational Institutions, Local Governments</p> <ul style="list-style-type: none"> ● Proposal of policies for diffusing programs that enhance practical skills using social media itself, games, etc., methods for measuring effectiveness, and verification of their effectiveness

Figure 1. Conceptualization of R&D elements

2.5 Two R&D frameworks and project requirements

As in the past, for this program we expect projects that can implement R&D elements (1) to (3) in a comprehensive manner; however, on the other hand, due to the nature of the “trust” problem, there are limited R&D topics that satisfy all of the R&D elements (1) to (3) given the limited time and budget, as well as R&D teams that can implement them. At the same time, there are important topics that are worth taking the time to gather evidence and verify even if they cover only R&D element (1). Therefore, we have established the following two frameworks for the implementation of this program.

(a) Problem-solving projects

Each R&D Project will formulate measures having clarified the actual frontlines facing the problem, what kind of trust should be formed and maintained with who/what, and what kind of frontlines they should aim to achieve, proposing implementation methods for the frontlines (society) and methods for measuring effectiveness, and work mainly to obtain a prospect of verifying the effectiveness of the measures. In addition, by clarifying the methodology of measure development based on indicators for

evaluating the effectiveness of measures, teams should aim to realize measures that are not independent on any individual and are easy to deploy horizontally without specializing too much in the resolution of specific issues.

For implementation, an R&D structure including R&D elements (1) to (3) must be built during the R&D period for the integrated implementation of these measures. Although we do not require that all R&D elements be started at the proposal stage or that all relevant stakeholders participate in the project, it is necessary to have a clear vision of how to develop the R&D elements and expand the structure accordingly during the R&D implementation period.

(b) Problem-identification projects

As mentioned above, among the social problems targeted by this program, some require focus on identifying the issue to be targeted before working on resolving the issue or formulating measures for problem solving. Therefore, while being aware of the frontlines facing the actual issue, these projects will work to create scenarios and models for the realization of measures that reflect the opinions of the frontlines regarding problem solving, focusing on R&D element (1), such as analysis of the mechanism by which the issue occurs.

While focusing on R&D element (1), it is expected that the plan and structure will include actual frontlines facing the issue (R&D element (3)) and solution methods (R&D element (2)) necessary for identifying the issue in order to contribute to the future resolution of social issues, and that the team includes members to engage in these.

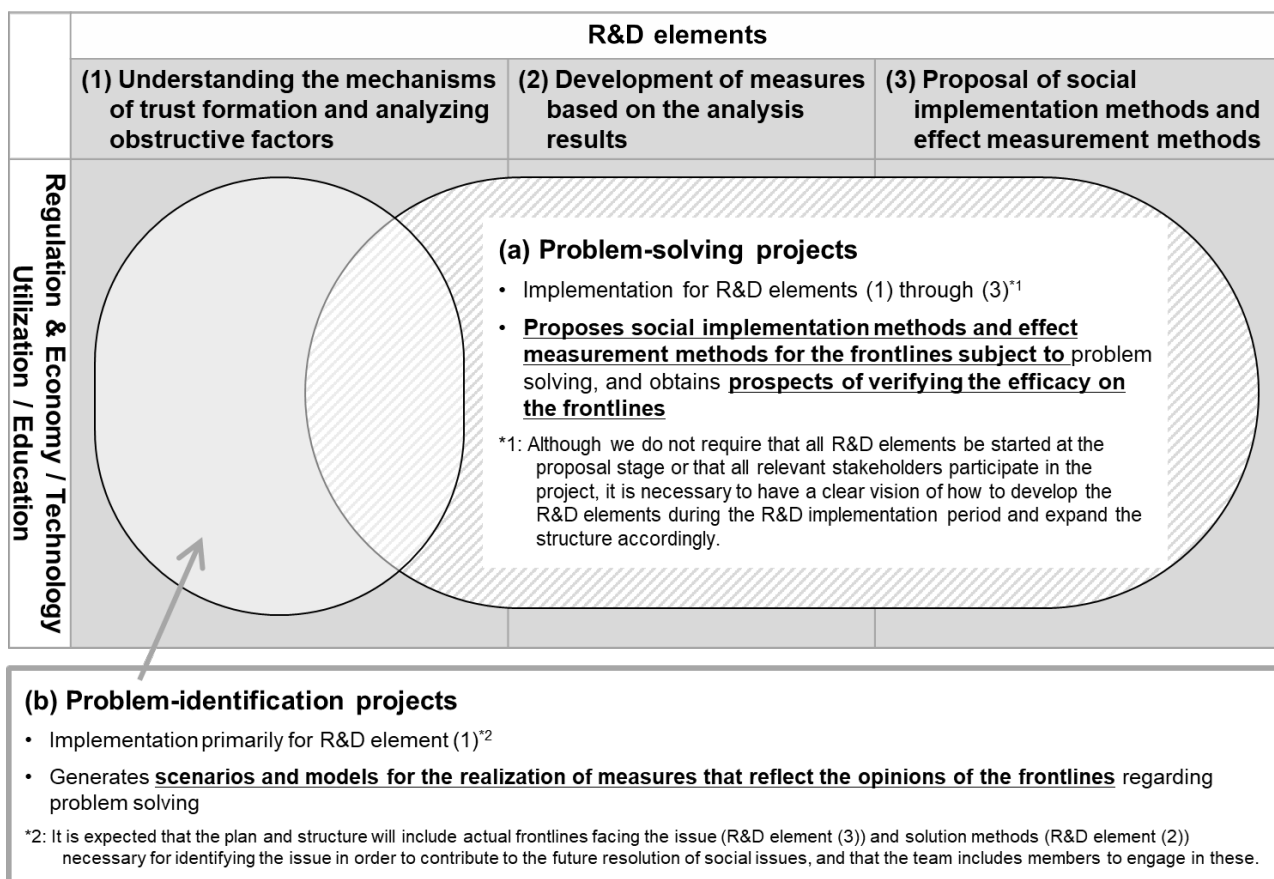


Figure 2. Overview of Problem-solving projects and Problem-identification projects

In addition, the requirements for each type of project are as follows:

Shared requirements for (a) Problem-solving projects and (b) Problem-identification projects

- Can be expected to be effective through a multifaceted approach using interdisciplinary research.
- Targets social issues that are not considered to be sufficiently resolved by other funding programs and research institutions.
- Targets cross-ministerial and cross-sectoral issues.
- Can be completed within the R&D period established for this program.

Requirements specific to (a) Problem-solving projects

- Proposes social implementation methods and effect measurement methods for the frontlines subject to problem solving, and obtains prospects of verifying the efficacy on the frontlines.

Requirements specific to (b) Problem-identification projects

- Is able to generate scenarios and models for the realization of measures that reflect the opinions of the frontlines regarding problem solving.

Research and development of underlying technologies only is not targeted by this program. However, R&D related to applied services and social implementation, with a view to collaborating with underlying technology R&D in other funding programs, etc., is eligible if the R&D elements and requirements required by the program are met.

2.6 Example of expected output

Examples of output generated by R&D based on the elements described in "2.3 R&D elements", "2.4 Examples of possible topics", and "2.5 Two R&D frameworks and project requirements" are provided as follows.

- A model for the generation and dissemination of information (including information other than disinformation and misinformation) that causes anxiety and disadvantage to people. Includes scenarios for systematically organizing trust formation entities and implementing trust formation and maintenance models required for this purpose.
- Analysis of the missing functions of the ecosystem necessary to promote self-purification against information pollution and proposal of development methods
- Methods for determining the trustworthiness of online media and distributed information. Proposal of self-regulatory rules based on the review of the attention economy, cooperation with advertisers, etc.
- Creation, dissemination, and distribution methods for corrected information and information that counteracts risks from misinformation, and effectiveness measurement methods
- Trust formation models between recipients and senders/intermediaries, literacy acquisition tools that take information pollution and personal preferences into consideration, diffusion methods, effect measurement methods
- Models for changes in citizen behavior and strategies to prevent societal fragmentation by uncovering the mechanisms behind distrust.

A further outcome is "the creation of an ecosystem in which both recipients and senders can interact with each other to enjoy the development of information technology and the benefits of the information society," and it is necessary to continue efforts to realize this outcome even after the project is

completed. Therefore, starting from the project implementation period, it is important to build a foundation for activities with a view to the end of the project (R&D base, researcher community, research database, etc.)

These outputs are only examples, and we expect more effective results to be produced according to the issues you are aiming to solve without being restricted to the above.

2.7 Selected Projects to date

In “2.4 Examples of topics” and “2.6 Example of expected output,” some examples of initiatives for R&D topics and some examples of outputs created through R&D are shown.

The projects selected to date are as follows:

(* The affiliations of the principal investigators are as of September 30, 2024.)

(a) Problem-solving projects

Project Name	Principal Investigator
Trust formation via visualization: Literacy education in personalized digital infosphere	TORIUMI Fujio Professor, Department of Systems Innovation, School of Engineering, The University of Tokyo
Towards the development of "Trust" between news outlets and audiences	FUJISHIRO Hiroyuki Professor, Department of Media and Communication Studies, Faculty of Social Sciences, Hosei University
Trust in Science in the Digital Media Society	TANAKA Mikihiro Professor, Faculty of Political Science and Economics, Waseda University
Study of Establishment of Trustworthy Generative AI and Legal Systems and AI Governance Frameworks	TERADA Mayu Professor, Graduate School of Social Data Science, Hitotsubashi University

(b)Problem – Identification projects

Project Name	Principal Investigator
Cognitive studies on trust formation mechanism toward local echo chamber steering	MORITA Junya Professor, Department of Behavior Informatics, Faculty of Informatics, Shizuoka University
Mapping Entry Channels into Conspiracy Theory and Developing a Framework for Preventing People's Acceptance	MURAYAMA Taichi Assistant Professor, Graduate School of Environment and Information Sciences, Yokohama National University
Identification of barriers against forming trust to conversational systems and development of control technology for them	KOYAMA Tora Associate Professor, Research Institute for Time Studies, Yamaguchi University
Trust Formation and Consensus Building in the AI Generation of the Deceased's Persona	ORITA Akiko Professor, College of Interhuman Symbiotic Studies, Kanto Gakuin University)

For an overview of each of the selected projects, open the following URL (press release material).

(Reference: <https://www.jst.go.jp/pr/info/info1646/pdf/info1646.pdf>

<https://www.jst.go.jp/pr/info/info1719/pdf/info1719.pdf>)

2.8 Perspectives to focus on in FY2025

With respect to issues with the formation of trust between information recipients and senders or between recipients and their information itself, as well as with the formation of trust in involved people, organizations, information technology, and services, this Program will cover a wide range of R&D focuses in order to take multilateral approaches, from aspects such as regulation, economics, technology utilization, and education, and utilize relevant academic disciplines and the on-the-ground convergence of knowledge. Furthermore, with ever-accelerating technological advancement, we believe that there will be perspectives formed toward the resolution of issues, which are not incorporated into the R&D elements conceptualized in Figure 1 of “2.4 Examples of topics” or into the assumed topics.

Considering the shifts in social conditions in 2024, the following points should be noted in FY2025.

- Research on social issues that have recently occurred in relation to the information space.

We welcome research that analyzes social issues that have recently occurred in relation to the information space, using relevant data obtained at the time, with the aim of contributing to their resolution.

- Analysis of filter bubbles and echo chambers during elections

In particular, the 2024 election in Japan, often referred to as the "SNS election," highlighted the significant role of SNS during elections.

We believe that analyzing the impact of filter bubbles and echo chambers during elections is crucial, as is exploring the appropriate use of SNS.

- Elucidation of mechanisms that give rise to distrust

We believe it is essential to investigate the mechanisms that lead to the formation of distrust and to analyze the behavioral changes of those affected as distrust has the potential to fragment society and, in some cases, cause individuals who have become distrustful to disengage from their communities or social groups.

- Manipulation of information and public opinion

The use of generative AI to manipulate information and influence public opinion, often through disinformation, remains a pressing concern that we believe requires extensive international research, including initiatives in Japan.

- Elucidating the cognitive mechanisms through which individuals come to trust the information they receive

Understanding the mechanisms through which individuals come to trust the information they receive is essential for designing effective countermeasures against disinformation. We believe it is important to study the cognitive mechanisms and psychological processes behind trust, not only in adults but also in children.

- Comparing trust formation in traditional media including newspapers and TV, and social media

2.9 Points to note about the R&D implementation structure and approach

- Japanese government agencies, universities, research institutes, public interest corporations, NPOs, private companies, and other entities that JST can outsource research to as organizations will cooperate to conduct R&D.
- We expect the promotion of R&D that focuses on comprehensive knowledge, approaching various fields such as regulation, economics, technology utilization, and education from multifaceted perspectives, utilizing cross-disciplinary knowledge that spans both the natural sciences and

Humanities and Social Sciences (HSS), as well as the prior knowledge of the frontlines targeted for problem solving.

- In order to promote (1) to (3) of "2.3 R&D elements" in an integrated manner, it is necessary to conduct co-creation with related parties from the start of R&D, bridge the gap between the research side and the frontlines side targeted for problem solving, promote research and practice at the same time, and conduct R&D to link various knowledge and feedback obtained from the frontlines to social implementation. Therefore, it is preferable that both the research side and the frontlines side targeted for problem-solving participate in the project from an early stage.
- In order to ensure that developmental efforts can continue even after the completion of R&D, it is necessary to sufficiently collaborate with related organizations such as platform operators, local governments, and educational institutions from the R&D stage.
- We will consider the perspective of diversity, including gender, in all aspects of R&D, such as research subjects, research methods and prerequisites, and design in R&D.
- Since the issues raised in this program are not limited to Japan, and similar issues exist now in other countries and will emerge there in the future, proposals that collaborate with entities outside Japan are also eligible, such as utilization of knowledge, fields, and human resources from other countries.

2.10 Management of this program

Under this program, the program manager and program advisor will use a hands-on approach to management to monitor the progress and results of R&D and work together with the principal researchers to carry out activities to achieve the program goals using the following structures and methods.

- We will appoint a program manager as the person responsible for program operation and management of the entire program.
- A program advisor will be appointed to provide expert advice to the program manager.
- The program manager, program advisor, and the secretariat will work together to recruit and select R&D Projects, as well as hold meetings and initiatives necessary for effective program operations (advice on R&D, implementation of site visits, etc.)
- The program manager will, as necessary, conduct reviews such as adjusting R&D expenses, and restructuring, consolidating, and discontinuing R&D Projects.
- In the operation of the program, we will respond flexibly, including prioritization and changes in

the entry selection policy, while paying due care to social conditions and international trends. In particular, the fields covered by this program are subject to significant short-term changes with the situation regarding technology and laws and regulations, including regions outside Japan; therefore, we will monitor these and manage them with a view to conducting research activities to provide prompt feedback to each R&D Project.

- The program manager, with the cooperation of the program advisor, etc., will appropriately optimize the content and implementation structure in light of changes in the situation related to the severity of the social issues targeted by each R&D project, the appropriateness and feasibility of the R&D approach, etc. In this regard, the program manager shall have the discretion to decide whether to continue or discontinue an R&D Project.
- In operating this program, we will actively plan exchange, cooperation, and interaction between adopted R&D Projects, and create opportunities for discussions with internal and external stakeholders who span and overlook the R&D Projects (such as program-wide meetings). We will also conduct outreach activities for the R&D results (such as results reporting meetings and information dissemination on website, etc.)

In addition, we are considering implementing the following.

- In order to promote the formulation of concepts for the realization of a new digital society and the creation of structures such as connections with the frontlines that are targeted for measures under this program, through a management structure consisting of people with diverse expertise pertaining to this program and people with experience developing and operating measures who are well versed in the characteristics of various involved parties such as media operators and IT platform operators, we will provide advice on concept formulation, match research and frontline sites to strengthen structures, and provide accompanying support to cultivate projects. In doing so, we will share knowledge by collaborating with other funding programs closely related to this program, such as JST's CREST "Fundamental Technologies Supporting Trusted AI Systems" (FY2020-) and Precursory Research for Embryonic Science and Technology "Fundamental Technologies for Trusted AI" (FY2020-).
- We will create a system to link the results of problem-identification R&D projects to problem solving. Specifically, we envision expanding project activities by connecting with new frontline sites, providing feedback for public applications from the next fiscal year onward, and supporting connections to other funding programs.

2.11 R&D Period

In principle, around 3.5 years

*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.

2.12 R&D Budget (Direct Costs)

(a) Problem-solving projects : Maximum of approx. 12 million yen per year

(b) Problem-identification projects : Maximum of approx. 3-7.5 million yen per year

*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.

*For FY2025, since it is assumed that R&D will start in October, please allocate expenses for 6 months until the end of the fiscal year.

For details on the use of R&D budget (direct costs) and indirect costs, please review "3.5 R&D Budget" and "Chapter 5 Q&A on R&D Proposal Application" in the application guidelines <general information>.

*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 after adoption. For details, please refer to "2.10 Management of this program."

2.13 No. of Projects to be Selected

(a) Problem-solving projects : About 2 projects

(b) Problem-identification projects : About 1 project

The number of projects to be adopted will be adjusted according to the contents and conditions of the proposals.

2.14 Notes on Selection

The selection process will decide which proposals to adopt after a comprehensive review, emphasizing the following points. Please refer to “Chapter 2 Concept of Program Supervisor in Solicitation and Selection” and “Chapter 3. Overview of R&D” when preparing the proposal document.

a. Conformity with program objectives and contribution to program goals

The proposed content (issues, goals, R&D plan, etc.) is consistent with the purpose of this program and is expected to contribute to the achievement of the goals of this program.

b. Significances and visions

- The specific problems related to the prevention of social isolation and loneliness to be solved, and their social background and causes are presented appropriately.
- The vision of what kind of social isolation and loneliness is targeted for prevention and what society is being aimed for is clear and appropriate.
- The newness and originality of the proposed R&D is specifically described, and it is challenging in light of the movement of the related R&D and engagements in Japan and abroad.

c. Adequacy of plan

- The goals to be achieved are appropriately set, including outcomes.
- The plan (budget scale, period, milestone setting, PDCA, and other processes) is appropriate for achieving the goal.
- Bottlenecks such as challenges, barriers, and difficulties in achieving project goals, including the implementation of PoC, are envisioned, and specific measures to address them are discussed.
- The R&D plan is appropriate to respond to social trends.
- The plan is to receive feedback from a variety of stakeholders. In addition, at each milestone of the R&D, the plan is to make public announcements about collecting reasonable opinions from outside and about correcting points that need to be improved.

d. Adequacy of implementation system

- The proposed researcher has sufficient experience in project implementation and the necessary clues to realize the concept.
- To promote R&D elements 1), 2), and 3) of “3.2 R&D Focus” in an integrated way, a sufficient collaboration system among researchers in HSS and natural science and various stakeholders

involved in society such as the sites is expected to be established by the end of the R&D period.

- To implement PoC, a system for demonstrating the effectiveness of the developed measures to prevent social isolation and loneliness in specific regions, schools, workplaces, communities, etc., in Japan is expected to be acquired by the end of the R&D period.
- A sustainable structure in terms of human and financial resources is being considered, with a view to development after the completion of implementation period.
- The project management is expected to be flexibly handled and effective.

e. Impact of R&D results and their potential for deployment

- The impact of the proposed R&D results (creating academic and public value, contribution to current and future social and industrial needs, influence and development to other fields and regions in Japan and abroad, etc.) and contribution to the achievement of the SDGs (Sustainable Development Goals) are expected.

In the selection and adoption of projects, consideration will be given to the following points in addition to the type of social isolation and loneliness, and field of the project.

- From an international perspective, the proposed project is expected to produce and disseminate results that are meaningful on a global scale, positioning itself within the context of domestic and international research trends.
- Young and/or female researchers are expected to actively participate in the project as part of human resource development.

Chapter 3. Guide to Completing the Proposal

Please refer to the original Japanese version.

* Materials submitted in formats other than the designated forms will not be considered for review.

* Please follow the instructions for completing the form and be sure to complete all required fields. Incomplete submissions may be deemed ineligible for review.

* Be sure to also review “Chapter 1 Idea of the Program Supervisor on the calls for proposals and selection” and “Chapter 2 Overview of R&D Focus Area and Framework of Calls for Proposal.”

* Before applying, please review “Chapter 4: Points to Note upon Application” in the application guidelines <general information>.

* For instructions on the submission of R&D proposals, please refer to the e-Rad Operation Manual.

* The proposal file must be converted to PDF format before uploading it to e-Rad. You can convert the file to PDF from the menu after logging into e-Rad. The use of special or non-standard characters may result in text corruption on a page-by-page or file-by-file basis. Please check the converted PDF file before submission.

* The size of the submitted PDF file must not exceed 5MB.

* Use a font size of approximately 10.5 points for the main text and ensure the layout is easy for

evaluators to read.

* Remove all blue instructional text from the proposal format before submission.

* **Download the proposal format (Word version) from the JST website or the e-Rad website.**

Chapter 4. References

(Related websites)

■United Nations Information Centre

2030 Agenda

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

SDG Action Plan 2023

https://www.kantei.go.jp/jp/singi/sdgs/dai13/sdgs_actionplan2023.pdf

■Cabinet Office

“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)

Committee on Collaboration of Science, Technology, and Society: Technology and Society
“Promotion of Collaboration between the Humanities, Social Sciences and Natural Sciences in Research Activities related to the Social Implementation of New Science and Technology”

https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu2/092/houkoku/1410641.htm

Strategic Promotion of International Activities in Science, Technology and Academic Fields

Basic Policy on Promotion of STI for SDGs

https://www.mext.go.jp/a_menu/kagaku/kokusai/sdgs/1408737.htm

MEXT STI for SDGs Package

https://www.mext.go.jp/a_menu/kagaku/kokusai/sdgs/1408738.htm

■Ministry of Internal Affairs and Communications (MIC)

Release of Teaching Materials for Raising Awareness of Disinformation and Misinformation, titled "How to Deal with the Internet: What You Should Do to Avoid Being Deceived by Dis/Misinformation," etc.

https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2022/6/17_07.html

Release of "FY2023 Survey Report on Usage Time of Information and Communications Media and Information Behavior"

https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2024/6/21_4.html

Results of the Public Solicitation for Participation in the "Development and Demonstration Projects for Countermeasure Technologies against False or Misleading Information on the Internet"

https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2024/7/2_1.html

Result of Appeal for Opinions on Draft Final Report from Study Group on Platform Services and Release of Finalized Report

https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2020/2/07_7.html

■JST

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

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

"STI for SDGs" Award

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

(Strategic Proposals) New Trust Formation in the Digital Society／CRDS-FY2022-SP-03

<https://www.jst.go.jp/crds/en/publications/CRDS-FY2022-SP-03.html>

■Others

Countermeasures Forum for Disinformation

https://www.saferinternet.or.jp/wordpress/wpcontent/uploads/Disinformation_report.pdf

【Inquiries】

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

boshu-digist@jst.go.jp

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

https://www.jst.go.jp/ristex/proposal/proposal_2025.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