Japan–Singapore Joint Call for Proposals 2025 in the Field of "Quantum"

Information Briefing

JST Japan Science and Technology Agency

a* Agency for Science, Technology and Research — SINGAPORE

Call Information

☐ **Japan side**

https://www.jst.go.jp/aspire/nexus/koubo/country/singapore.html

Search 🔍 JST NEXUS

☐ **Singapore side**

https://www.a-star.edu.sg/Research/funding-opportunities/japan-singapore-joint-call-2025

Guidelines and Application Forms

☐ **Japan side**

Application Guidelines and Forms

	File
Application guidelines	PDF
Application guidelines (appendix for Japan-side PIs)	PDF
Joint application form (proposal)	Word
Japanese application form (appendix for Japan-side PIs)	Word
e-Rad manual (in Japanese)	PDF
FAQ (in Japanese)	PDF

☐ **Singapore side**

APPLICATION MATERIALS

» Grant Call Guidelines for the Japan-Singapore Joint Call 2025
» Application Form for the Japan-Singapore Joint Call 2025
» Budget, Milestones and KPIs Template (for Singapore-based applicants only)
» A*STAR Terms and Conditions 2020
» A*STAR Guidelines 2020
» Milestone & Benchmark Setting Guidelines

same

same

There are unified "Application Guidelines" and "Joint Application Form."
Also note that, there are Japan- and Singapore-specific guidelines, form, and so on.

Abstract of the Application System

Submit **identical copies of the proposal** to JST and A*STAR, respectively.

proposals received by the A*STAR and not submitted to JST (and vice versa) will automatically be considered ineligible

e-Rad

iGrants

Japanese Application Form (appendix)

Budget, Milestones and KPIs Template

Japan-side PI

Joint Application Form (Proposal)

Singapore-side PI
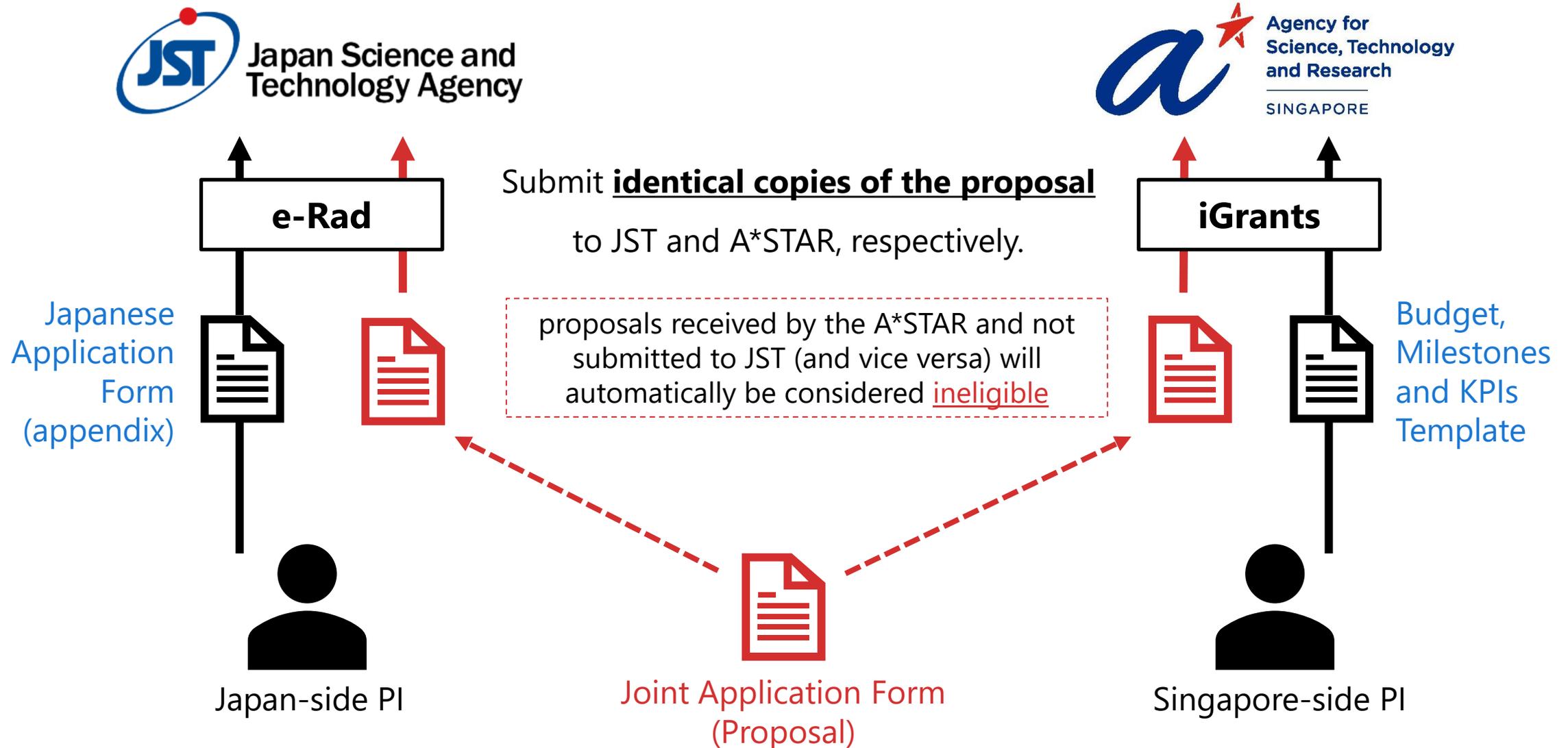
Call Schedule

Event	Date
Deadline of Submission	**Wednesday, July 30 at <u>1 PM (JST) / 12 pm (SGT)</u>** *the same timing
Selection Results Announcement	December 2025 to January 2026 (tentative)
Expected Start of Granted Projects	April 2026

Call Summary

	Japan side	Singapore side
Duration	**3** years (**36** months): Apr 2026 – Mar 2029 *PIs are expected to lead the proposed research throughout this period.*	
Number of Granted Projects	Up to **10** projects (depending on the number of applications received)	
Funding per Project	Up to **30 million yen** (+ indirect expenses)	Up to **350,000 Singapore dollars** (incl. indirect expenses)

Research Field and Subtopics

Quantum - Research into fundamental quantum sciences and/or cutting-edge quantum technologies with tangible industry

1. **Quantum computers and quantum simulations**

   incl. quantum-classical hybrid solutions, quantum software, and quantum computing

2. **Quantum info-communications**

   incl. quantum internet, quantum memory, encrypted communication, and quantum information theory

3. **Quantum sensing**

   incl. solid-state quantum sensors and quantum optical sensors

Summary of Research Project

Proposal Title (in English):	Select the topics you propose
Subtopics (Check the boxes the project aligns. Multiple check is allowed.)	☐ Quantum computers and quantum simulations (inc. quantum-classical hybrid solutions, quantum software, and quantum computing)
	☐ Quantum info-communications (inc. quantum internet, quantum memory, encrypted communication, and quantum information theory)
	☐ Quantum sensing (inc. solid-state quantum sensors and quantum optical sensors)
	☐ Others ( )

Criteria for Evaluating Proposals

Criteria	Description
Capability of PIs	Research leaders should be able to lead and take responsibility for the entire team strongly. A sufficient collaborative system should be planned that can contribute greatly to the achievement of the research objectives as leaders.
Expected scientific results	The expected achievements from the proposed research should be eminent, creative and at an internationally recognized standard.
Expected economic and social impact	The expected outcomes from the proposed research should attempt to produce a significant impact on the development of future science and technology or to create innovative technological seeds that can contribute to the creation of new industries in the future.
Synergy effects of international collaboration	• The expected achievements from the proposed research should be produced through essential collaborative research rather than a combination of individual research projects. • The exchange plan is clearly planned, and organic ties are expected to be fostered.
Consistency with the research field of this grant call and feasibility of implementation (given proposed plan, participants, budget, facilities, means of cooperation, etc.)	• The proposed methodology should be feasible, with well-defined research and exchange milestones from both sides and Key Performance Indicators (KPIs) (from the Singapore side). • Research objectives must be matched to the research field of this grant call. Plans, and deliverables must be clearly described, and technical challenges must be properly addressed. • Teams highlight the novelty of their approaches or methodology based on providing the clues necessary to demonstrate the feasibility of the research concept.

Japan-specific Information

Networked Exchange, United Strength for Stronger Partnerships between Japan and ASEAN (NEXUS)

A **flexible and multi-layered cooperative framework**, leveraged by the long history of science and technology cooperation **between Japan and ASEAN member states**

- ☐ **International Joint Research** ──────────➤ **Japan－Singapore Joint Call on "Quantum"**
  - ➢ NEXUS supports international joint research in common priority challenges.
- ☐ **Researchers Exchange/Development**
  - ➢ NEXUS promotes the development of young international researchers through supporting personnel exchange. It aims to initiate international joint research and formulate a pool of research talent resources.
- ☐ **Program Office**
  - ➢ NEXUS establishes a program office to promote cooperation in science, technology, and innovation, including strengthening the systems and functions of existing research platforms.

Researcher Eligibility

- ❑ **Two identical copies of a proposal must be submitted to both the JST and the A*STAR.**

  - ➢ proposals received by the A*STAR and not submitted to JST (and vice versa) will automatically be considered ineligible

- ❑ **Research duration must be 36 months**

  - ➢ Duration less than 36 months will be possibly ineligible

Common eligibilities

- ❑ Applicants (PI and Co-PIs) must be affiliated with '**Domestic Japanese research institution'**

  - ➢ Applicants and their institution must have accounts of e-Rad system

  - ➢ Institution must submit "体制整備等自己評価チェックリスト" via e-Rad

- ❑ PI must complete **a research ethics training program** in advance

- ❑ Two ore more proposal as a PI for the joint call on "Quantum" are not allowed

  - ➢ Co-PI is not restricted in this respect

- ❑ Proposals must be submitted via e-Rad

Japan-side eligibilities

Proposals

Joint Application Form

Japanese Application Form (appendix)

Japanese notations of:
- Research title
- Participants (PI, Co-PI, and SG-side PI)
- Research abstract

Disclosure of Funds (awarded/submitted)

Checklist of treatments:
- Research security
- Regulations regarding to the use of biological and genetic resources
- Personal information
- Intellectual property
- Other ethics

"Confirmation Form" signed by <u>the head of the institution</u> affiliated with the PI
- In the case of a university/college, it is the president, <u>not the dean</u>

Amount of Funding and **Eligible Costs**

Indirect Expenses

up to **9,000,000** yen

（30,000,000 × 0.3）

※Indirect expense rate of 30%

Direct Expenses

up to **30,000,000** yen

For Exchange Activities

around **30%** of the total direct expenses

around **9,000,000** yen

（30,000,000 × 0.3）

- Equipment costs (equipment and consumables)
- Travel costs
- Personnel costs
  - ✓ Incl. administrative staff who coordinate exchange activities
- Miscellaneous

Exchange activities of researchers (incl. graduate and undergraduate students)

- Dispatching researchers/students to the partner country
- Holding workshops
- Presenting at international conference, and so on

Budget Description

Amount (1,000 yen)	First Year (FY2026)	Second Year (FY2027)	Third Year (FY2028)	TOTAL (a)	Exchange Plan (b)
Facilities and equipment				8,000	0
Consumables				1,000	1,000
Travel				12,000	8,000
Personnel				4,000	1,000
Others				5,000	0
Total amount				30,000	*around 30% of the left cell 10,000

Enter direct expenses for exchange activities in the left TOTAL column

30.0% are allocated to these activities in this example.

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Team Structure (Japan)

Japan-side team

PI Group

Principal Investigator
(PI, **institution A**)

Collaborators/Participants
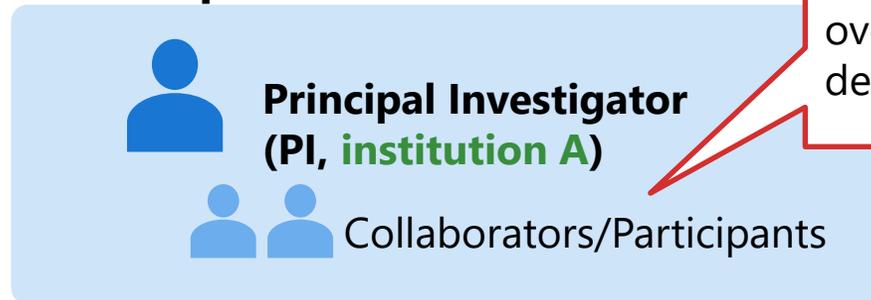
Prefer a collaborator/participant over a Co-PI from the same department/division.

Co-PI is optional. PI's group proposals are fine.

Co-PI Group1

Co-PI (**institution B**)

Collaborators/Participants

Co-PI Group2

Co-PI (**institution A**)

Collaborators/Participants

To fund researchers from different institutions, designate them as Co-PI.

Designate a Co-PI only when separate contracts are necessary, such as leading a project. Avoid same department/division as the PI.

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Application System: e-Rad
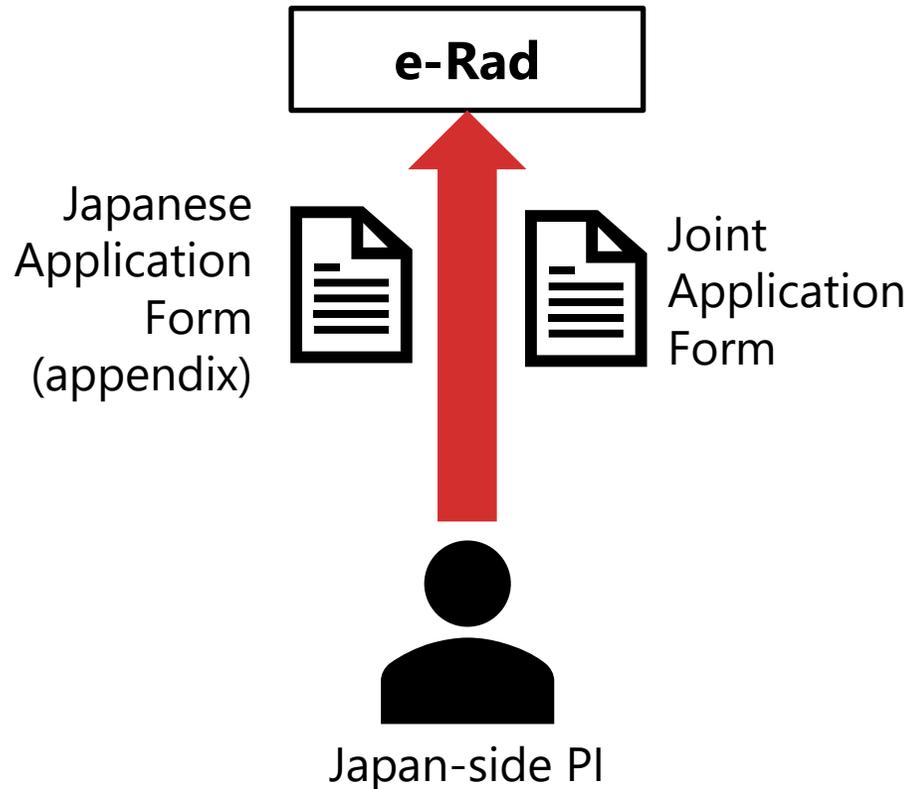
Japan Science and Technology Agency

e-Rad

Japanese Application Form (appendix)

Joint Application Form

Japan-side PI

Application Guidelines and Forms

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Please refer to the "**e-Rad manual**" when you submit

Cautions on e-Rad

☐ Reporting about "**Research Integrity**" is required for **ALL** applicants (PI <u>and Co-PIs</u>)

Cautions on e-Rad

- **Research Duration**
  - 2026 – 2028

- **Research Objective & Abstract**
  - Write "提案書参照" on the forms. The form allows only up to 5 characters (you can not write details).
  - Do not upload files of "Objective" & "Abstract" on the section.

Inquiry

❑ Contact

➢ Japan Science and Technology Agency (JST)

Department of International Affairs

NEXUS Japan－Singapore "Quantum"

joint-call-ja"AT"jst.go.jp

Please write questions from the "Q&A" button.

➢ 国立研究開発法人科学技術振興機構（JST）

国際部先端国際共同研究推進室ASEAN連携グループ

NEXUS日本－シンガポール「量子」公募担当

joint-call-ja"AT"jst.go.jp

日本語での質問も可能です。
その場合は読み上げず、
テキストで回答します。

Singapore-specific Information

Researcher Eligibility

- ❑ **Two identical copies of a proposal must be submitted to both the JST and the A*STAR.**

  - ➢ Proposals received by the A*STAR and not submitted to JST (and vice versa) will automatically be considered ineligible

- ❑ **Research duration must be 36 months**

  - ➢ Duration less than 36 months will be possibly ineligible

Common eligibilities

- ❑ Applicants' (PI and Co-PIs) primary appointment has to be **75% or more in a local publicly funded research institution**

  - ➢ Applications must be endorsed by applicants' Host Institution before submission

  - ➢ Applicants must deliver their project in accordance with the A*STAR Grants T&Cs and Guidelines

  - ➢ Applications must be submitted through iGrants, with all the information as outlined in the Application Form and the Budget, Milestones and KPIs template, along with all necessary attachments

Singapore-side eligibilities

Amount of Funding and Eligible Costs

Funding per project

up to SGD **350,000**

(inclusive of 30% Indirect Expenses)

Examples of Direct Cost Items:
- Manpower / labour (FTE) costs
- Equipment costs
- Materials and consumables
- Travel costs

(Please refer to the **A*STAR Grants T&Cs** for the fundable items.)

Examples of Non-fundable items include:
- Salaries of Lead PI / investigators / visiting profs and researchers / collaborators / general admin support staff
- Stipend top-up for existing post-grad scholarship holders
- Undergraduate stipend and tuition support
- Audit and legal fees
- Patent application

(Please see **Application Guidelines, section 6.2** for more information on the non-fundable direct cost items.)

Budget Description

Singapore-based applicants are required to also separately fill in the Budget breakdown, Milestone, Work contribution and KPIs template.

	Year 1 ($)	Year 2 ($)	Year 3 ($)	Total ($)
Manpower / Labour (FTE) [EOM]				
Equipment (EQPT)				
Other Operating Expenses (OOE)				
Overseas Travel (TRVL)				
Research Scholarship (RS)				
Indirect costs (30%)				
GRAND TOTAL (SGD)				

Please **ensure proper planning of expenses each year**, taking into consideration the amount of time needed to source for FTE, procure EQPT etc.

Budget Justifications

Budget Justifications

EOM Vote

Vote Item	Justification

EQPT Vote

Vote Item	Justification

OOE Vote

Vote Item	Justification

Overseas Travel Vote

Vote Item	Justification

RS Vote

Vote Item	Justification

Please ensure **clear and comprehensive justifications for all budget vote items and how it contributes to the project**, e.g. (i) descriptions of EOM duties, (ii) description, examples and purpose of OOE expenses, (iii) purpose and no. of expected pax for TRVL, etc.

Useful Info

☐ **For more information on the Grant Call application,**

Please visit the Japan-Singapore Joint Call for Proposal on Quantum 2025 webpage for the following materials:

➢ Grant Call Guidelines

➢ A*STAR Terms and Conditions

➢ A*STAR Grant Guidelines

➢ Milestones & Benchmarking Setting Guidelines

Inquiry

- **Contact**
  - A*STAR

    Office of Grant Administration

    oga_bilats@hq.a-star.edu.sg

Frequently Asked Questions (1)

◻ **Will e-mail applications be accepted?**

- ➢ No, e-mail applications will not be accepted. Please ensure ahead of time that there are no problems with your iGrants or e-Rad accounts, in order to submit your applications by the stipulated deadline.

◻ **Are there any internal deadlines to adhere to?**

- ➢ Please confirm with your respective Host Institutions' Research Office, or equivalent, for any internal deadlines you would need to adhere to for submission for external grants.

Frequently Asked Questions (2)

- **Can funds be allocated to external collaborators that are essential to the project?**
  - ➢ No, funds can only be allocated to PIs/co-PIs or co-Is who are from publicly funded institutions.

- **Does the Japan-based research team members need to be added as part of the team composition in the iGrants submission?**
  - ➢ No, the Singapore-based applicant will only need to include the Singapore-based team on iGrants. The Japan-based team members should be listed in the Application Form instead.

Frequently Asked Questions (3)

□ **Can the deadline be extended if a part of a proposal appendix is missing** (especially the confirmation seal of the institution head for the Japan side)**?**

  ➢ No, we will not extend the deadline, and the submission system will close as scheduled. Please ensure that items requiring additional time are prepared in advance. However, should the online system encounter any issues, updates will be provided via our website, including information on how such matters will be addressed. [For Japan-based PIs only: Even if you are unable to obtain the seal and other information in time, please proceed with the submission without the item through the system by the deadline <u>by consulting JST in advance</u>.]

  ➢ [For Singapore-based PIs: Please let us know **in advance** that your formal submission through iGrants would be incomplete and we will liaise and confirm accordingly.]

□ **If the PI needs to leave Japan/Singapore before the project is completed, is it possible to transfer the PI role to another researcher and continue the project until the project ends?**

  ➢ We expect the PI to lead the proposed project throughout its duration as stated at the time of proposal. However, should such a situation occur during the project period, we won't terminate the funding immediately. Instead, we will consider alternative arrangements, such as appointing a new PI.

Appendix

Q&A (in the session June 16th)

Question	Answer
May I know if we can include collaborators from other countries (ASEAN)?	Researchers from other countries, including those from ASEAN countries, may be included. However, please note that budget allocations are restricted to PIs and Co-PIs affiliated with Japan or Singapore. For further details, please refer to the introduction section of the Joint Call Guidelines on collaborators.
Can funds be used for Workshop costs?	Yes, the funds can be used for workshop purposes.
Clarification: How many total projects will be funded?	Up to 10 projects can be funded (depending on the quality of the proposals and number of applications received).

Q&A (in the session June 16th)

Question	Answer
Can a PI be on two projects?	**[A*STAR]** For Singapore-based applicants, there is no restriction on the number of applications one can submit. However, we encourage PIs to focus on a single application as the Lead PI. If two or more similar proposals are submitted by the same Lead PI with different teams, the Grantor may require the PI to retain only one of them. **[JST]** For Japan-side researchers, PI is not allowed to submit more than one proposal as a PI in this Joint Call for Proposals. However, there is no restriction on serving as a Co-PI.
Would Company Collaborators be viewed positively (e.g. JP Morgan, IBM)?	Proposals will be evaluated based on the criteria outlined in section 9.2 of the Joint Call Guidelines.
In Japan, is there a requirement of the PI to have 75% time in an education institute, or is an affiliation enough?	**[JST]** No, there isn't. They must be able to apply for research funds through the host institution that they are affiliated to.

Q&A (in the session June 16th)

Question	Answer
Is there any quotas for specific institutions?	**[A*STAR]** For Singapore-based applications, there is no specific quota for a specific institution. **[JST]** No, there isn't.
For the Singapore side, can the co-PI be from the same research institution (RI)?	**[A*STAR]** Yes, it is possible for PI and Co-I to be from the same research institution.
If a grant in Singapore has Co-PI is institutions different from PI, will the funds be split between the two institutes?	**[A*STAR]** Please do clearly state the budget requirement in the Budget template for the respective institutions. The funds allocated to both institutions should be used for the research objectives of the submitted proposal.
Are optical sensors utilizing quantum plasmonics part of subtopic 3?	Yes, you can check on subtopic 3 on the form if the theme is aligned to the main topic "Quantum: Research into…". Note that, the point will be evaluated as a criteria "Consistency with the research field…".

Q&A (in the session June 16th)

Question	Answer
In your example, I found some consumables are included in an exchange plan. Which kind of consumables do you have in mind?	**[JST]** Examples of consumables for research exchanges include certain items used in collaborative experiments, including the dispatching or inviting of young researchers and students.
Can the collaborators come from any company in Japan or Singapore?	**[JST]** Yes, you can. But we can fund only to PI and Co-PI's domestic institutions. If you want to allocate budgets to the company, please include a leader as a Co-PI/Co-I rather than a collaborator. **[A*STAR]** For Singapore-based applications, collaborators from companies or non-publicly funded institutions would not be able to receive any SG funding from this grant.
Is there any expected TRL level for fundamental quantum information science fundable?	**[A*STAR]** We encourage projects of a higher TRL. Projects will be evaluated based on research excellence and criteria stated, such as expected economic and social impact. **[JST]** JST does not require high TRL of Japan-side teams. Because this is joint call, please note that the Singapore-side team are encouraged to have high TRL.