



# International Partnership Programme: Using Space to Achieve the UN Sustainable Development Goals

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# Space Solutions for Sustainable Development



Space-applications are increasingly **relevant to developing world challenges**

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Space systems, including communications, earth observation and navigation satellites, can **deliver on-the-ground development impact**

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Space and sustainable development sectors are **collaborating and partnering** now more than ever before

+



International organizations and developing country governments are **building capacity to leverage space applications**

# UK Space Agency and “International Partnership Programme”

- ▶ UK Space Agency is responsible for the UK civil space programme
- ▶ Committed to demonstrating societal and economic value of satellite-derived services
- ▶ Promote international partnerships to deliver sustainable development in emerging and developing economies
- ▶ Funding access to the UK commitment on ODA via Global Challenges Research Fund (GCRF)



**The International Partnership Programme – the largest programme of it's type in the world.**

**£30 million p.a.**  
5 year UKSA investment plus **additional** partnership co-funding finance and support

**33 Projects** across **40+ ODA Countries**

**120+ organisations**





***Eligible nations must be part of the OECD DAC List of ODA Recipients.***

# Application Areas

## Majority of Portfolio:

- **Disaster Resilience**
- **Forestry/Land**
- **Agriculture**
- **Maritime**

## Minority of Portfolio:

- **Education/Skills**
- **Water**
- **Climate**
- **Energy**
- **Mining**
- **Urban**
- **Health**
- **Connectivity**



# Projects assessed on their applicability to the UN Sustainable Development Goals



# How do we deliver the IPP?

- ▶ A series of sector calls over 5 years
- ▶ Based on a “sustainable model” – the projects are the ideas of the international bidding consortia, **NOT** the UK Space Agency
- ▶ Grants of 50%+ offered to facilitate projects over the course of five years (2016-2021)
- ▶ **Rigorous monitoring and evaluation of the impact, benefits and sustainability of each project (5-15% of budget effort)**

## Scoping

Short exercise to establish viability of idea prior to Open call – aimed at SME’s to create partnerships in readiness to submit to the main calls

## Open

applications submitted on any theme linked to the objectives of the IPP

## Tactical

pre-defined topics offered by specific countries (ie Malaysia) around specific challenges which should be addressed by the applicant

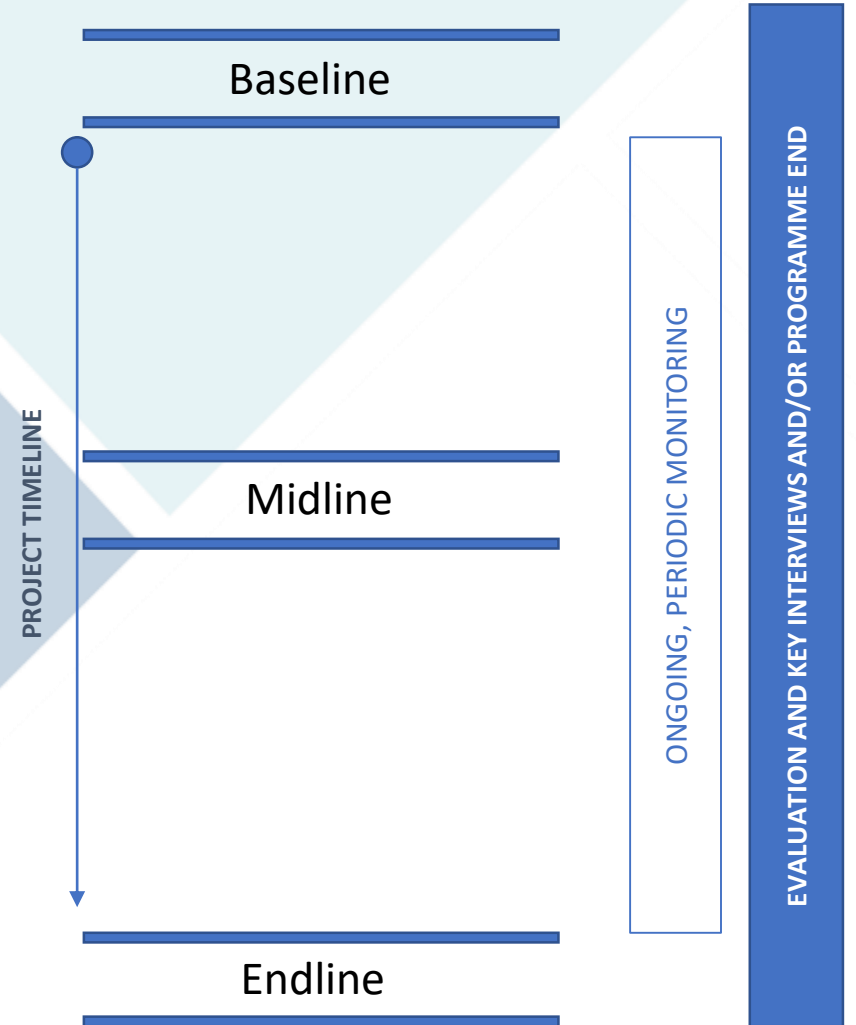
## Strategic

Pre-defined themes for applicants to address: ie DFID’s ‘The use of satellite data and technologies in disaster risk management’.

# Monitoring and evaluation occurs throughout the IPP lifecycle

Evaluation of the programme focus on three key areas:

- ▶ **Process Evaluation**  
How was IPP and the individual projects delivered?
- ▶ **Impact Evaluation**  
What difference did IPP and the individual projects make?
- ▶ **Economic Evaluation**  
Did the outcomes and impacts of IPP and the individual projects justify the costs?



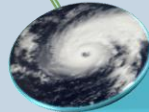


# IPP Cost-effectiveness Analysis

- All projects conduct cost-effectiveness analysis under guidance from Caribou Space and London Economics (Space Division)
- The recently published 'Economic evaluation of IPP: Cost-Effectiveness Analysis' highlights that space solutions are:
  - 12 times more cost effective at delivering sustainable forestry
  - 7 times more cost effective in supporting agriculture
  - Twice as cost effective for ensuring disaster resilience



**25,000 farmers involved**



**12 disaster events supported**



**341 health workers trained**



**34,000 students educated**



**45 fisherfolk lives saved**



**53,000 barrels of oil (spill) identified**



**300,000 ha of forests saved**

# IPP – after 30+ projects, what makes the **best** projects...

Smart eGov



Pragmatic



Local Experts



Champions



Training



Field Trials



Partner Fit



Testable Metrics



# Mongolia: Improved resilience herding communities to winter dzuds

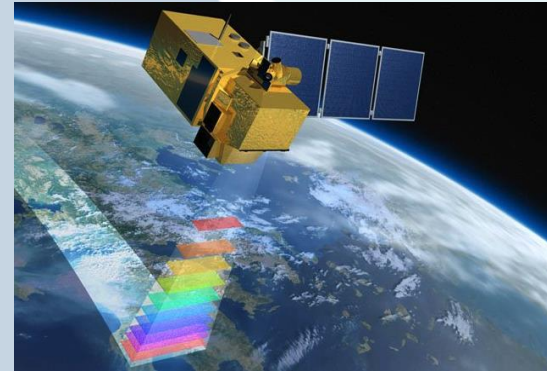
**Project Lead:** eOsphere

**International Partner:** National Agency for Meteorology and Environmental Monitoring of Mongolia (NAMEM)

**Project** 2018-2021

**Objective:** Improve the winter dzud-resilience of the Mongolian herding population by better integrating new satellite-derived environmental information into existing government and insurance networks.

**Approach:** EO products will include those providing information on grazing capacity, snow depth and 'dzud risk maps' aiming to predict the likelihood of a dzud events in advance.





# Philippines: Reducing impact of natural disasters using Satcom

*Typhoon Haiyan 2013 - deployment of emergency comms to the Incident Control Post was slow and inefficient - 1.5 million families were affected, 6,300 people were killed and there was \$2 billion of damage....*



**Project Lead:** Inmarsat Global plc

**International Partner:** Dept of Social Welfare & Devt, Philippines  
**Project** 2017-2019

**Objective:** To improve disaster resilience preparedness and response by using satcom  
**Approach:** Preposition powerful yet easily deployable telecoms equipment (Global Xpress) in 5 key regions - supported by training



# Bridging the space & development worlds

'Space for Development' is the use of space for positive impact on society, economy and environment, for all countries.

Space provides capabilities to solve challenges across climate change, disaster resilience, agriculture, forestry, maritime, health, education and industry.

This website provides a view of the knowledge, initiatives and community using space for development benefits. It is managed by [Caribou Space](#), and is supported by the [UK Space Agency International Partnership Programme](#).

## UK Space Agency International Partnerships Programme

### Space for Forestry in Developing Countries



Coverage Lead	Project	Country	Sector	Priority/UN/SDG	Space Technology
2015	2015	2015	2015	2015	2015



## UK Space Agency International Partnership Programme

### Space for Agriculture in Developing Countries

## UK Space Agency International Partnership Programme

### Space for Disaster Resilience in Developing Countries

Sharing knowledge on: [www.spacefordevelopment.org](http://www.spacefordevelopment.org)







# Thank You for listening

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