



Engineering and
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Japan-UK Joint Call for collaborations in Advanced Connectivity Technologies

Monday 7 September 2026

11:00 – 12:00 noon

Dr Shiny Mathew

Opportunity Lead

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Webinar Housekeeping



- For Technical difficulties, contact **future.communications@epsrc.ukri.org**
- Submit questions through the Q&A function (there is no open chat)
- Individual specific questions: please email us directly at future.communications@epsrc.ukri.org and we can arrange a one-to-one meeting.
- The webinar is **not being recorded**: we will publish a copy of the slides and FAQ on the funding finder page.
- Full details of the call are on the funding opportunity page [Japan-UK Joint call for collaborations in Advanced Connectivity Technologies – UKRI](#)

Agenda

- Welcome remarks – Head of EPSRC Future Communications team
- Info session on UK-Japan ACT funding opportunity (~30 mins)
- Q&A (~30 mins)
- Webinar Close





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Welcome Remarks

Maisie England

Head of EPSRC Future Communications team



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Background



In early 2026, a [Prime Ministerial level announcement](#) was made for a jointly funded £6 million UK-Japan research programme on Advanced Connectivity Technologies (ACT).

EPSRC and NICT held UK-Japan ACT Ecosystem workshops:

- held in Tokyo and London (Dec 2025 and Mar 2027)
- brought together academic and industry stakeholders
- facilitated connections
- showcased UK and Japanese R&D capabilities
- explored collaboration opportunities in non-terrestrial networks, the integration of AI in digital networks, and advanced optics/ photonics

Read the [workshop reports](#)

Aims of the opportunity

- To partner with NICT (National Institute of Information and Communication Technology) for the first time under it's Innovative ICT Fund Project for Beyond 5G/6G > Elemental Technology and Seeds Creation Program
- To support internationally competitive collaborative research projects between Japan and UK in ACT
- To achieve the ambitions outlined in the UK government's [Digital Technologies and Sector Plan](#), which outlines interventions in terms of securing international partnerships in terms of building new partnerships, investing in critical supply chains and supporting UK regulators, expert bodies and our overseas trade teams

Expected outcomes

UK and Japan researchers are asked to:

- Leverage on each other's **strengths** and address their weaknesses by means of collaboration.
- Accelerate progress in advanced connectivity technologies and deliver new technologies that will **drive** the field forward.
- Develop collaborative research **partnerships** that help build research ecosystems for the benefit of the next generation of researchers working in the area of ACT

These connections will strengthen the existing landscapes within each country and will form the foundation for research in ACT that drives economic growth, improves lives and strengthens resilience in an increasingly connected world.

Key dates for your diary

2026	July	Aug	Sept	Expert Peer review		
	EOI Open EPSRC Call Open		Webinar EOI Close 8 September 2027, 16:00 UK time, link	Oct	Nov	Dec
				<u>The Funding Service (TFS) application deadline (EPSRC)</u> 6 October 2027, 16:00 UK time		
				<u>E-Rad submission deadline (NICT)</u> 7 October 2026 at 12:00 pm Japan time		
2027	Jan	Feb	Mar	Apr		
	Panel		Call outcomes notifications	Funded projects to: Start on 1 April 2027 Finish by March 2030		

IMPORTANT

TFS application deadline (EPSRC)

6 October 2027, 16:00 UK time

E-Rad submission deadline (NICT)

7 October 2026 at 12:00 pm Japan time

- You will need to complete a The Funding Service (TFS) application as well as an e-Rad application. Deadlines are 6 October for TFS and 7 October for e-Rad.
- EPSRC and NICT each require certain information as part of their respective standard application processes. As a result, some sections of the application forms may differ (for example, EPSRC requires information relating to RRI, while NICT may require other information specific to its processes).
- Applicants should **ensure** that the proposed core research, objectives, scope of work, and partnership arrangements are consistent across both submissions, while addressing any **additional requirements** specific to each funder within the relevant application form.
- **The Peer review of applications will be conducted through The Funding Service ONLY.** Reviewers from the Japan side will also be taking part in the Peer review process via The Funding Service. Further, we plan to hold a joint UK-Japan panel to help arrive at the funding recommendations.



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Scope areas

Applications related to one or more of the following scope areas are encouraged and submissions should be limited to these areas.

1. Integration of AI in digital networks
2. Non-terrestrial networks
3. Advanced optics/ photonics

Please refer to 'What we're looking for' section in the **UKRI Funding Finder page** for detailed descriptions of these scope areas.

1. Integration of AI in digital networks

- This area is centred around developing AI driven communication networks built on robust, trustworthy and traceable AI architecture and orchestration frameworks that support distributed and federated AI.
- It involves designing data-centric, AI-native networks capable of managing and optimising themselves automatically, underpinned by reliable measurement methodologies that keep datasets continuously up to date, which is an essential requirement for effective machine learning based optimisation.
- Progress in this area relies on advanced edge technologies that enable real time operation, supported by collaboration across network operators. Long term success further relies on open standards, sustainability, security, AI interoperability, and trustworthy governance. This is alongside cross-cutting enablers such as inclusive user participation, assurance, privacy, regulation, and energy efficient, physics informed, interpretable AI to ensure resilient and future proof networks.

2. Non-terrestrial networks

- Non-terrestrial networks (NTNs) such as satellites, drones and high-altitude platforms, depend on advanced hardware, quantum technologies, AI, experimental testbeds, and strong security to deliver reliable communication, and several foundational challenges underpin this.
- These include developing new, reliable communication methods (for example, new waveforms, hybrid optical/RF links, AI-driven optical tracking) that can operate under rapidly changing channel conditions creating smaller, low-power, high-performance hardware and antenna systems for fast-moving NTN platforms. This also contributes to the advancement of next generation satellite and quantum communication systems for sensing and connectivity that can function globally without causing interference, supported by appropriate spectrum management.
- Another key challenge is ensuring interoperability across space, air, and ground networks through shared standards and securing the supply chains on which these systems depend on.
- AI and machine learning must support real-time optimisation, digital twin-based prediction, and performance management while keeping virtual and physical systems synchronised in dynamic environments. AI is also needed to enhance complex, multivendor Open RAN and NTN architectures for greater automation and efficiency.
- Additional challenges include developing scalable Internet of Things (IoT) platforms that operate across oceans, satellites, and embedded systems creating shared testbeds and global field trials to validate emerging AI-enabled NTN and IoT solutions and strengthening resilience and security across land, undersea and satellite networks in the face of evolving threats, legacy weaknesses and supply chain vulnerabilities.

3. Advanced optics/photonics

- This area is centred around developing the next generation optical and wireless networks, addressing challenges from designing scalable, resilient and energy efficient optical infrastructures, supported by physics informed AI, to advancing ultrawideband fibre technologies, supported by energy efficient digital signal processing.
- It also includes integration of optical and wireless systems for global-scale sensing and enabling end-to-end photonic networks through utilisation of emerging All Photonics Network (APN) concepts.
- Another key element is the development of quantum enabled communication links to provide secure, reliable operation and seamless integration with classical optical networks. This priority further emphasises the importance of building sustainable, interoperable systems, including APN-based architecture, with shared standards across data centres, mobile networks and operators, aligned by international frameworks.
- Finally, there is the need for highly resilient networks capable of withstanding new technologies, cyber-physical threats, variable traffic patterns, and integration with space-based systems, while balancing cost, energy efficiency and global standardisation to ensure long-term, futureproof connectivity.

Eligibility

- For support under this funding opportunity, **applicants and organisations** must be eligible to apply for funding from their respective country's funding agency.
 - EPSRC standard eligibility rules apply. UK applicant eligibility and organisation eligibility requirements can be found [here](#).
 - Japanese applicants must meet the [NICT eligibility requirements](#). More info can be found [here](#).
- To be eligible for funding from this opportunity, you **must** have a project partner from Japan.
- **To Note:** Applicants may act as the project lead in **only** one application, but may participate in additional applications in other roles (for example, co-lead)

Available Funding

Engineering and Physical Sciences Research Council (EPSRC) has a total of £3 million for this activity. NICT funding totals £3 million.

Applications must comply with country-specific requirements which are that:

- UK applicants may request up to £897,000 (80% of the FEC) per application from EPSRC
- Japan applicants may request up to ¥200 million per application from NICT

We aim to fund approximately **three** collaborations through this activity for projects of **three years'** duration.

Applications may consist of a single research project, or a suite of related research activities in a defined research area.

How to Apply

Submitting your application

We are running this funding opportunity on the new Funding Service, before starting an application, you will need to log in or create an account on [The Funding Service \(TFS\)](#). You can save completed details in TFS at any time and return to continue your application later.

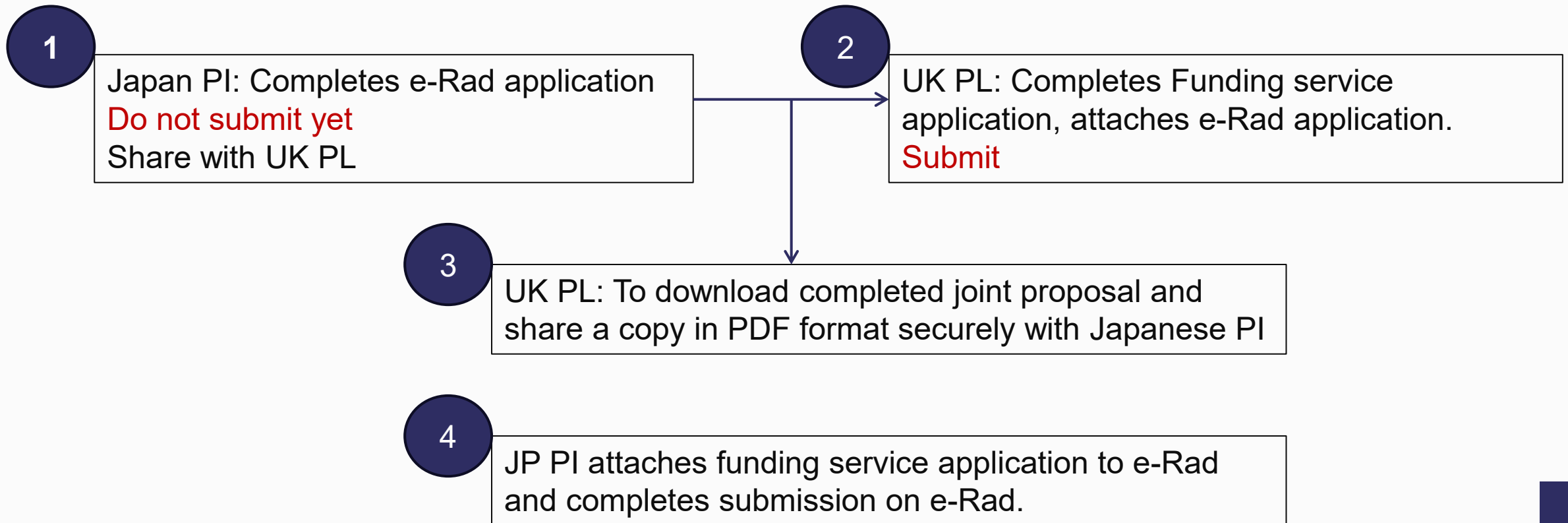
The project lead is responsible for completing the application process on the Funding Service, but we expect **all** team members and project partners to contribute to the application.

The PI from Japan (and any Japanese team members) must be listed as the **project partner** on the Funding Service and not as part of the core team.

Only the lead research organisation can submit an application to UKRI.

How to Apply

Remember: You will need to complete a The Funding Service (TFS) application as well as an e-Rad application. Deadlines are 6 October for TFS and 7 October for e-Rad.





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Application process



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Application questions

The following questions will be included via the UKRI Funding Service:

- Vision and Approach
- Research partnership
- Applicant and team capability to deliver
- Resources and cost justification
- Ethics and responsible research and innovation (RRI)

For UK applicants, the following questions will be included in the Funding Service:

- Additional documentation: NICT-EP SRC joint application form
- Project partners
- Project partners letters (or emails) of support
- Facilities
- Trusted research and innovation
- Ethics and responsible research and innovation (Additional sub-questions)
- Data management and sharing
- Duplication

Assessment process

The Funding Service applications will be checked to confirm:

- alignment with at least one of the **defined scope** areas and contributes to the high-level objectives of this funding opportunity.
- clear relevance to the **remits** of both EPSRC and NICT
- meets the **eligibility** requirements for EPSRC and NICT
- no significant duplication with ongoing projects or concurrent submissions and
- includes Japanese project partner(s) eligible for NICT funding

EPSRC will coordinate and manage these checks in consultation with NICT.

Subject to successful eligibility and scope checks, applications will be subject to an assessment process led by EPSRC in partnership with NICT.

Assessment Process

Expert review

- We will invite experts to review your application independently, against the specified criteria for this funding opportunity.
- You will not be able to nominate reviewers for applications on the new UK Research and Innovation (UKRI) Funding Service. Research councils will continue to select expert reviewers.

Panel

Following expert review, we will invite experts to collectively review your application against the criteria and rank it alongside other applications after which the panel will make a funding recommendation.

EPSRC and NICT will make the final funding decision.

Assessment Criteria

The assessment areas we will use during the peer review stage are:

- Vision and Approach
- Research partnership
- Applicant and team capability to deliver
- Resources and cost justification
- Ethics and responsible research and innovation (RRI)

Assessment Criteria – Vision and Approach

Vision

For the Vision, explain how your proposed work:

- is of excellent **quality and importance** within or beyond the field(s) or area(s)
- has the potential to **advance** current understanding, generates new knowledge, thinking or discovery within or beyond the field or area
- is **timely** given current trends, context and needs
- impacts world-leading research, society, the economy or the environment

Within the Vision section we also expect you to explain how your proposed work:

- is relevant to at least one of the **scope areas** and **high-level objectives** of this funding opportunity and should be within EPSRC and NICT remits.

Assessment Criteria – Vision and Approach

Approach

For this section, explain how you have designed your work so that it:

- is effective and appropriate to achieve your objectives
- is **feasible**, and comprehensively identifies any risks to delivery and how they will be managed
- if applicable, uses a clear and transparent **methodology**
- if applicable, summarises the previous work and describes how this will be built upon and progressed
- will maximise **translation of outputs** into outcomes and impacts
- describes how your, and if applicable your team's, **research environment** (in terms of the place, and relevance to the project) will contribute to the success of the work

Within the Approach section we also expect you to:

- clarify the **division** of the research between the teams in Japan and the UK
- provide a detailed and comprehensive **project plan** including milestones and timelines in the form of a Gantt chart or similar

Assessment Criteria – Research Partnership

Research Partnership

How does your proposed work involve collaboration between UK and Japan?

Demonstrate how the research partnership:

- involves high-level international joint research aimed at **enhancing** scientific and technological capabilities for both countries
- **deliver** the research strengths, added value and synergies that can be achieved through UK-Japan collaboration
- demonstrates a clear and feasible **division of roles** between the Japanese and UK research, throughout the research period
- has an appropriate approach for building and expanding the international collaboration
- involves research exchanges and collaborations that are equitable and mutually beneficial for both countries
- **advances** the research field in both Japan and the UK

Assessment Criteria – Applicant and team capability to deliver

Why are you the right individual or team to successfully deliver the proposed work?

Evidence of how you, and if relevant your team, have:

- the **relevant experience** (appropriate to career stage) to deliver the proposed work
- the **right balance of skills** and expertise to cover the proposed work
- the appropriate **leadership** and management skills to deliver the work and your approach to develop others
- contributed to developing a positive research environment and wider community
- sufficient research achievements to demonstrate current or potential high level of international standing within global research community within relevant research fields
- an established record of relevant technology research which clearly and purposefully contributes to the scope stated in the funding opportunity

Assessment Criteria – Resources and cost justification

What will you need to deliver your proposed work and how much will it cost?

Justify the application's more costly resources, in particular:

- project staff
- significant travel for field work or collaboration (but not regular travel between collaborating organisations or to conferences)
- any consumables beyond typical requirements, or that are required in exceptional quantities
- all facilities and infrastructure costs
- all resources that have been costed as 'Exceptions'

You can request costs associated with **reasonable adjustments** where they increase as a direct result of working on the project. For further information see [Disability and accessibility support for UKRI applicants and grant holders](#). Where a funding limit is imposed on the opportunity, requested costs for reasonable adjustments may exceed the maximum funding amount.

Assessment Criteria – Ethics and responsible research and innovation (RRI)

What are the ethical and RRI considerations, implications and issues relating to the proposed work? If you do not think that the proposed work raises any ethical or RRI issues, explain why.

Demonstrate that you have identified and evaluated:

- the relevant **ethical and RRI considerations**, including both the research or topic area itself and the design and delivery of the project
- the **wider implications** of the proposed work, and how you will maximise the positive societal, environmental, and economic benefits arising from the project, whilst minimising unintended negative impacts, such as research misuse or accidental harm
- how you will manage these considerations throughout the lifecycle of the project

For NICT's Ethics and responsible research and Innovation, please check the [NICT Application guidelines](#) for details.



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Key points & Contact details



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Key points

- For support under this funding opportunity, **applicants and organisations** must be eligible to apply for funding from their respective country's funding agency.
- You **must** have a Japanese partner to be eligible to this funding opportunity
- The PI from Japan (and any Japanese team members) **must** be listed as the **project partner** and **not** as part of the Core team on the Funding Service.
- Applicants may act as the project lead in **only** one application but may participate in additional applications in other roles (for example, co-lead).

Deadlines:

- EPSRC must receive your application via The Funding Service by 16:00 (UK time) on 6 October 2026.
- NICT must receive the Japan based applicants e-RAD submission by 12:00 pm (Japan time) on 7 October 2026.

More info: <https://www.ukri.org/opportunity/japan-uk-joint-call-for-collaborations-in-advanced-connectivity-technologies-full/>

Useful information

Get help with developing your proposal:

- For help and advice on costings and writing your proposal, please contact your **research office** in the first instance, allowing sufficient time for your organisation's submission process.

Ask about this funding opportunity:

- UK applicants please email future.communications@epsrc.ukri.org with any questions you may have.
- Japan based applicants, please contact info-itaku@ml.nict.go.jp
- A **Frequently Asked Questions document and a copy of this presentation** will be available on the funding opportunity web page after the webinar.
- **Get help with applying through The Funding Service:**
Email: support@funding-service.ukri.org
Phone: 01793 547490 **Opening times:** Monday to Thursday 8:30am to 5:00pm, Friday 8:30am to 4:30pm





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Q&A



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