



**UK SPACE**  
AGENCY

# Where next Climate / Space / Data / Services in UK?

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<http://www.bis.gov.uk/ukspaceagency>

# What next?

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- Vision – where does the UK want to be in 2020?
- Actions
  - What has been done so far
  - how do we address remaining gaps?
- Governance – what is the appropriate structure for enabling the actions?
- Resources – who can/should commit to activity?

# Vision

***By 2020 UK will be the place producing and interpreting climate quality data sets from satellites to underpin public and private sector decisions on risk, resilience and sustainability and investment for a global audience and customer-base***

- A vibrant, sustainable, world-leading climate community
- Climate data integrated “as standard” in a variety of services
- A seamless supply chain for climate data from space
  
- Does this address the IGS vision?

# Vision (details)

This encompasses...

- A vibrant, sustainable, world-leading climate community, which includes
  - Prominent role for both UK industry and academia in C3S and CCI programmes
  - UK leading the exploitation of Sentinel data for climate research and services
  - Career development opportunities for individuals with skills around climate data production, interpretation and integration
  - Training and engagement to bridge gaps in awareness, understanding and expertise between the satellite community, scientists, data specialists, service developers/providers, a “cadre” of entrepreneurial SMEs and potential users of satellite data.
  
- Climate data integrated “as standard” in a variety of services, which includes
  - The means to find and use data matching specific sectoral and individual user needs much more easily.
  - Stimulating development of business models that work for private sector suppliers who want to use satellite data to enhance the impact and effectiveness of the services they offer to end-users.
  - Development of climate data as “commoditised” product, rather than tailored for niche applications
  - Development of trusted, world-leading climate data quality standards for services
  
- A seamless supply chain for climate data from space, which includes
  - Efficient sustained operations of climate data from space
  - Capacity for translating R&D to the sustained operations when mature
  - An open innovation platform and computing space in which businesses can test their applications
  - A strong and coherent voice to influence the institutional infrastructure which underpins the supply chain

# Highlights of CDSSG activity 2014-16

- Engagement
  - Regular, well-attended meetings – building links between different parts of the supply chain
  - Information sharing on meetings, events, funding opportunities etc
  - Sectoral engagement with agriculture, financial services, infrastructure and maritime users in particular
- Success with ECMWF bids
  - creating the awareness, relationships and intelligence that put UK participants in an excellent position to compete for this work
- Community consultations:
  - CCI paper presenting coherent community views to UKSA and ESA - UK priorities clearly reflected in ESA programme proposal
  - Priorities for H2020 programme in 2016/17
  - BIS science investment strategy
- Studies:
  - Existing issues in the supply chain - CDR producers, key public sector users, potential private sector users (consultancies, agric, insurance)
  - Proposals for trials to implement key ECV processing on a routine basis, utilising climate-data skills developed in the academic teams
  - Operational data processing requirements captured at Jasmine CEMS
  - Trial climate service interface for infrastructure sector

# A framework programme needs

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- Many stakeholders
- to leverage existing entities and skills of each
- sustained (multi-year) funding from across partners, for significant project work
- and a full-time programme manager

# Actors and Resources needed

- A collaborative framework, with concrete contributions from a range of organisations with different roles:
  - UKSA
  - NCEO
  - NERC
  - STFC
  - Catapult?
  - IEA
  - UKSpace/BARSC?
  - Innovate UK?
  - Individual commercial entities?
  - Others?
- Capital investment vs. new posts vs. other funding?

# Governance / structure

## Programme Board

Entities funding the work

Responsible for setting and implementing vision, funds the work and monitors the outcome. UKSA to chair at first.

## Exec Team

Steers the programme and supports the programme manager

## Programme manager

Ensures projects are delivering as expected  
Website and social media  
Events, including stakeholder meetings  
Community building and information sharing  
Project management of work streams

Create a community-wide UK knowledge exchange forum to maximise opportunity-spotting and facilitate consortia to come together for collaborative design and development of pilot services, exploiting and building on other programmes where appropriate.

## Work streams / projects

### Data and Technology

Focus on sustained operations, data issues and satellite availability, identifying R&D gaps

### Market Building

Marketing and engagement, development of innovation platform, and a strategy for business engagement

### Training and Skills

Understanding which skills are required, capacity building, course development.

Provide evidence of demand and traction with early adopters: UK work programme should be developed to complement European actions, specifically to support UK-based climate service providers. Should include piloting new facilities.

# Proposed actions

Timescale	Action	Who	By when
Immediate	Agree vision, framework and programme plans	CDSSG	End of March 2016
Immediate	Development of CDSSG “success stories” for engagement	IEA	April 2016
Short term	Continued coordination of group before framework in place	IEA	April-October 2016
Short term	Identify which areas/actions are in scope for NERC investment	NCEO	May 2016
Short term	Clarify and establish the relationship and connectivity with the cross-government EO group/initiative		
Short term	Develop framework programme	CDSSG/IEA	July 2016
Short term	Recruit / tender/ appoint coordinator / programme manager	UKSA	October 2016
Short term	Training course development and delivery to support service development and engagement	UKSA / IEA	October 2016
Long term	Demonstrators/case studies specifically developed as part of the process of evaluating a market opportunity or focused on demonstrating supply chain capability.	Framework project team	October 2016 onwards
Long term	Assessment of broader training needs and skills shortages, and development of appropriate courses	Framework project team	October 2016 onwards
Long term	Continued engagement on seamless supply chain: Focus on identifying data issues, operational service provision and R&D gaps. Development of cases for investment.	Framework project team	October 2016 onwards

# So what about this group?

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- Members to decide where they want to sit / what contributions are
- Annual meeting for wide group
- Specific project actions
- Community emails and website

# Questions

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- Is the vision right?
- Is the governance right?
- Will it work / deliver?
- Who wants to help?