



Agenda

09:05 Introduction to Innovate UK & the GEM Programme

09:10 Japan's Commercial Space Sector

09:20 UK – Japan Collaboration in Space

09:30 Overview of Mission & Key Insights

09:45 UK Experts Perspective

10:05 Break (5 mins)

10:10 Expert Panel Q&A Session

10:30 Case Study - Astroscale

10:40 Next Steps

10:50 Meeting Close

Introduction to Innovate UK & the GEM Programme

Tim Just

Head of Portfolio – AI & Data Economy, Innovate UK



Innovate
UK

The UK's innovation agency

We are the UK's innovation agency

As part of UK Research and Innovation (UKRI), Innovate UK is publicly funded to drive innovation and productivity across the UK.

We work for you to create a better future by inspiring, involving and investing in businesses developing life-changing innovations.



A typical Innovate UK backed business raises

>30%

more money
from the
private sector



Than similar businesses. Since 2007

**Direct
business
benefit**



£3.61

For every £1 invested

Over a seven-year period. Based on the most recent independent evaluation.

Our purpose

We drive **productivity and economic growth** by supporting businesses to develop and realise the potential of new ideas, including those from the UK's world-class research base.

We **connect businesses to the partners, customers and investors** that can help turn these ideas into commercially successful products and services, driving productivity, and supporting business growth.

Our mission is to enable the creation and adoption of innovation across the UK.

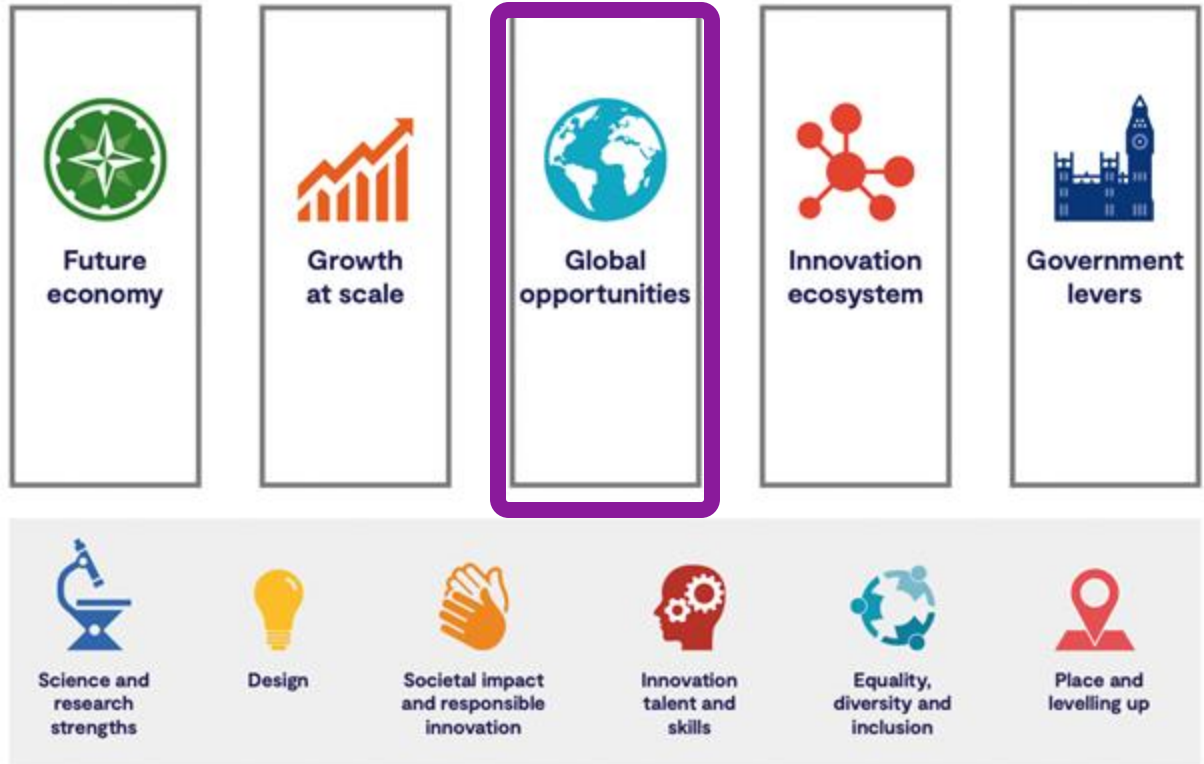


Building the future economy

Plan for action for UK business innovation

inspire | involve | invest

2021–2025



Theme 3: Global opportunities

More and more countries are looking to science and innovation to build their economies and meet global challenges. There is a major opportunity for international co-operation on research and development and innovation that builds on our world-class science and research capabilities and industry strengths.

Innovate UK Global Tool Set

Global Scoping Workshops (GSW)

These workshops bring together UK businesses, research organisations and other stakeholders in specific technology and sector areas to help identify countries offering the best prospects for partnership and collaboration with the UK.

The outputs of the workshop(s) will help to narrow down where Global Expert Missions could be used to scope opportunities in more detail.

Global Expert Missions (GEM)

A group of 6-8 UK experts scopes the innovation opportunities for UK businesses in a specific tech area sector/challenge in a specific country, with the information gathered by the experts then disseminated to UK businesses.

- Three stages –
- Expert visit
 - Dissemination report
 - Dissemination workshop

Global Business Innovation Programme (GBIP)

Cohort of c.15 innovative high growth businesses exploring opportunities and building collaborations and partnerships in specific countries and technology and sector areas.

- Programme over 9-12 months with 3 phases –
- Get ready
 - Visit the market
 - Exploit the opportunity

Global Incubator Programme (GIP)

Cohort of c.6-8 innovative high growth businesses building long-term relationships and foundations for future market growth.

In Canada, USA, Singapore and India in specific technology and sector areas.

- Programme over 12-18 months with 4 phases
- Prepare
 - Participate
 - Pursue – 3-6 months in an incubator in country
 - Exploit

Global Explorers

Funding to individual SMEs to help accelerate their growth and scaling through increasing global collaboration and future market access.

Aim is to support SMEs to:

- Explore and further international R&D and innovation collaboration and partnerships
- Engage effectively in collaborative research and innovation across borders
- Explore global market opportunities

Funding is available for up to 70% of eligible project activities, up to a maximum of £21,000.

Bilateral and multilateral R&D + innovation funding programmes

Collaborative R&D grant funding to support projects involving UK businesses + researchers and overseas counterparts, often up to 36 months in specific technology and sector areas.

Enables partners to take forward the development of innovative products and services of relevance to the UK or partner countries involved.

Funding programmes can be bilateral or multilateral, such as through Eureka network.

Supporting access to Horizon Europe.



GEM Objectives

Building International Collaboration

- Gather key insights, build connection and produce evidence to inform and enhance partnerships with strategic economies across the globe

Inform UK Business and Government

- Communicate sector specific insights to UK businesses and generate recommendations to Innovate UK and the UK Government to deliver collaborative partnerships with key countries

Showcasing UK Capabilities

- Promote the UK's strengths in innovation and as the "Partner of Choice" for future collaborative partnerships

UK – Japan Space Sector Collaboration

Eva Georgiou

International Relations Lead - UK Space Agency



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UK Space Agency

GEM Japan Dissemination Event – 18th November 2024

UK/Japan Govt

2023: Hiroshima Accords – enhanced strategic partnership

DSIT/METI

2023: UK-Japan Science and Technology Agreement



UKSA/JAXA

MoC 2021 (2024)

Joint Committee Meetings

Joint projects

International Bilateral Fund

£20m - end of FY24/25 – increasing the UK's bilateral and multilateral space partnerships

Direct Awards (InRange)

Phase 1 (32 projects) – cooperation on radioisotopes, fluorescent deep space petri pods, space-grade AI devices, unlocking in-orbit servicing investment.

Phase 2 (down-selection) – space nuclear power technologies

Space Science and Exploration: Bilateral Programme



Complements ESA Science Programme by **increasing opportunities** to partner on **globally significant science**.

Led by **UK academia**, selected on **science excellence**.

Programme recognised at recent UK Government Parliamentary Select Committee on Astronomy

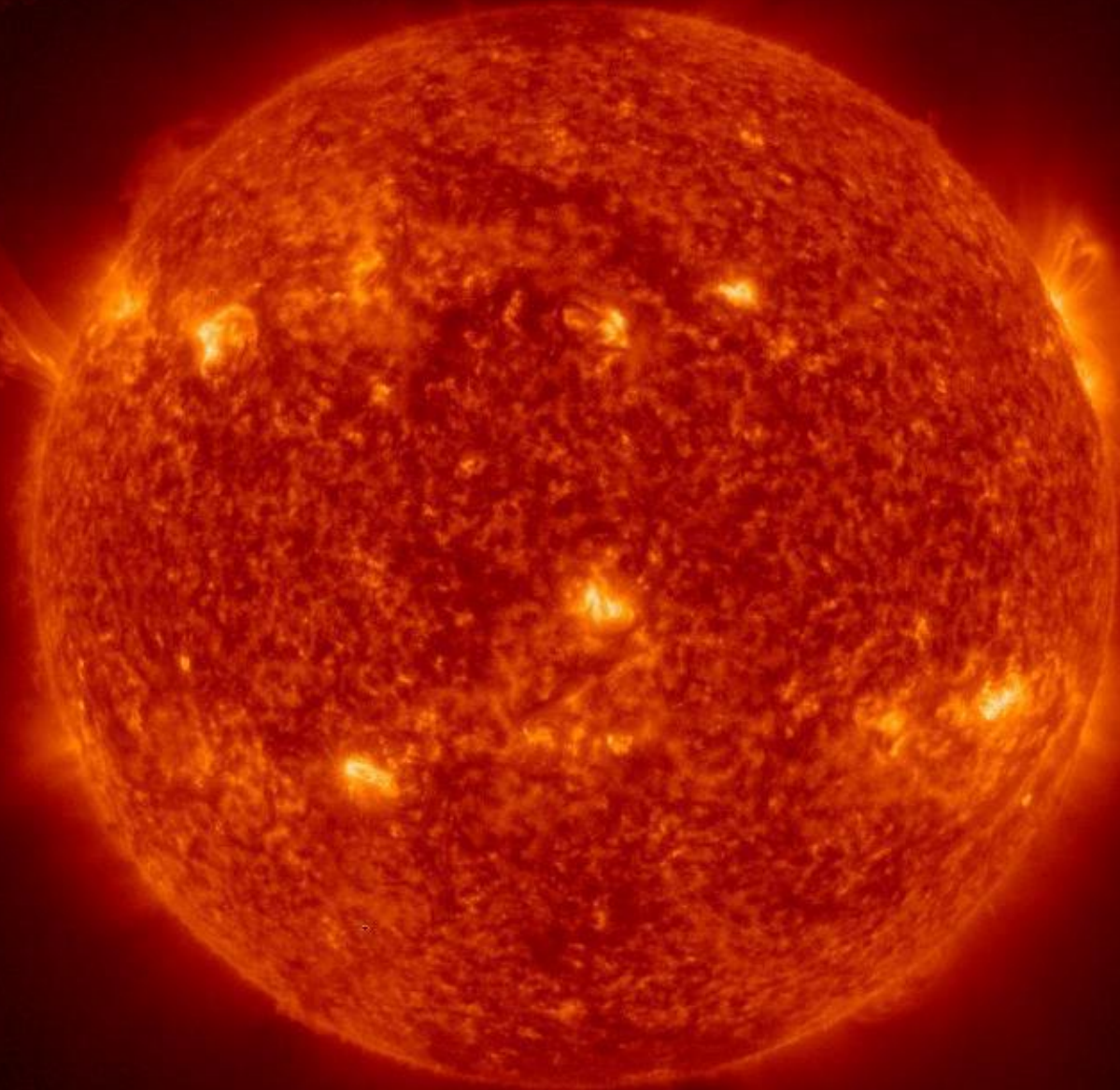
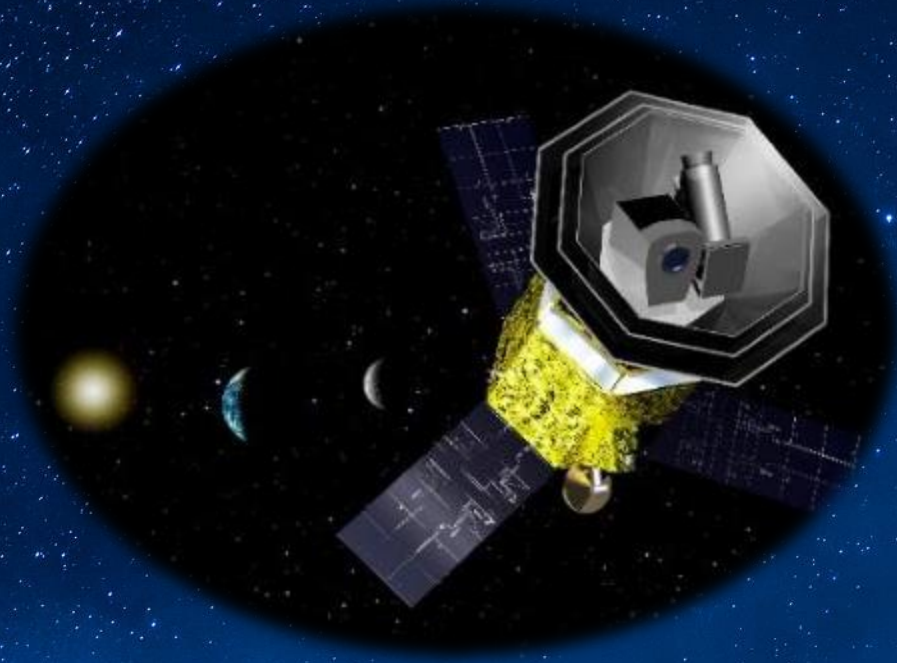
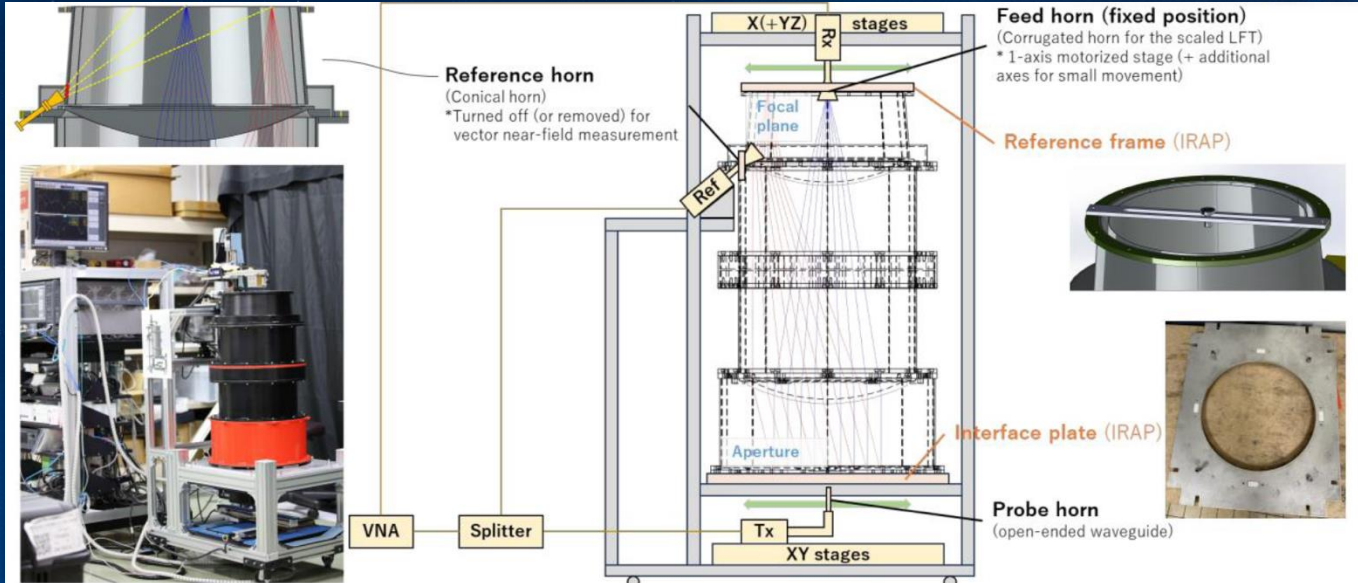
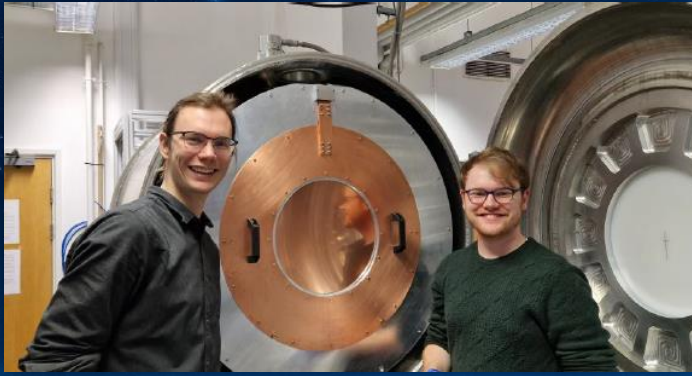


Image credits: Solar O
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LiteBIRD (~2030) - dramatically improved understanding of the early universe and cosmic inflation.



Mission Overview & Key Insights

Andy German
Mission Technical Writer



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Space Tech Mission

Mission Week: 8th to 12th July 2024

Mission coincided with the **SPACETIDE** conference & exhibition

Experts:

Alice Bunn, IMechE

Liz Seward, BAE Systems

Anushka Sharma, SPAN

Joshua Western, SpaceForge

John Auburn, ReOrbit

Colin Baldwin, UKspace

Mission Scope

The following thematic areas were identified as possibilities for future collaboration:

- Satellite Applications
- Instrumentation and Sensors
- Position, Navigation & Timing
- In-Orbit Servicing, Assembly and Manufacture
- Space Sustainability



UK and Japan in Space



	UK	Japan
Largest economy	6	4
R&D	6	3
Innovation	5	13

Mission Week 8-12 July 2024

- **Ecosystem**

- S-Booster
- SPACETIDE
- Satellite Business Network
- Cross-U / X-Base

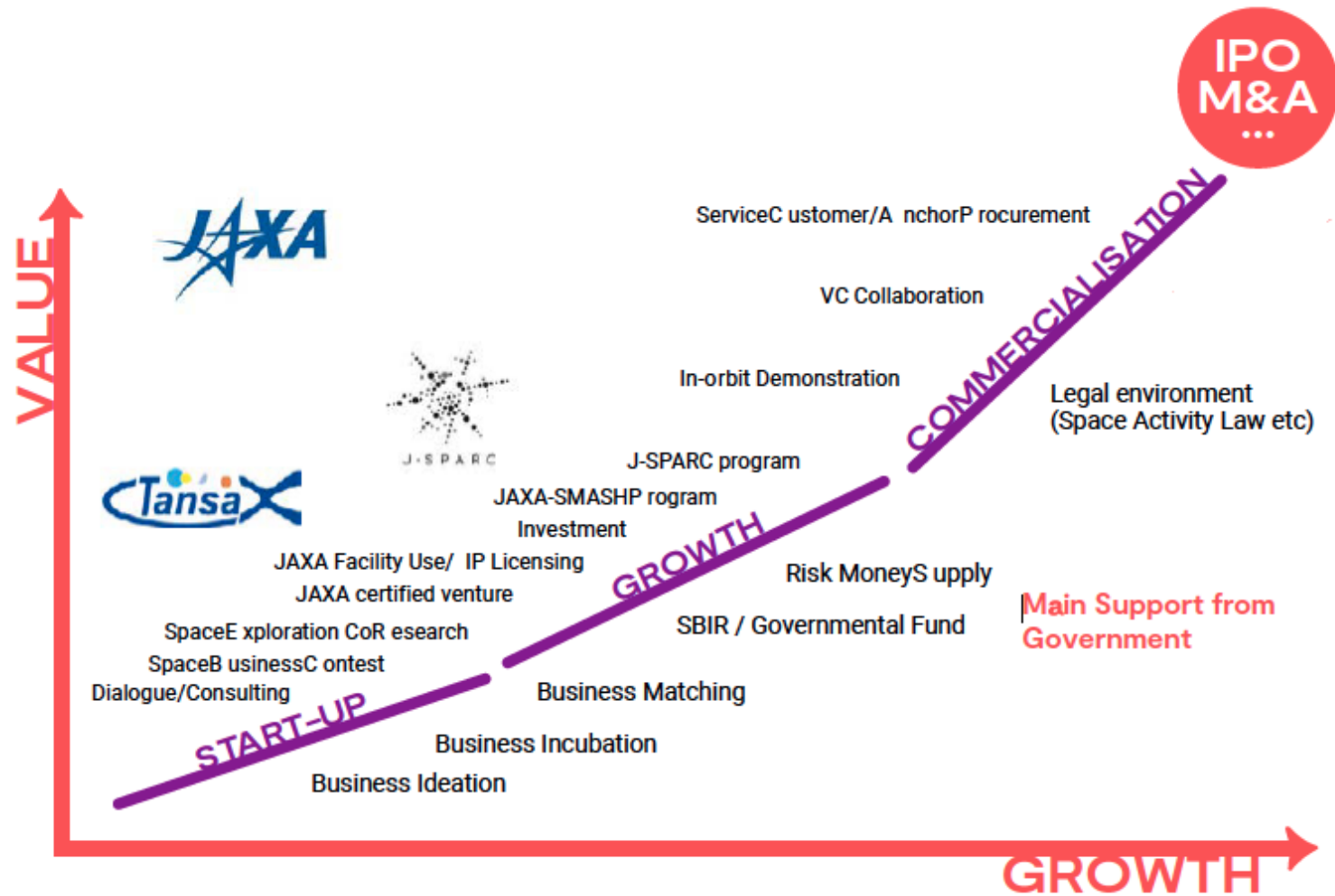
- **Academia**

- University of Tokyo
- Keio University

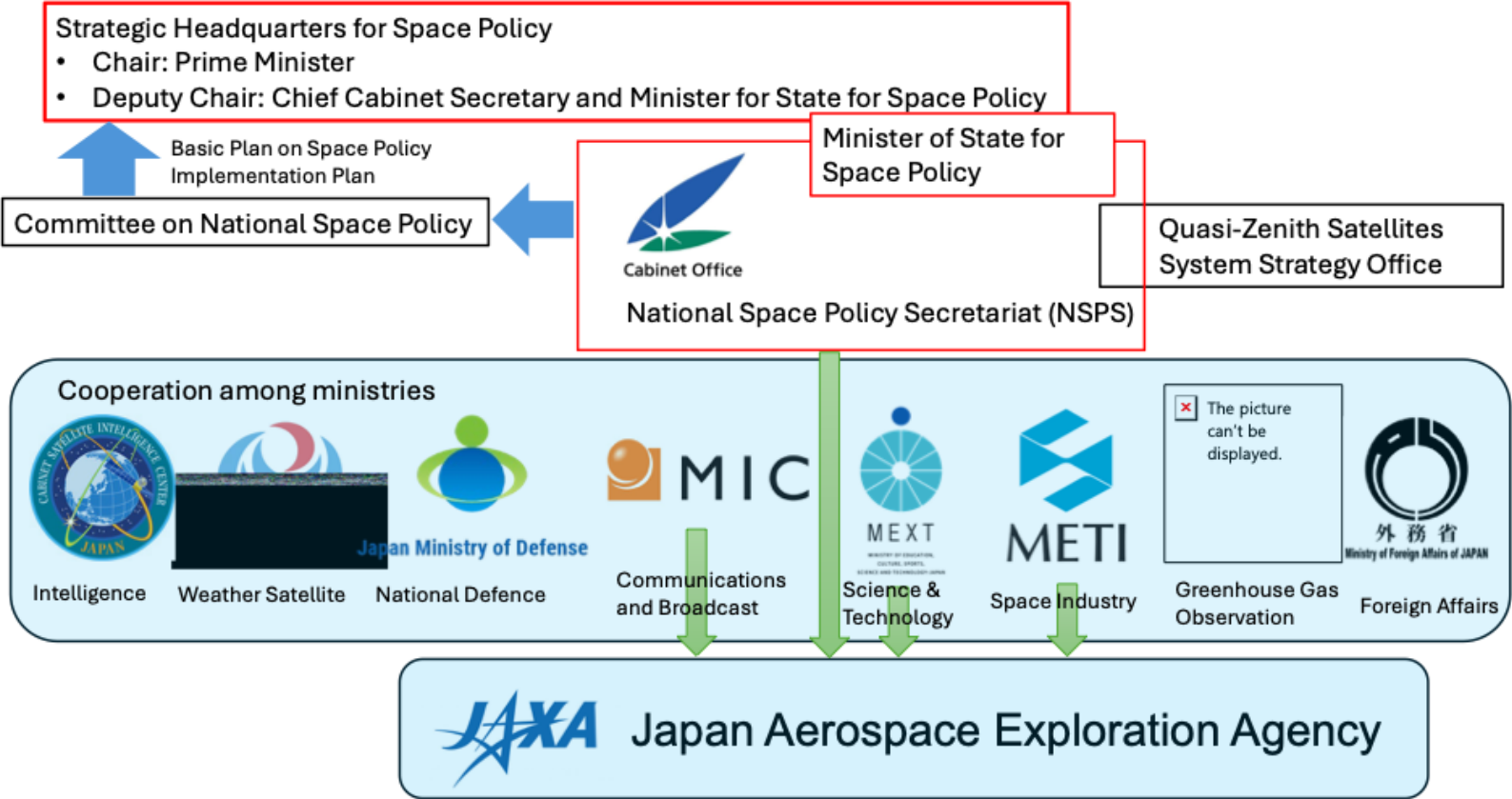
- **Industry**

- ArkEdge Space
- Axelspace
- Infostellar
- ispace
- Space BD
- Tenchijin
- Warpspace

The Innovation Landscape



Government Space Organisation in Japan





Space Strategic Fund

- 10-year fund launched 2024
- Targeting £5Bn (1 trillion yen)
- Coordinated by Govt
- Run by JAXA

Themes:

1. Satellites
2. Exploration
3. Transport

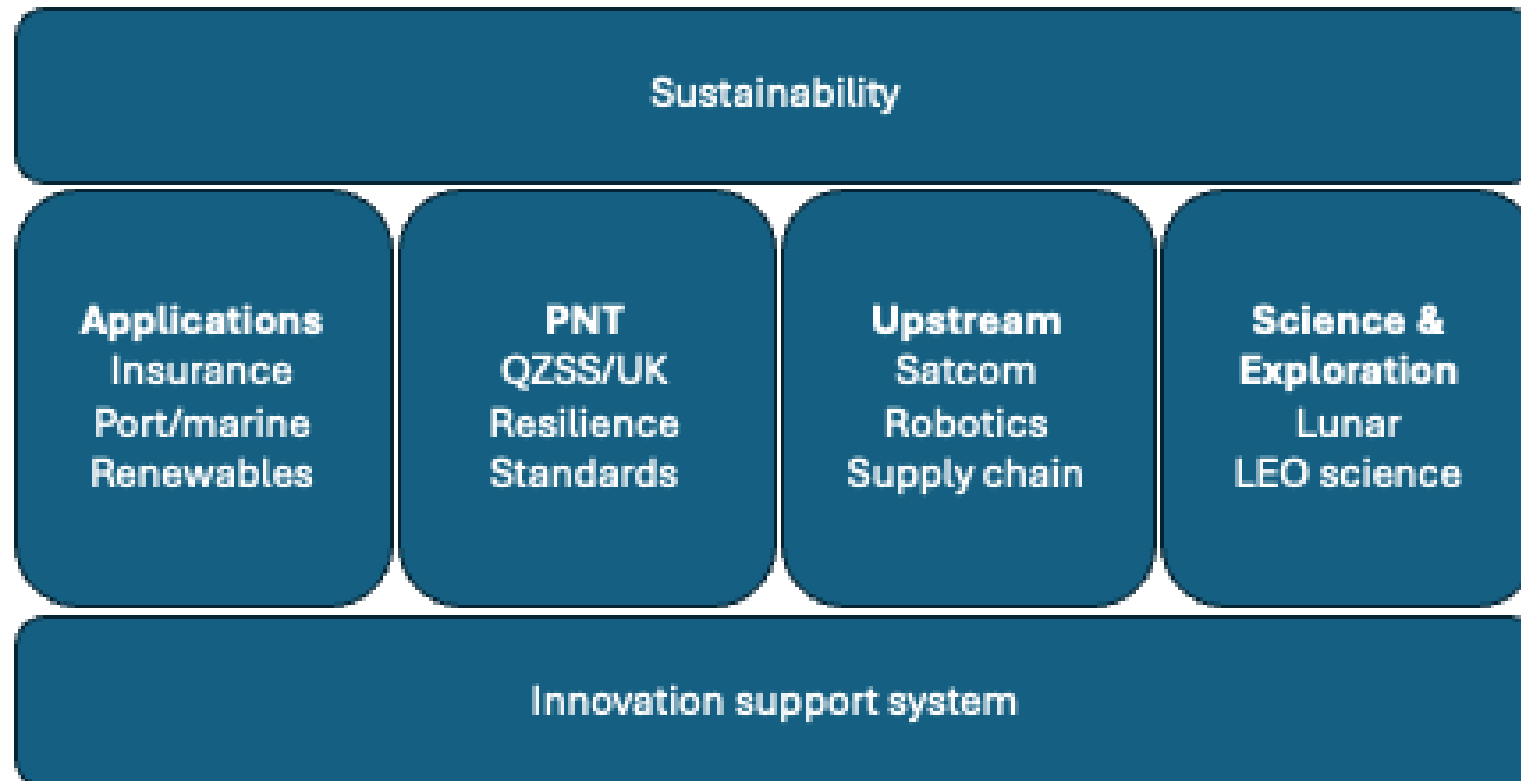


Potential Barriers

The apparent big 3:

- Culture
- Language
- Time difference
- Lack of skilled workers
- Standards
- Levels of public funding & support
- Relationships & trust

Opportunities



UK Experts

Alice Bunn, Institution of Mechanical Engineers

Joshua Western, SpaceForge

John Auburn, ReOrbit

Anushka Sharma, Space Academic Network

Alice Seward, BAe Systems

Colin Baldwin, UKspace



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Alice Bunn

CEO
Institution of Mechanical Engineers

<https://www.imeche.org/>



Anushka Sharma

Space Academic Network (SPAN)
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Joshua Western

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Liz Seward

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Colin Baldwin

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John Auburn

Chief Strategy & Commercial Officer
ReOrbit

<https://www.reorbit.space/>



Mission Report

Mission Report has been published today

<https://iuk-business-connect.org.uk/projects/global-expert-missions/space-in-japan-2024/>

