



UK ICOS Meeting

National Oceanography Centre, Southampton

8th January 2015

Meeting Aim

To bring together a group of individuals who are interested in having some input into forming a UK ICOS committee to help guide the UK community into more coordinated and official interactions with the international ICOS European Strategy Forum on Research Infrastructures (ESFRI).

Attendees

Name	Employer	Email	UK-ICOS Committee Member?
James Morisson	Forestry Commission	james.morison@forestry.gsi.gov.uk	x
Phil Nightingale	PML	pdn@pml.ac.uk	
Eiko Nemitz	CEH	en@ceh.ac.uk	
Euan Nisbet	Royal Holloway	e.nisbet@rhul.ac.uk	
Naomi Greenwood	CEFAS	Naomi.greenwood@cefas.co.uk	
Ute Schuster	University of Exeter	u.schuster@exeter.ac.uk	
Julia Sussams	DECC	julia.sussams@decc.gsi.gov.uk	
David Lowry	Royal Holloway	d.lowry@rhul.ac.uk	
Simon O'Doherty	University of Bristol	s.odoherty@bristol.ac.uk	
Andrew Manning	UEA	andrew.UEA@gmail.com	x
Tom Gardiner	NPL	tom.gardiner@npl.co.uk	x
Ned Garnett	NERC	nedg@nerc.ac.uk	x
Dorothee Bakker	UEA	d.bakker@uea.ac.uk	
Stephan Matthiesen	University of Edinburgh	Stephan.matthiesen@ed.ac.uk	
Richard Wood	Met Office	richard.wood@metoffice.gov.uk	x
¹ Andrew Watson	University of Exeter	andrew.watson@exeter.ac.uk	
² Richard Sanders	NOC	r.sanders@noc.ac.uk	
³ Jennifer Riley	NOC	Jennifer.riley@noc.ac.uk	

¹ ICOS Focal Point (Liaising with science community)

² ICOS Ocean Thematic Centre Stakeholder (liaising with funders – i.e. NERC, DEFRA, DECC)

³ Project support, international links and networks

Meeting Background

This meeting followed the conclusion of the Greenhouse Gas Townhall (GHG) Meeting (7-8th January 2015 at NOC Southampton) where a cross section of the terrestrial, oceanic and atmospheric science community interested in GHG research met to identify research gaps and priorities for the future, culminating in the production of a NERC SPAG note proposing ideas for the next tranche of funding.

During the GHG townhall meeting a presentation was also made regarding the need for a formal commitment to the ICOS programme from the UK. The UK (via NERC and then NOC) host, in partnership with Norway the Ocean Thematic Centre (OTC) within the ICOS programme. The aim of the OTC is to facilitate the observational science undertaken by the oceanic community measuring GHG's and ensure the data is fed into the international ICOS programme where possible.

In light of the forthcoming end of the currently funded GHG programme (2011 – 2016; www.nerc.ac.uk/research/funded/programmes/greenhouse) and the new role of NOC as the OTC it seems practical to bring the UK GHG research community together (using ICOS as a focus) to show sufficient coordination for future funding from NERC and other stakeholders such as DECC and DEFRA.

In order to do this a committee needs to be established which represents the entire community (both scientific and stakeholder) across atmospheric, oceanic and terrestrial realms with an interest in GHG research.

The attendees of this meeting (named above) were those individuals from the GHG townhall who were interested in finding out more and or helping in establishing such a committee.

Meeting Discussion – Key points

Establishing a UK-ICOS Committee

The UK-ICOS community must have a good vision of what they want to achieve before any money will be allocated from UK stakeholders. Establishment of a UK-ICOS committee will help to coordinate the community vision.

Potentially there are various institutions/organisations¹ in the UK who would be interested in becoming part of an ICOS committee. However it was felt that this would be too many for one single committee. The committee would therefore have to be populated with a subset of these organisations, balancing the ocean, atmosphere, terrestrial and stakeholder / funding communities.

Note that not all the people in attendance felt that they were suited to sit on the committee but felt that they could aid in its set up at this stage and at least be a point of contact for now. Thus the people listed in attendance at this meeting will consist of the interim committee and help to set the formal committee. Some people absent from the GHG townhall meeting and the UK ICOS meeting should also be contacted regarding the establishment of the ICOS committee.

DECISION: Those people in attendance at this meeting will help to shape the future UK-ICOS committee.

ACTION 1: Identify other individuals not at the UK-ICOS meeting who should be contacted regarding UK-ICOS activities.

¹ Including the Forestry Commission, PML, CEH, Royal Holloway, CEFAS, University of Exeter, DECC, Royal Holloway, University of Bristol, UEA, NPL, NERC, DEFRA, University of Edinburgh, Met Office, University of Exeter, NOC

In the case of DECC the new head of climate science should be briefed and asked about DECC representation on the committee.

ACTION 2: Brief Miguel Martinez-Boti (DECC Head of Climate Science) on the ICOS activities and ask about committee membership.

Once established the formal committee will be responsible for helping to coordinate information gathering across the community on existing stations that have potential to be submitted for ICOS labelling.

Identifying stations for ICOS designation

In order to obtain funding for ICOS stations by NERC (and potentially DECC and DEFRA in the future) there needs to be a good scientific basis underpinning the station identification process (and ultimately the request for money). The case for funding should not be based solely on the need to support the UK's GHG inventory. European data is not necessary for the UK's national reporting. Nevertheless, the UK also has a commitment to report its GHG inventory to Europe. As such UK involvement with ICOS would be beneficial.

There will likely be a discrepancy between what the community desires for the ICOS station network and what NERC (DECC and DEFRA) can afford to pay to enter stations in to the network. Each group (ocean, atmosphere and land) have their own sets of needs and priorities for stations. Therefore each community should identify a minimum and maximum (money no object scenario) station shortlist that the committee (when established) make a final selection from.

ACTION 3: Representatives of each sector, coordinated by the interim committee to present their ambitions regarding infrastructure needs within ICOS.

It was proposed that the absolute minimum commitment should be 1 station per sector to ensure a minimum UK presence in the ICOS network. However, given that existing stations across the UK will continue to be operated, such a small commitment to ICOS does not necessarily make sense with regards to the cost benefits and producing robust science. Furthermore, both France and Germany have made much more significant contributions to the network.

There is an increasing cost to be paid by the member state with each additional station that is part of the ICOS network. This cost per station needs to be circulated to help people identify station 'wish lists'.

ACTION 4: Circulate the station cost and number information

ACTION 5: UK-ICOS (interim) committee to shortlist UK stations for ICOS submission from collated information.

Available funding from the UK

It is unclear how much money is available from the Stakeholder(s) (currently only NERC, but in the future possibly DEFRA and DECC). Nominally it is likely to cost €70k per annum.

ACTION 6: Clarify the NERC position with regards to the financial commitment from the UK to ICOS

Currently NERC is the main funder for UK-ICOS membership. However, other organisations such as DECC, DEFRA and the Science and Technology Facilities Centre (STFC) are likely to have stakeholder interests. In order to engage these other organisations knowledge of where their funding priorities lie is needed.

ACTION 7: Look at the Science and Technology Facilities Council Roadmap, which summarises the current projects which STFC supports, to identify future opportunities for investment.

From a DECC point of view committing to funding longer than 3-5 years is difficult due to government election timescales. In order to get funding from government bodies such as DECC cost benefit analyses of the financial investment are needed. In order to undertake such an analysis an up to date list of stations and their associated running costs is needed. An old database exists on the website but this needs to be updated.

ACTION 8: Update the list of existing stations to be used for future cost benefit analyses for funders.

NERC suffers similar problems with election timescale budgetary reviews. However work is committed to in good faith that it can be completed assuming the money is available.

ACTION 9: submit a request to pay the UK ICOS membership to NERC (DEFRA and DECC).

It should be noted that the annual subscription that is paid (by the member state) would ultimately be less than the return gained from ICOS network membership (including pan-European data for comparisons, calibration, model and satellite validation, monitoring, reporting, verification and assessment of carbon fluxes and budgets, synthesis (including maps) and predictions and education).

UK-ICOS communications

The old UK-ICOS website (believed to be hosted by the University of Edinburgh) is out of date and not useful to the community. A new website should be established with the most up to date documents and information on it regarding ICOS activities across the three areas (ocean, land and atmosphere).

ACTION 10: Repeal old ICOS website and establish a new one with up to date information

A UK-ICOS newsletter should be established whereby information can be easily circulated to interested individuals. Initially this mailing list should be populated with the individuals present at this meeting and a message sent out with relevant information regarding recent developments.



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ACTION 11: Circulate relevant information on ICOS to meeting attendees through a mailing list

In order to keep momentum going and ensure that the UK has a coordinated commitment to ICOS in the near future a follow on meeting should be arranged in the next 2-3 months. The next meeting should be held somewhere more centrally than Southampton. The Medical Research Council Buildings in London were suggested.

ACTION 12: Poll for a date of next UK-ICOS meeting (ca. 2 months) via Doodle Poll