



EGIDA Project

National Use Cases Workshop

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In the UK, lead responsibility for GEO rests the [Department for Environment, Food and Rural Affairs](#), Defra currently aided by:

- NERC,
- UK Space Agency
- UK-EOF

[UK GEO Coordination Group](#) established in 2010 and funded a 2 year [UK GEO Coordination Project](#):

In order to take advantage of [current UK strengths in GEO](#), it is being initiated for NERC by [the BGS Earth Observation Team](#): ukgeo@nerc.ac.uk



British
Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL



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Department for Environment
Food and Rural Affairs



UK SPACE
AGENCY

UK Environmental Observation Framework



UKGEO Project Aims & Objectives



Develop UK understanding of GEO initiatives undertaken in the UK, develop UK GEO community and identify capacity gaps. Specifically:

- Undertake [landscape review of GEO in UK](#): identify current GEO activities, others that could contribute to GEO and gaps
- Develop [UK GEO community](#) including a communication strategy and stakeholder mapping
- Coordinate and [promote GEO related work](#) in the UK
- Ensure that the GEO community is [linked](#) with relevant UK initiatives like UK-EOF, Living With Environmental Change
- Provide [evidence to policymakers](#) on potential benefits and risks associated with GEO to underpin UK GEO positions



Main Achievements Year 1

- Focal point established – Ukgeo@nerc.ac.uk
- Stakeholder analysis
- Benefits and risks analysis
- Review of GEO Landscape – via questionnaires and workshop
- Coordination of 'UK line' for Beijing ministerial.
- Hosted GEPW5 workshop (February 2011)



- 6 main questions were asked with sub topics
 - How are you involved with GEO?
 - What is the scale of your engagement with GEO?
 - What is your motivation for involvement with GEO?
 - Do you consider that involvement with GEO adds value?
 - Are there any negative aspects to your involvement with GEO?
 - What do you believe should be the level of UK engagement in GEO?



Responses

- 42 people invited to take part.
- Those invited were thought to be already well engaged with, or have some involvement with, GEO Tasks/Sub-Task/Committees/Task Forces
- Responses from 22 out of 42 (52%)
 - 12 interviewed by telephone
 - 2 interviewed in person
 - 8 questionnaire responses by email
- In all cases anonymity of participants of the questionnaire respected !

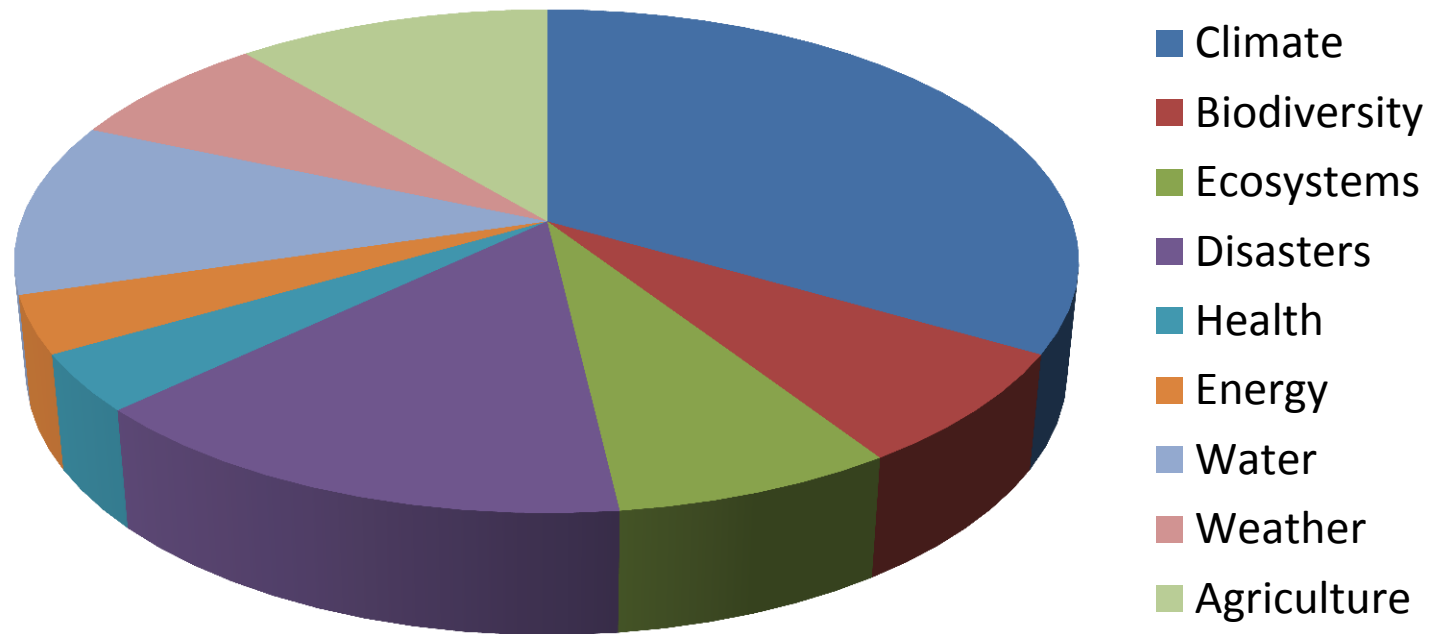
Who is working in what SBA?

examples

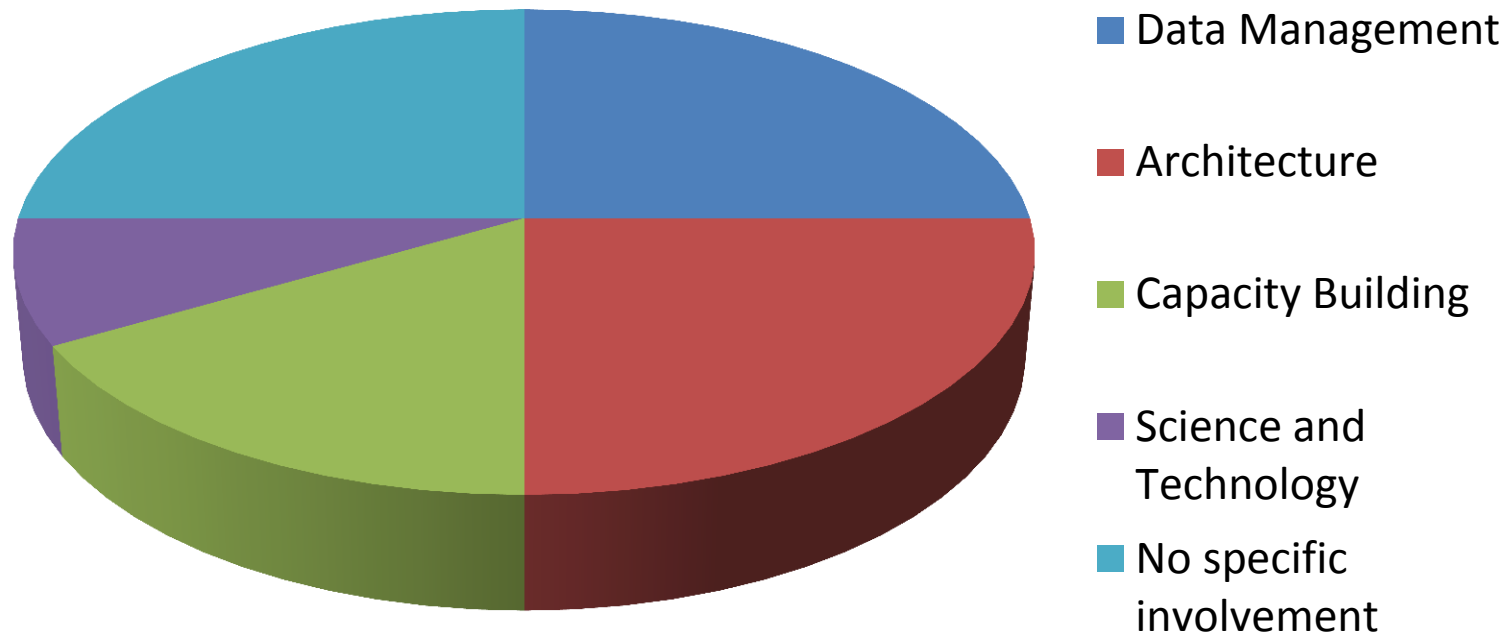
- EBONE – an EU FP7 project relevant to this area of GEO involves Joint Nature Conservancy Council
- British Antarctic Survey is involved in many polar research activities with GMES and so is involved with GEO 'by default'
- Forest Carbon Tracking – University of Sheffield leads activity in Forest Carbon Tracking sub task
- British Geological Survey Co-Chairs the geohazard community of practice and is working to have the EC GEO FP7 Project EO Miners identified as a new GEO sub-task by the end of the year



SBA of respondents



Cross cutting area of work of respondents



Cross Cutting Area UK examples

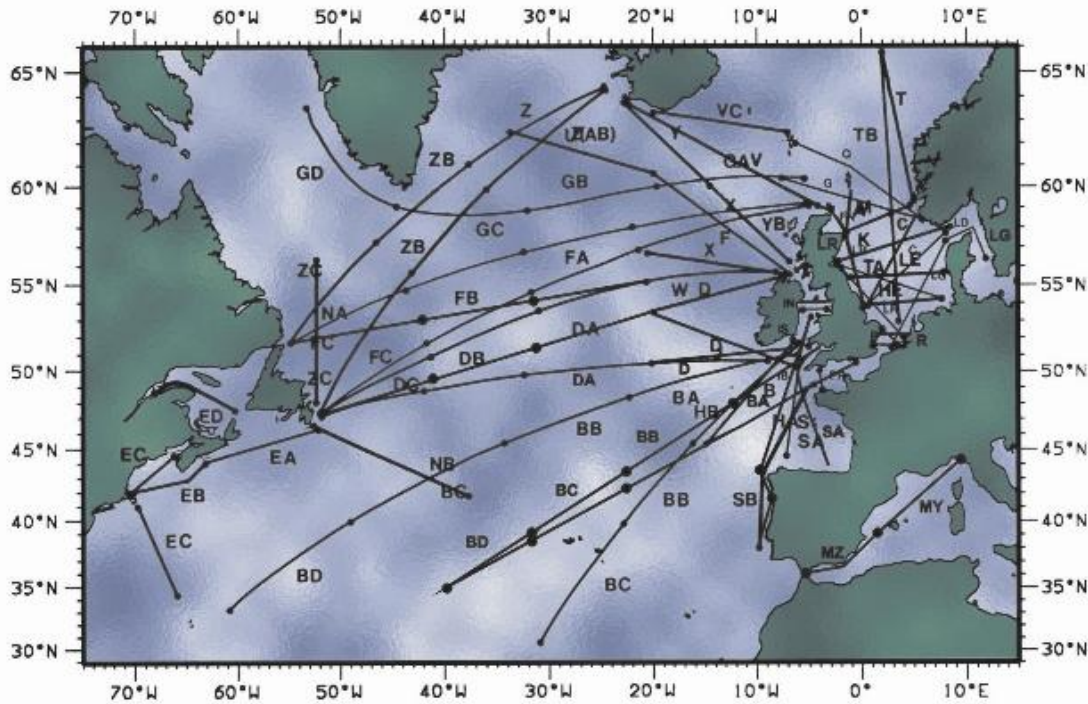


- NERC Space Geodesy Facility attends the Global Geodetic Observing System steering committee
- POGO/Plymouth Marine Lab – DevCoCast project which aims to involve developing countries more closely in the GEONETCast initiative and EAMNet
- BGS - OneGeology is global datasets sub task and EC FP7 AEGOS (African-European Georesources Observation System) project is capacity building sub-task



Sir Alistair Hardy Foundation for Ocean Science

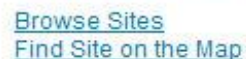
The Continuous Plankton Recorder Survey



Network of CPR routes towed in N Atlantic since 1931



CPR launched from ferry “Pride of Bilbao”



> 5 m individual records increasing to 25m.



HL	HM	HN	HO	HP	JL	JM
HQ	HR	HS	HT	HU	JQ	JR
HV	HW	HX	HY	HZ	JV	JW
NA	NB	NC	ND	NE	OA	OB
NF	NG	NH	NJ	NK	OF	OG
NL	NM	NN	NO	NP	OL	OM
		NR	NS	NT	NU	OQ
A	B	C	D	E	F	G
F	G	H	I	J	K	L
L	M	N	O	P	Q	R
Q	R	S	T	U	V	W
V	W	X	Y	Z	AA	AB
		SR	SS	ST	SU	TQ
		SV	SW	SX	SY	SZ
					TV	TW



Other UK examples of related data collection

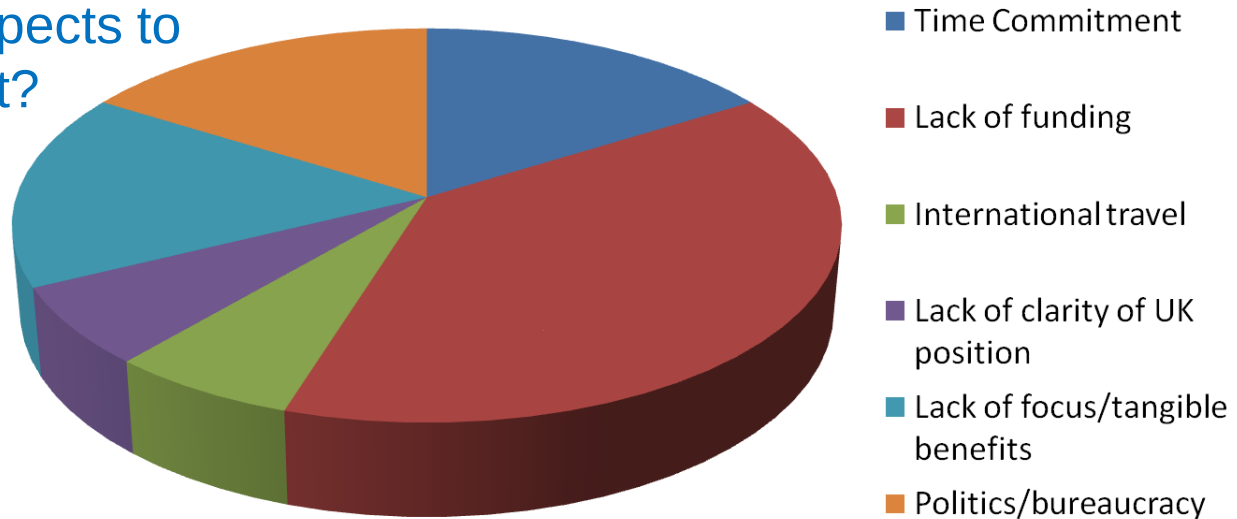


British Antarctic Survey

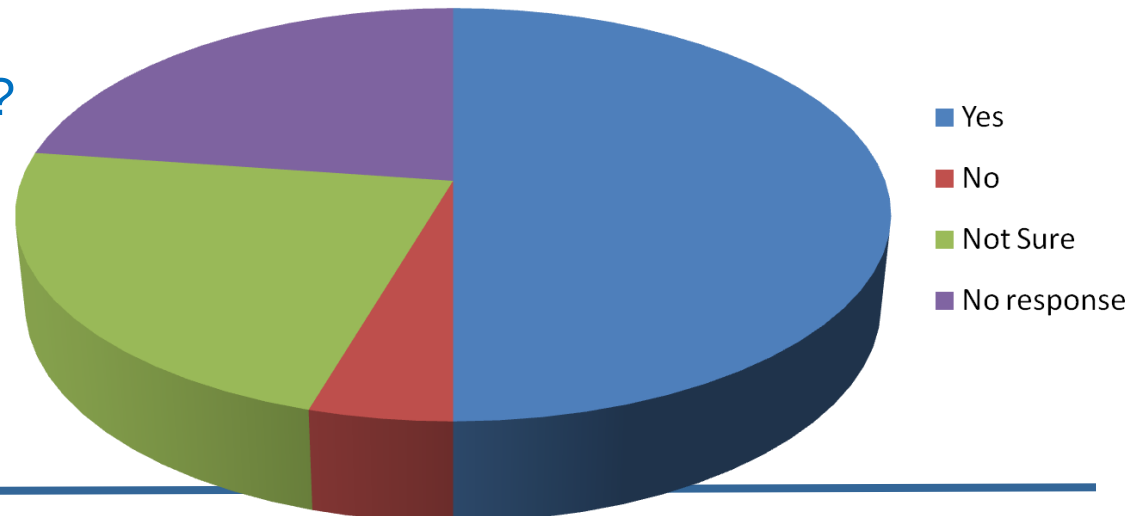
- Atmospheric e.g. Surface and Upper Air Meteorology at Halley and Rothera
- Oceanographic e.g. Moorings ; CTD station; Weddell Sea transect at 10 degrees W; Sea Ice observations; The Rothera Oceanographic and Biological Time Series (RaTS)
- Biological –e.g. Climate measurements of the terrestrial ecosystem; Biodiversity and Bacterial biodiversity
- Air Quality in Scotland
- Bathing water quality England and Wales
- Flood events in Northern Ireland
- Etc. etc



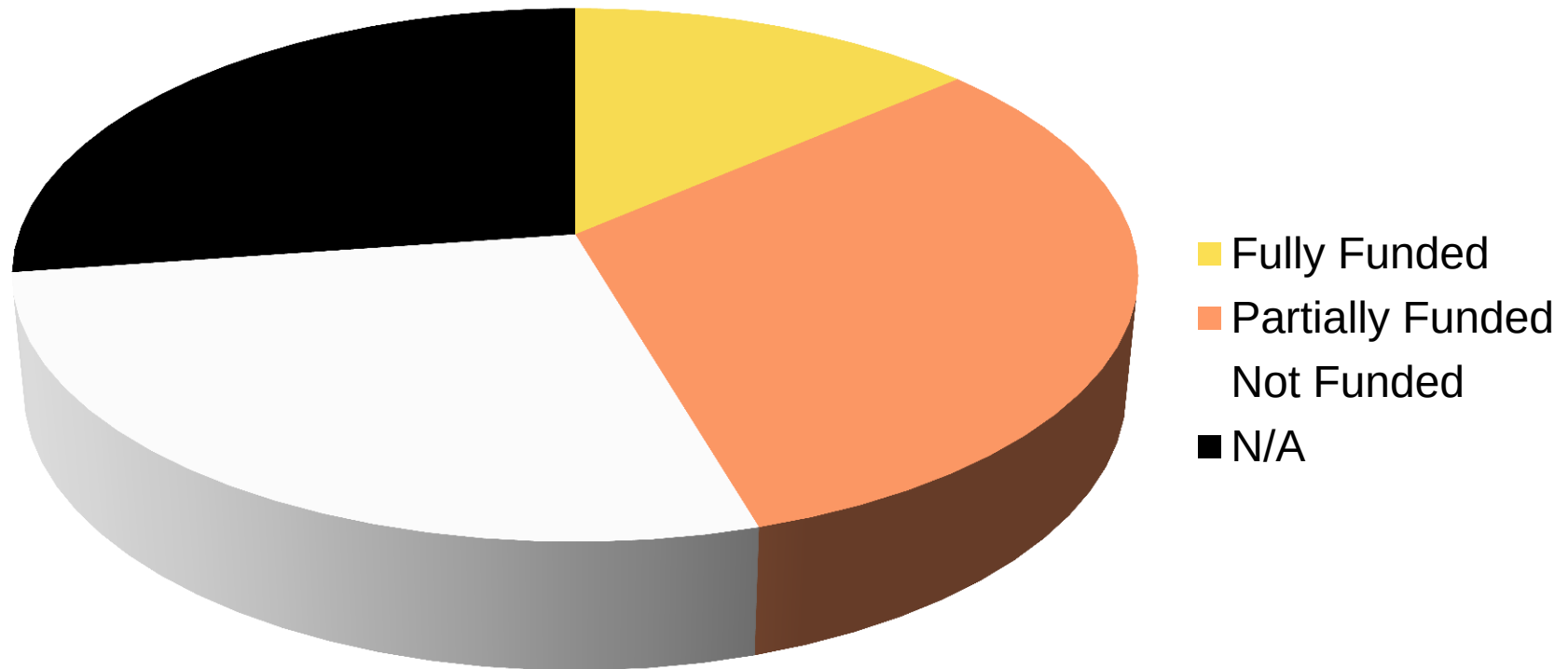
Main negative aspects to GEO involvement?



Does GEO Add Value?



Is your GEO work funded?



Where has funding come from?



- not all funding has been generated by EC FP7 projects related to GEO...
... Funding for some UK players has also come from the Canadian Space Agency, for example
- ESA is another large source of GEO funding
- For GMES work related to GEO, some funding has also been provided by the UK Foreign and Commonwealth Office



What is your interest in GEO?



- Majority of responders expressed an interest in GEO as a whole and not just on a project or single Task specific basis

“a satellite system for the Earth is a good idea”

“All the SBAs are valuable - can see the benefits that GEO could bring in all these areas”

“a more comprehensive system in GEO/SS and data accessibility and architecture is important”



Motivations



“the principal of bringing together international expertise to offer a joined-up approach to common problems and opportunities and sell the practical value of EO is very appealing”

“was asked to do the work because he is the expert in his field”

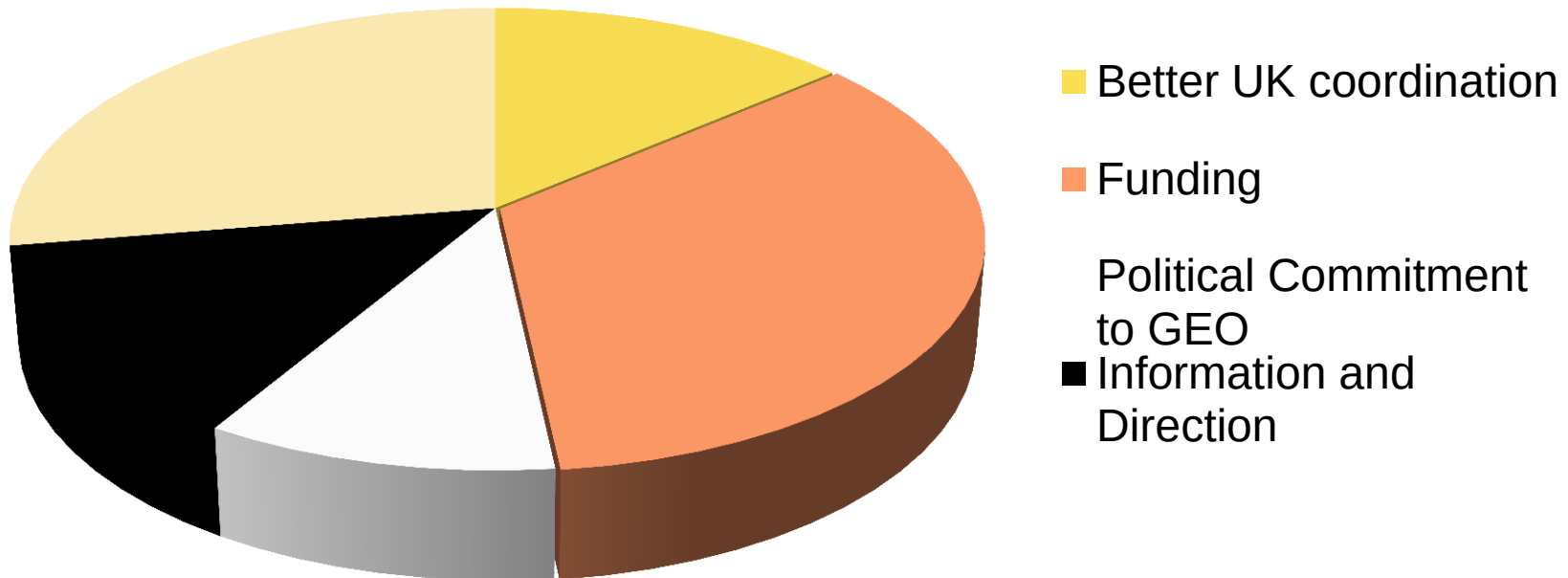
“became involved because he passionately believes that a better EO system for geohazards saves lives and reduces costs”

“GEO is gaining momentum and it would look very strange if the UK wasn’t involved”



“I am interested in improved overall exploitation of satellite Earth Observation data – and GEO is aiming to do this”

Support required/requested



The need for funding is the main support requested

A need for up-to-date information was also strongly requested

Greater coordination of UK GEO activities and greater awareness of how to get involved was seen as a pressing requirement

Lessons Learnt in year 1



- Understanding the players and the landscape is the first step
- Many UK scientists involved in relevant work but do not know it as GEO – could be quick wins to join up effort
- Gap between UK line for policy and governance and the science input.
- Strategic level decisions needed for next steps
- The co-ordination of UK GEO activities is requested by stakeholders



UKGEO priorities– 2011/12



- Draft strategy to define UKs overall position on GEO. (Political and science perspective).
- Encourage data sharing including the GEO data-CORE implementation. UKGEO website should contain guidance on how to register data and UKGEO team keep track of UK submissions to the CORE.
- Provide a framework and opportunities to encourage working together e.g., GEO/GMES.
- Provide administrative support to UK members on the major GEO committees.
- Consider if / how a sustainable UKGEO is viable and what form it should take.

Support partner activities such as ...

- UK consideration of GCOS Implementation Plan.
- UK Space Agency launch and review of EO needs.

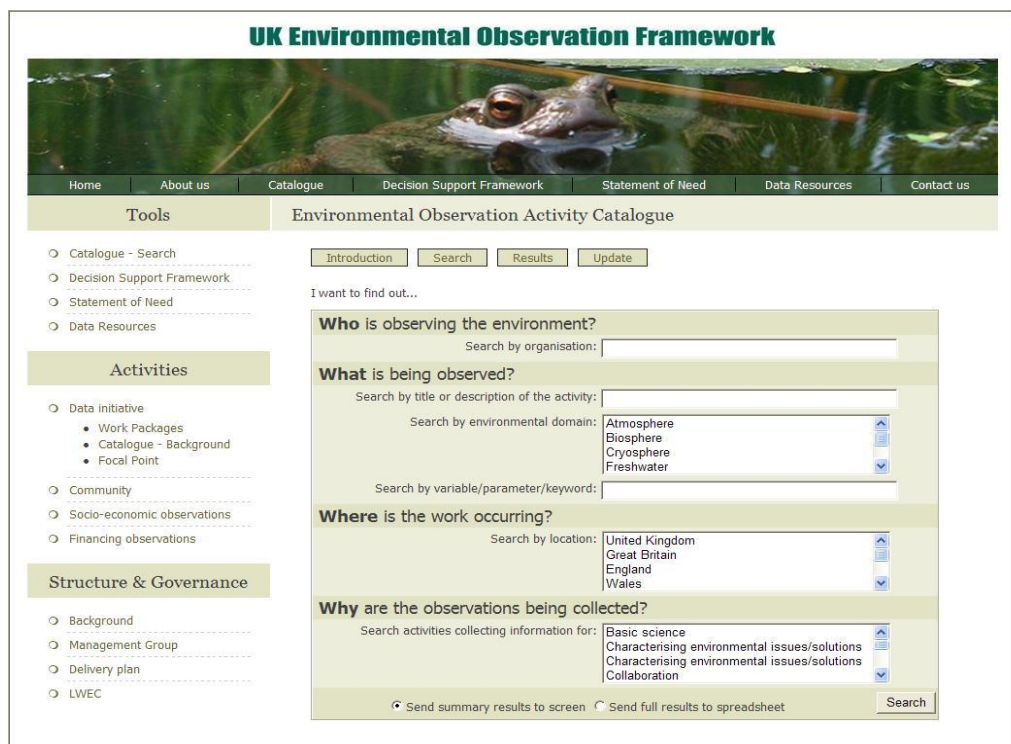


GEO Data Action Plan : Action 7

maximise the number of documented datasets made available on the basis of full and open access.

Method Used:

- UKEOF Catalogue of observation programmes + Other data sources
- Mapped to what could be useful to GEO to address the SBAs.



UK Environmental Observation Framework

Home | About us | Catalogue | Decision Support Framework | Statement of Need | Data Resources | Contact us

Tools

- Catalogue - Search
- Decision Support Framework
- Statement of Need
- Data Resources

Activities

- Data initiative
 - Work Packages
 - Catalogue - Background
 - Focal Point
- Community
- Socio-economic observations
- Financing observations

Structure & Governance

- Background
- Management Group
- Delivery plan
- LWEC

Environmental Observation Activity Catalogue

Introduction | Search | Results | Update

I want to find out...

Who is observing the environment?
Search by organisation:

What is being observed?
Search by title or description of the activity:
Search by environmental domain: Atmosphere | Biosphere | Cryosphere | Freshwater
Search by variable/parameter/keyword:

Where is the work occurring?
Search by location: United Kingdom | Great Britain | England | Wales

Why are the observations being collected?
Search activities collecting information for: Basic science | Characterising environmental issues/solutions | Characterising environmental issues/solutions | Collaboration

☒ Send summary results to screen ☐ Send full results to spreadsheet



Conclusion



UKGEO is a 2 year funded project to establish:

- The depth and breath of existing UK involvement in GEO
- What motivates involvement
- Business case for continual coordination at UK level –i.e. what's the benefits and who pays?
- Existing partners of UKGEO continue own involvement in GEO committees and projects
- Main requirement from existing GEO stakeholders is
 - to clear up confusion over difference between GMES and GEO
 - Identify sustainable funding sources for observations
 - Identify funding for research



Thank you

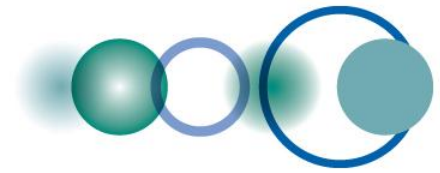
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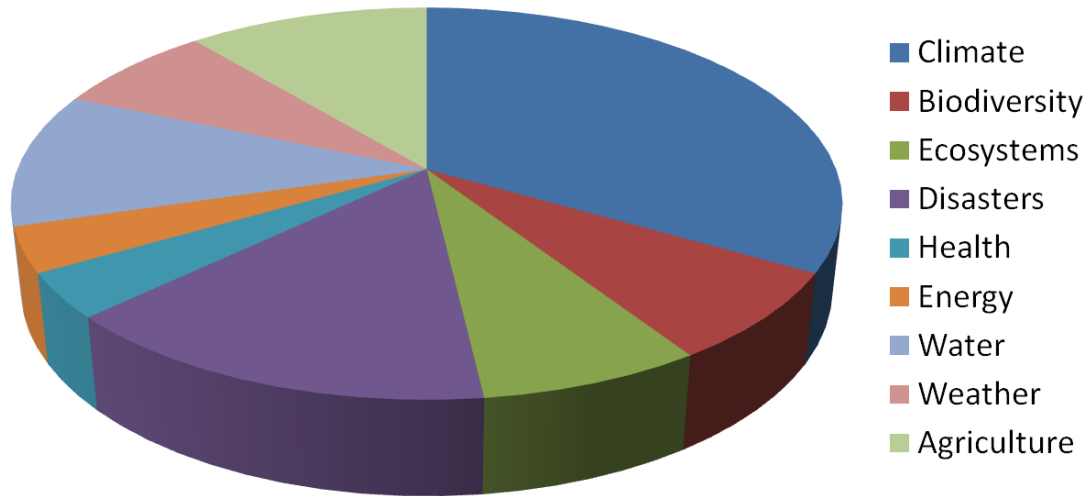


EGIDA Project

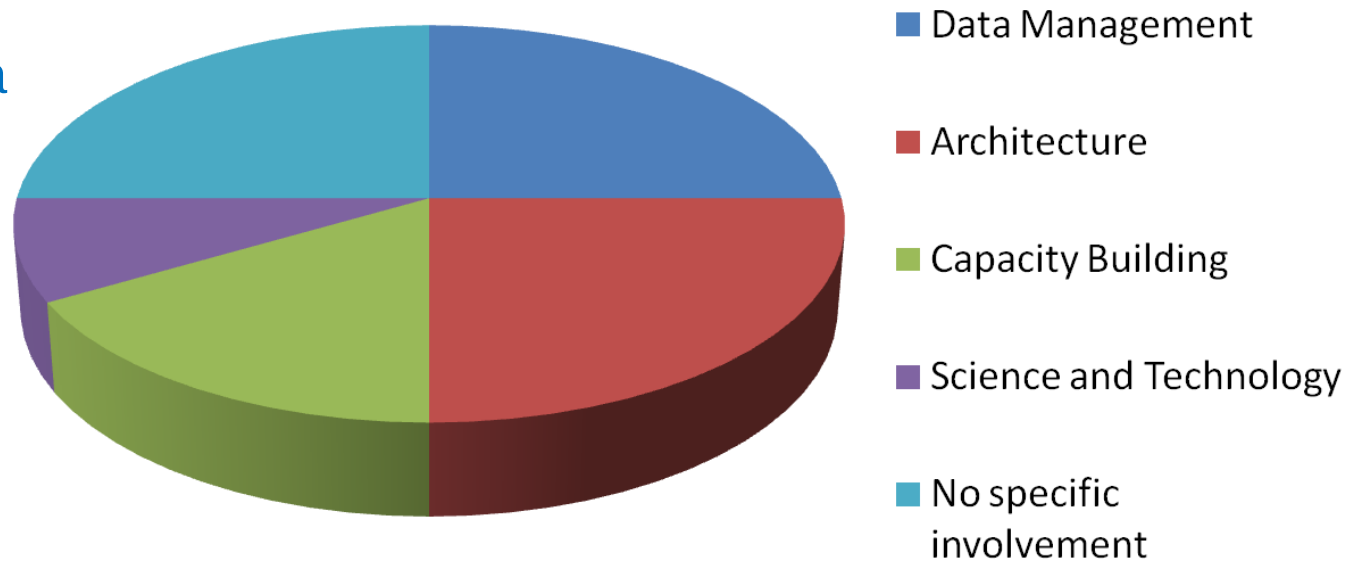




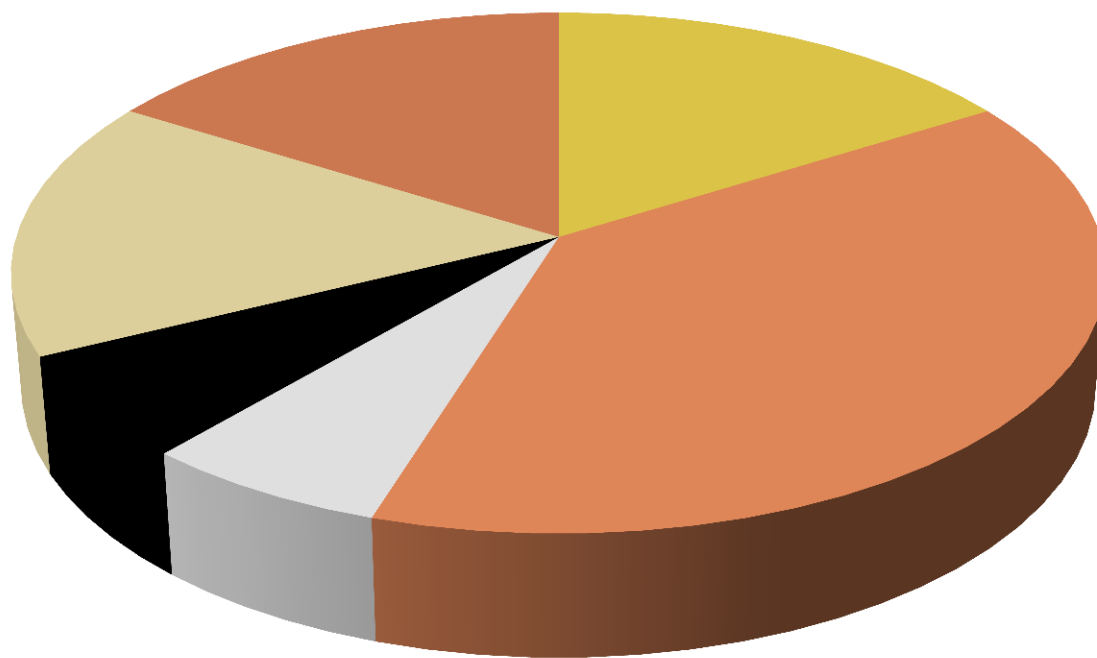
SBA of respondents



Cross cutting area of respondents



Main negative aspects to GEO involvement?



- Time Commitment
- Lack of funding
- International travel
- Lack of clarity of UK position
- Lack of focus/tangible benefits
- Politics/bureaucracy

Should level of UK Involvement Increase?

