

The Joint UK GEO/CEOS Office

Overview, achievements and priorities for 2017-18

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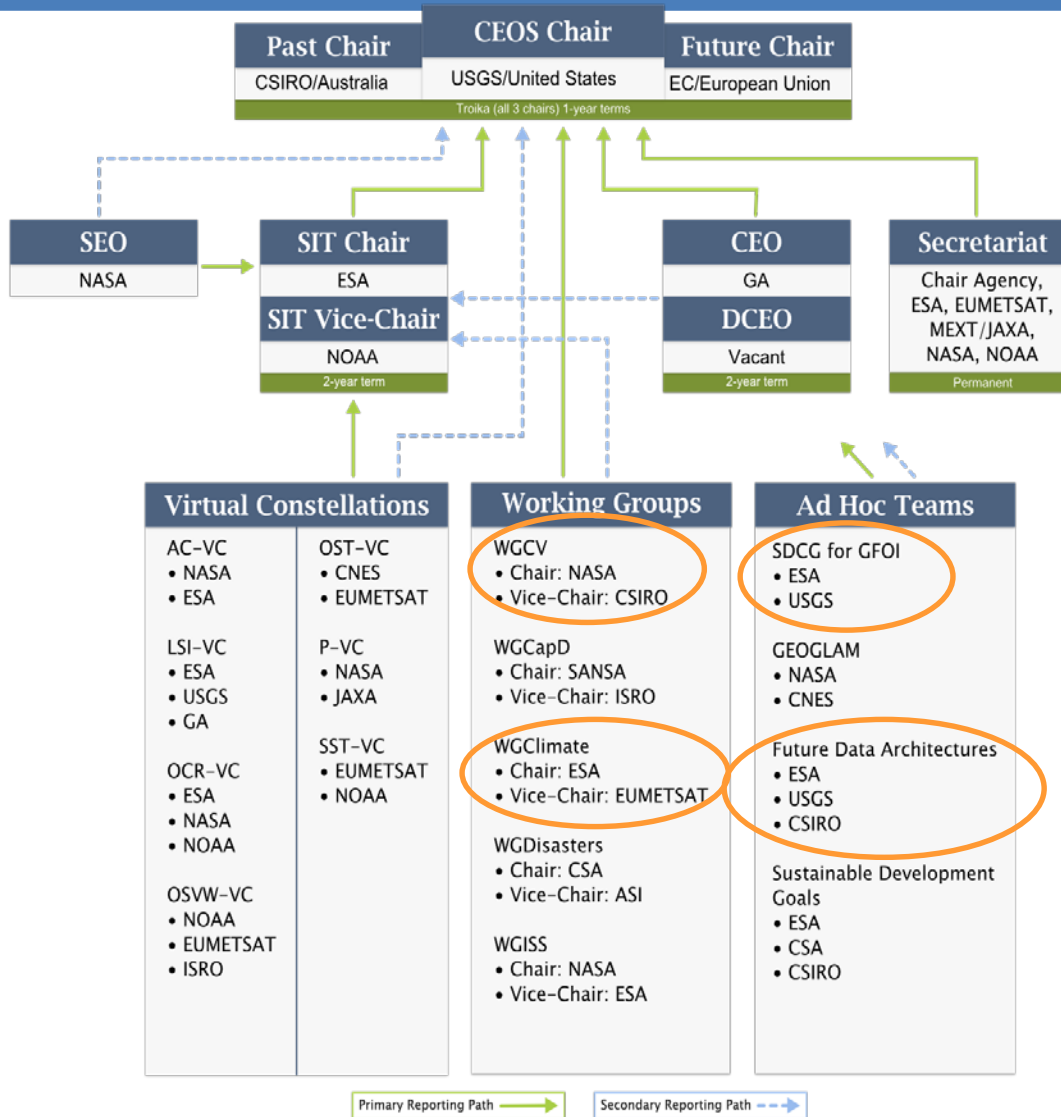
Zof Stott (GEO/CEOS Strategic Support)

What is CEOS?

The **Committee on Earth Observation Satellites (CEOS)** is **An international mechanism to coordinate civil space-based EO programmes and data exchange.**

- 60 space agencies operating 142 EO satellites;
- Three primary objectives:
 - 1) **Co-operation of CEOS agencies in mission planning and exploitation.**
 - 2) **To serve as a focal point for international coordination of space-based EO.**
 - 3) **To provide a forum for exchange of policy and technical information to encourage complementarity and system compatibility.**
- UK policy lead is UK Space Agency.
- Support from NCEO, key experts in HEIs, Research Orgs and Satellite Applications Catapult.

CEOS structure



What is GEO?

The Group in Earth Observations (GEO) is a voluntary partnership of governments and organizations focused on EO for decision-making.

“a future wherein decisions and actions for the benefit of humankind are informed by coordinated, comprehensive and sustained Earth observations and information.”

- 105+ nations; 109+ participating organisations;
- Creating a Global Earth Observation System of Systems (GEOSS) for **open data** access and software;
- Connecting EO to Sustainable Development Goals;
- Activities: GEO Flagships, GEO Initiatives, Community activities, Foundational tasks;
- UK Policy Lead is Defra, with support from UK Space Agency and NCEO
- Technical support: NERC Centres, HEIs, Research Orgs, Met Office, Ordnance Survey.

GEO structure

- GEO plenary: main body of reps; primary decision-making body. Meets annually.
- GEO Executive Committee (ExCom): oversees activities outside of plenary, guides GEO Secretariat. 16 reps from the 5 GEO caucuses.

Africa

- Senegal
- South Africa *
- Uganda

Americas

- Colombia
- Mexico
- United States *

Asia/Oceania

- Australia
- China *
- Japan
- Korea, Republic of

Commonwealth of Independent States

- Armenia
- Russian Federation

Europe

- European Commission *
- Finland
- France
- **United Kingdom**

UK has two years on ExCom

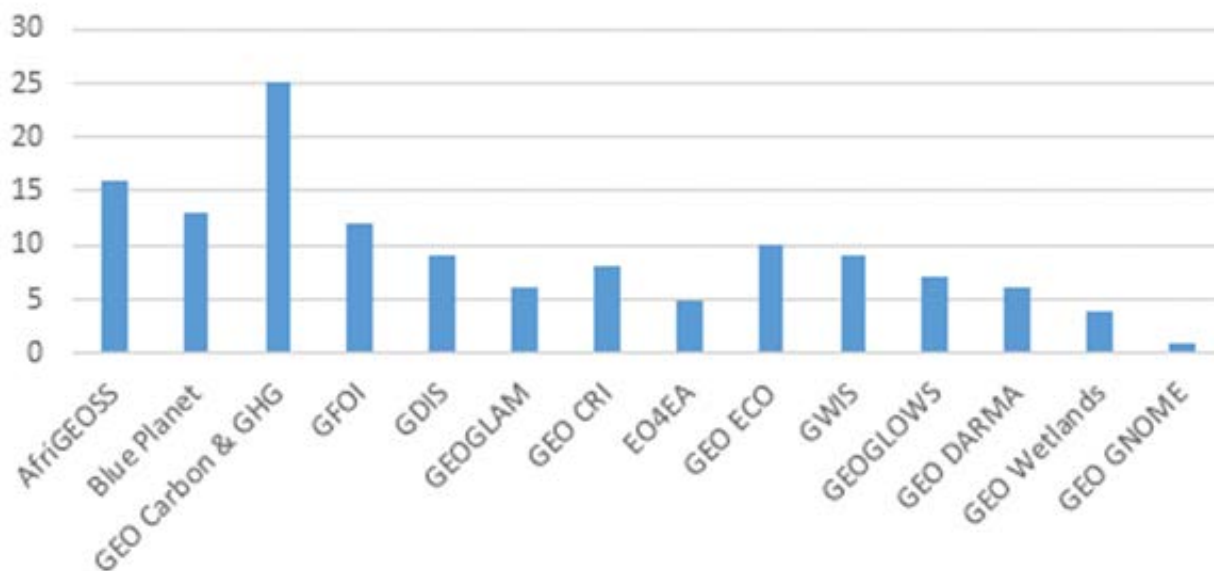
* Denotes co-chairs of ExCom who preside over plenary and ExCom

- GEO Programme Board oversees GEO Work Programme & align activities with GEO priorities. Reports to ExCom and Plenary, meets 3 x year (Balzter/Marsh).

GEO Work Programme

- Flagships, Initiatives and Community Activities.
- Flagships:
 - Geo Biodiversity Observation Network (GEO BON);
 - GEO Global Agricultural Monitoring (GEOGLAM);
 - Global Forest Observation Initiative (GFOI);
 - Global Observation System for Mercury (GOS4M).

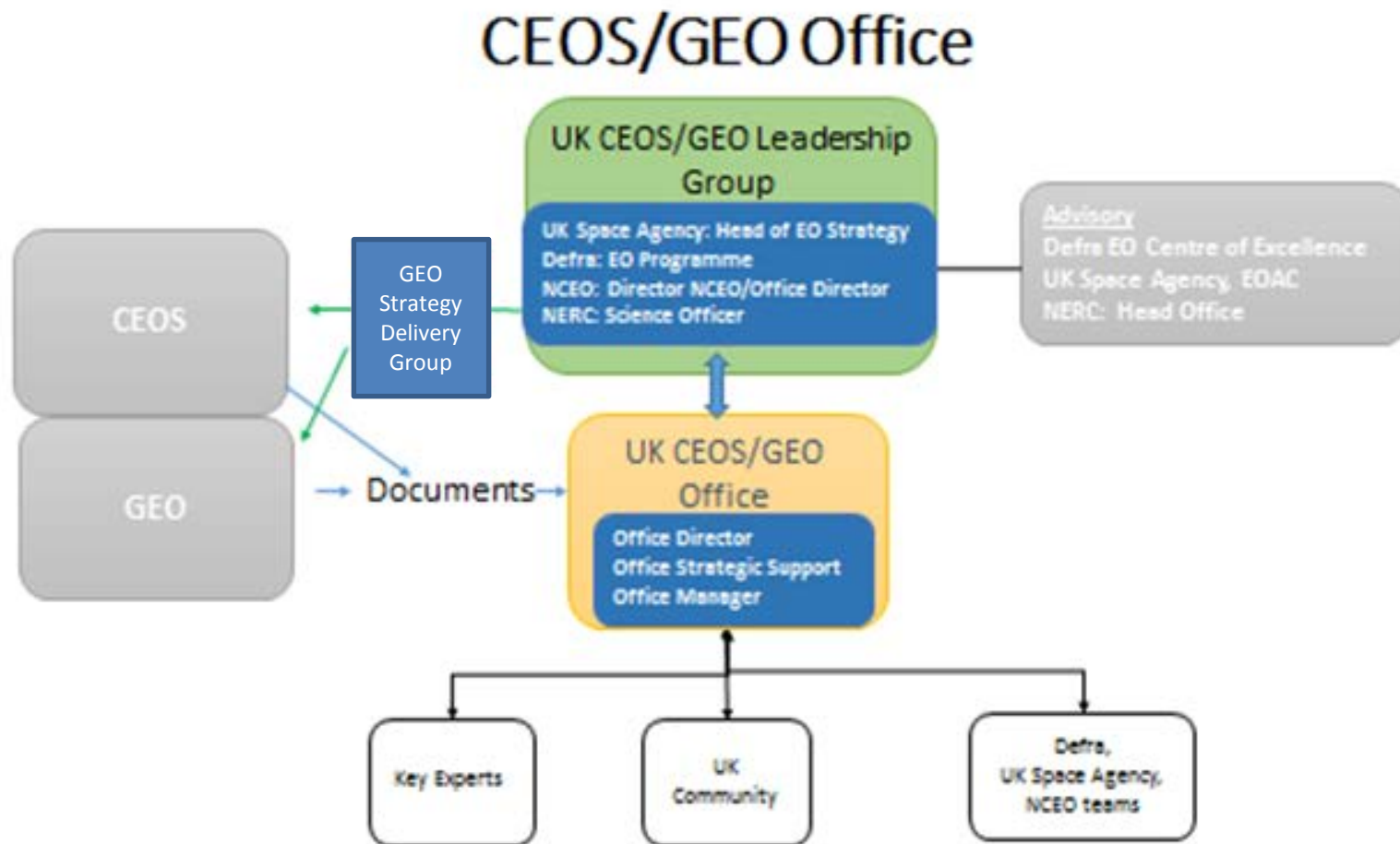
- GEO Flagships and Initiatives by NCEO staff survey:



Why do we need a UK GEO/CEOS Office?

- Closer policy inputs ↔ technical to respond to CEOS/GEO initiatives;
- Critical level of resource not possible for each individual organisation & more efficiency in the management/co-ordination of tasks;
- Brings together UK inputs to two closely-related international EO activities with leads in different orgs;
- Capacity to send individuals as reps at international level;
- Coordinated community & access to info (Basecamp, website, email list, workshops);
- Raises profile of GEO and CEOS across academia, government and industry, for benefits and impact;
- Higher international profile for UK.

UK Office governance



Who does what?

UK GEO/CEOS Office



Prof John Remedios, GEO Office Principal, GEO/CEOS Office Lead, NCEO Director



Beth Greenaway, GEO Office Principal, Head of EO UK Space Agency

Dr Farhana Amin, GEO Office Principal, EO Programme, Defra

Leadership group



Dr Zof Stott, GEO Strategic Support, NCEO Prog & Impacts Manager



Dr Sophie Hebden, GEO/CEOS Office Manager, NCEO-Univ of Leicester



Prof Heiko Baltzer, PB member, NCEO-Univ of Leicester



Professor Stuart Marsh, Alternate PB member, Nottingham Geospatial Inst.

GEO Programme Board representatives

GEO Strategy Delivery Group



Chris McQuire
UKSA



Adrian Broad,
Met Office/Vicky Pope –
Alternate at Met Office.



Rollo Home,
Ordnance Survey

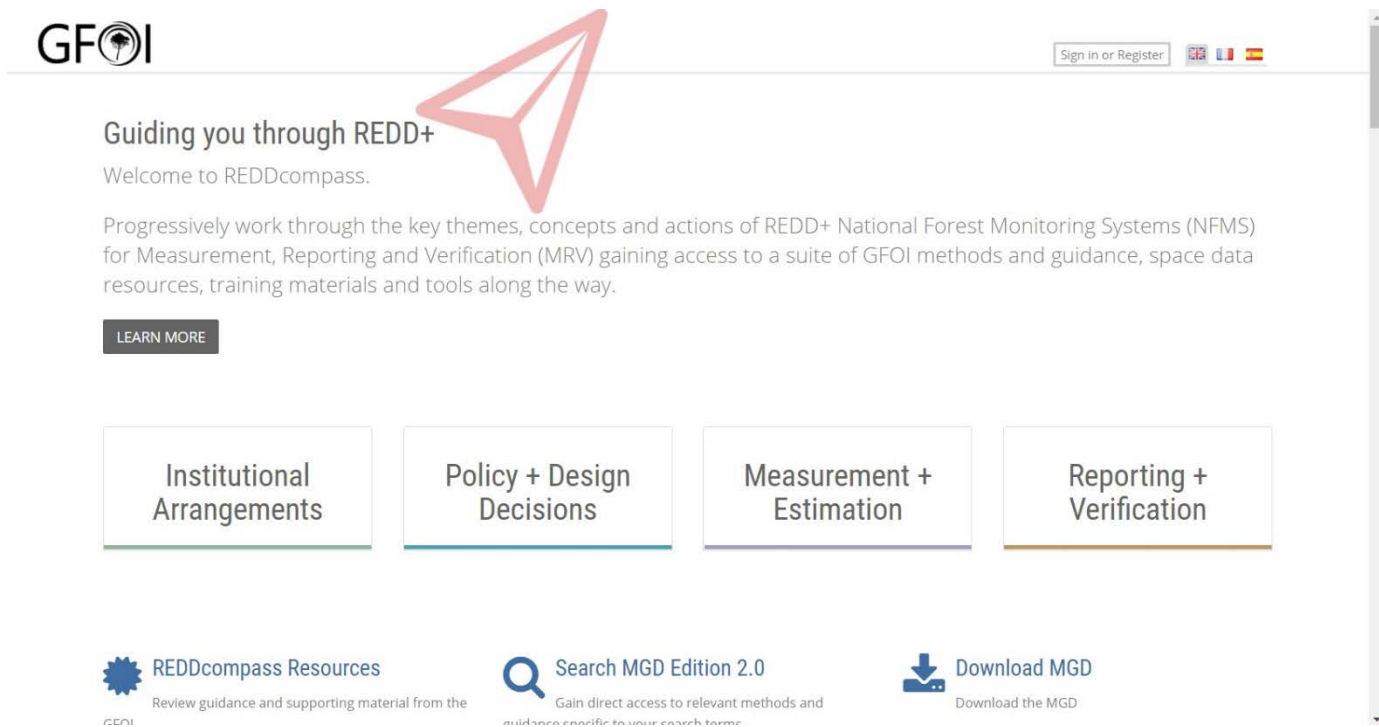
- **Miles Gabriel,** GEO Data Sharing Working Group correspondence, Director Gabriel Information Solutions Ltd.
- **Garry Baker,** UK GEO Data Sharing National Focal Point, British Geological Survey
- **Dr Nigel Fox,** CEOS Working Group on Calibration and Validation correspondence, National Physical Laboratory
- **Professor Chris Merchant,** CEOS Working Group on Climate correspondence, NCEO-University of Reading (supported by Dr. Claire MacIntosh and Dr. Caroline Poulsen)
- **Dr Joao Carreiras,** Future Data Architectures (interim).

Activities and contacts

Highlights: achievements 2016-17

Supported at international level the GFOI Methods and Guidance v2.0, distributed via REDDcompass.org:

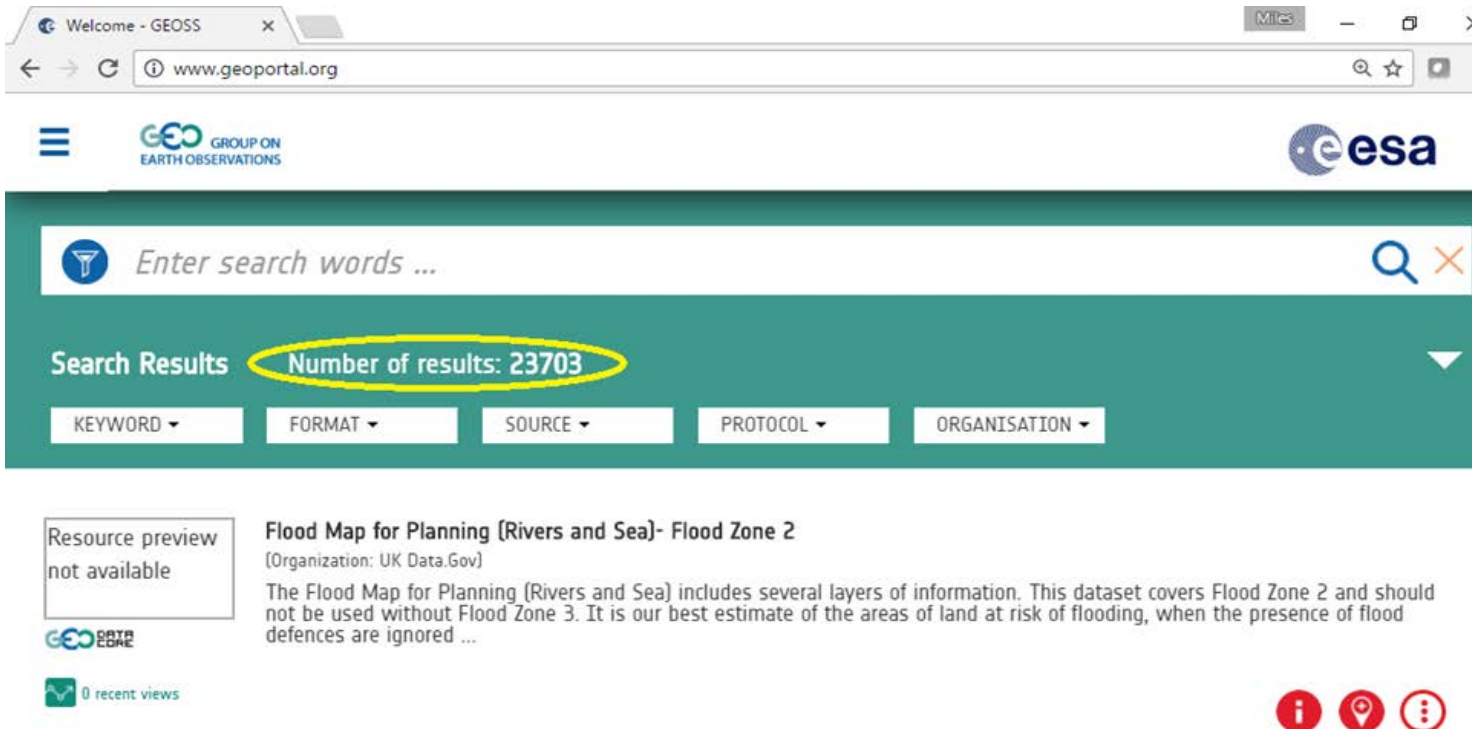
Methods and Guidance v2.0 author team



The screenshot shows the homepage of the REDDcompass website. At the top left is the GFOI logo. To the right is a navigation bar with a 'Sign in or Register' button and flags for the UK, France, and Spain. A large red paper airplane icon is positioned in the upper right area. The main heading is 'Guiding you through REDD+' followed by the text 'Welcome to REDDcompass.' Below this is a paragraph: 'Progressively work through the key themes, concepts and actions of REDD+ National Forest Monitoring Systems (NFMS) for Measurement, Reporting and Verification (MRV) gaining access to a suite of GFOI methods and guidance, space data resources, training materials and tools along the way.' A 'LEARN MORE' button is located below the paragraph. Four main content boxes are arranged horizontally: 'Institutional Arrangements', 'Policy + Design Decisions', 'Measurement + Estimation', and 'Reporting + Verification'. At the bottom, there are three sections: 'REDDcompass Resources' with a gear icon and the text 'Review guidance and supporting material from the GFOI'; 'Search MGD Edition 2.0' with a magnifying glass icon and the text 'Gain direct access to relevant methods and guidance specific to your search terms'; and 'Download MGD' with a download icon and the text 'Download the MGD'.

Highlights: achievements 2016-17

- +23,000 UK environmental metadata records replicating onto GEOSS data portal (harvested monthly from data.gov.uk).
- Datasets include in-situ air quality, pesticides in river discharges, sea-ice thickness in Arctic, drought indicators for Europe.



The screenshot shows a web browser window with the URL www.geoportal.org. The page features the logos for the National Centre for Earth Observation, GEO Group on Earth Observations, and ESA. A search bar contains the text "Enter search words ...". Below the search bar, the search results are displayed, with the text "Search Results" and "Number of results: 23703" circled in yellow. Below the search results, there are several filter buttons: "KEYWORD", "FORMAT", "SOURCE", "PROTOCOL", and "ORGANISATION". A resource preview is shown for "Flood Map for Planning (Rivers and Sea)- Flood Zone 2" (Organization: UK Data.Gov). The preview text reads: "The Flood Map for Planning (Rivers and Sea) includes several layers of information. This dataset covers Flood Zone 2 and should not be used without Flood Zone 3. It is our best estimate of the areas of land at risk of flooding, when the presence of flood defences are ignored ...". The preview also shows the GEOSS logo and "0 recent views". At the bottom right, there are three red circular icons: an information icon, a location pin icon, and a menu icon.

Priorities 2017-18

1. Increase UK presence (with consistent national messages) on the key GEO and CEOS meetings including: CEOS and GEO plenaries, GEO Programme Board, CEOS SITs .
2. Support experts to attend, influence or lead key groups inc
 - Data access & sharing work (GEO), consolidate metadata harvesting work and review.
 - CEOS **Future data architectures** / CEOS LSI-VC for analysis-ready data
 - CEOS WG cal/val;
 - CEOS WG Climate
 - GFOI and CEOS GFOI space data group;
 - AfriGEOSS & CEOS WGCapD
3. Scope UK relevance to GEO DARMA/CEOS WGDisasters; GEOGlam, CEOS WGISS, GEO Ecosystem accounting.– for agreement in Feb EOAC;
4. Office coordination, community communications, website etc. Leverage funding for other actives such as from IPP, ESA EOEP5

Funding overview

2016/17

- £126k

2017/18

- £100k plus NCEO contribution from ODA £30k.

To cover:

- Office function: disseminating info, collating community inputs, strategic support
- Ongoing data activities, GEO WGs and CEOS WG/VCS
- Small amount for new priorities of funders
- Meetings, workshops, conferences (convening and attending)

What's the relevance of CEOS and GEO to me?

- CEOS on international standards and harmonisation e.g. Analysis Ready Data, Climate ECVs, Cal/val etc.
- The global convening power of GEO is an attractive platform for international collaboration aiming to identify gaps and reduce duplication for sustainable development and sound environmental management.
- Priority areas for GEO are climate change and UN Sustainable Development Goals and Disaster Risk Reduction.
- Free and open data access contributing to and benefitting from global pool of data.