



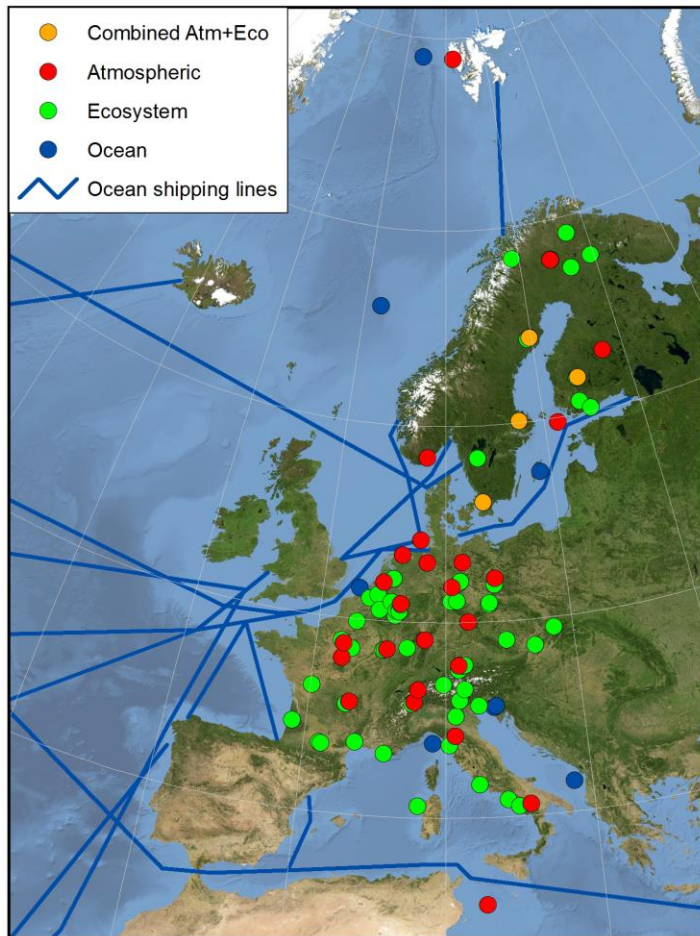
# ICOS

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## The challenge of developing ethical guidelines for a research infrastructure

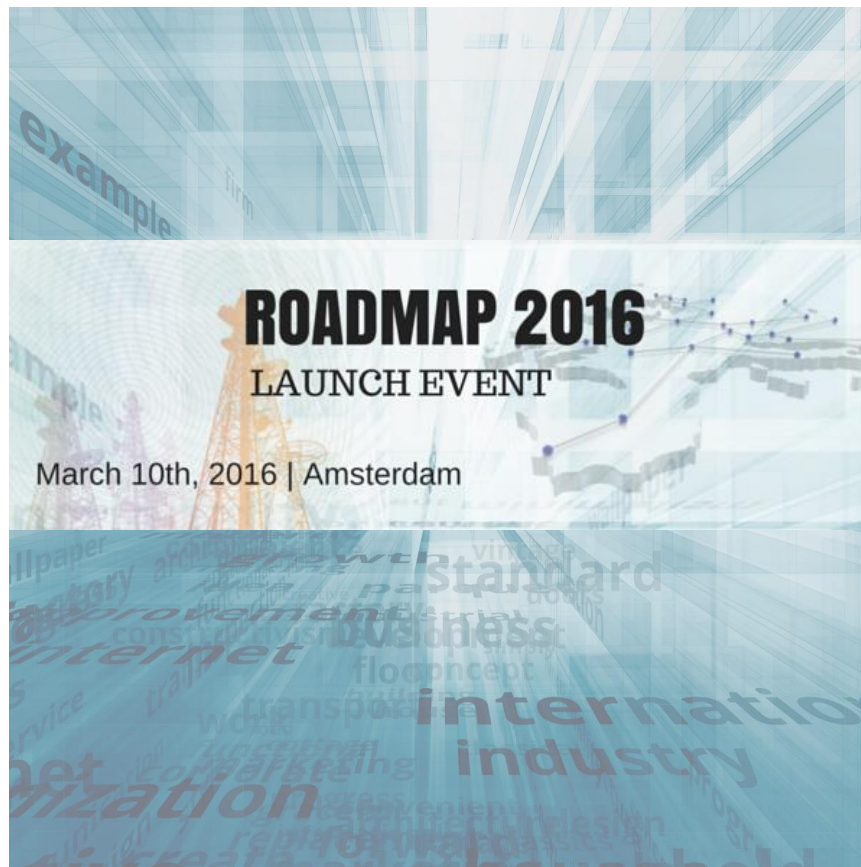
Werner L. Kutsch, Director General

Current status of ICOS: 11 participating countries,  
> 100 stations and VOS lines, 2016 fully operational

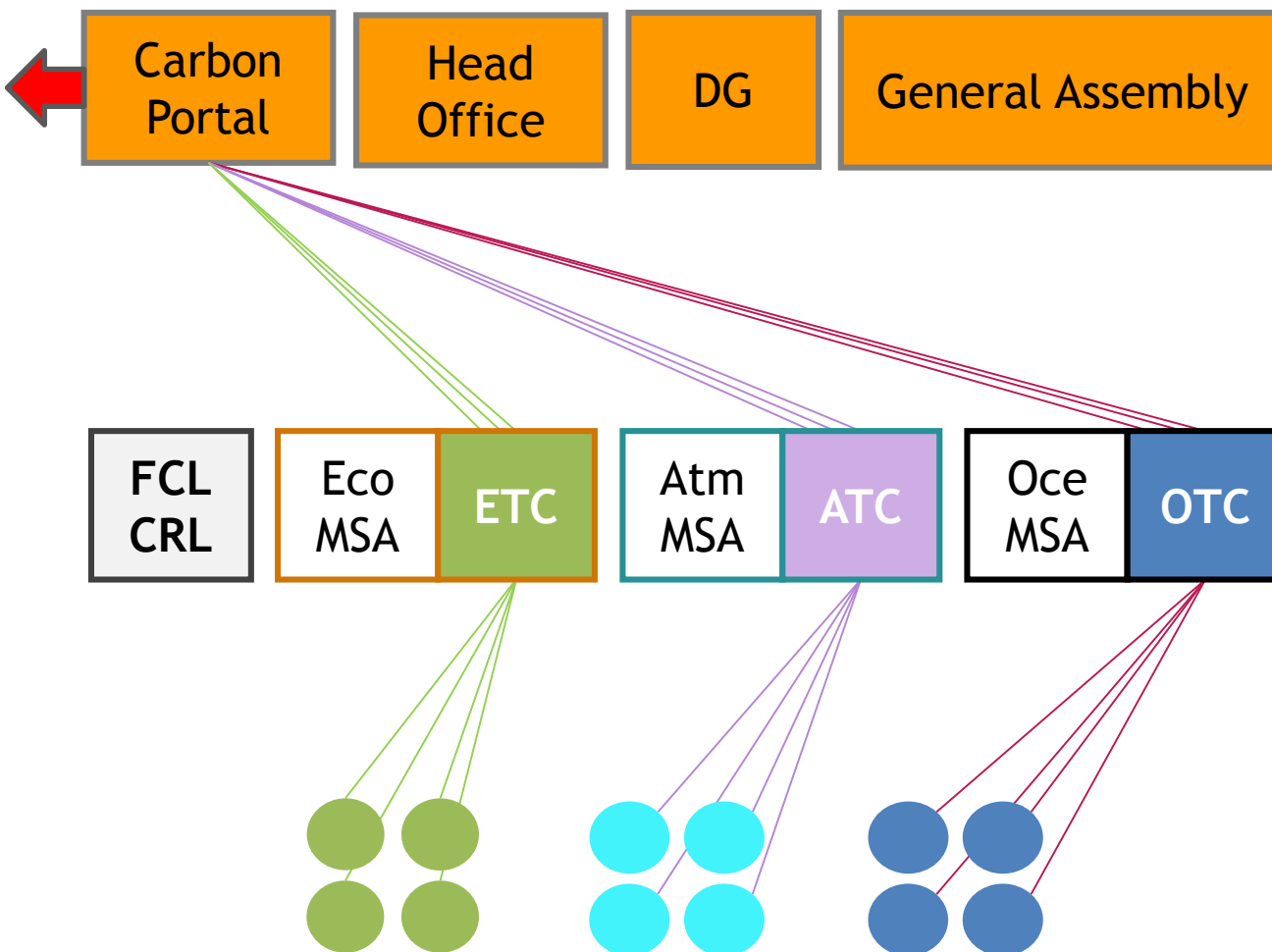


# ESFRI ROADMAP 2016

ICOS is a landmark!



# Three levels of ICOS / data



## ICOS ERIC

Overall management,  
data management

## Central Facilities

Services,  
not part of ICOS ERIC,  
Independent budget mainly  
from host countries

## National Networks

Observations  
Independent budget from  
host countries



# Why ethical guidelines?

## Article 13

### Ethical Advisory Board

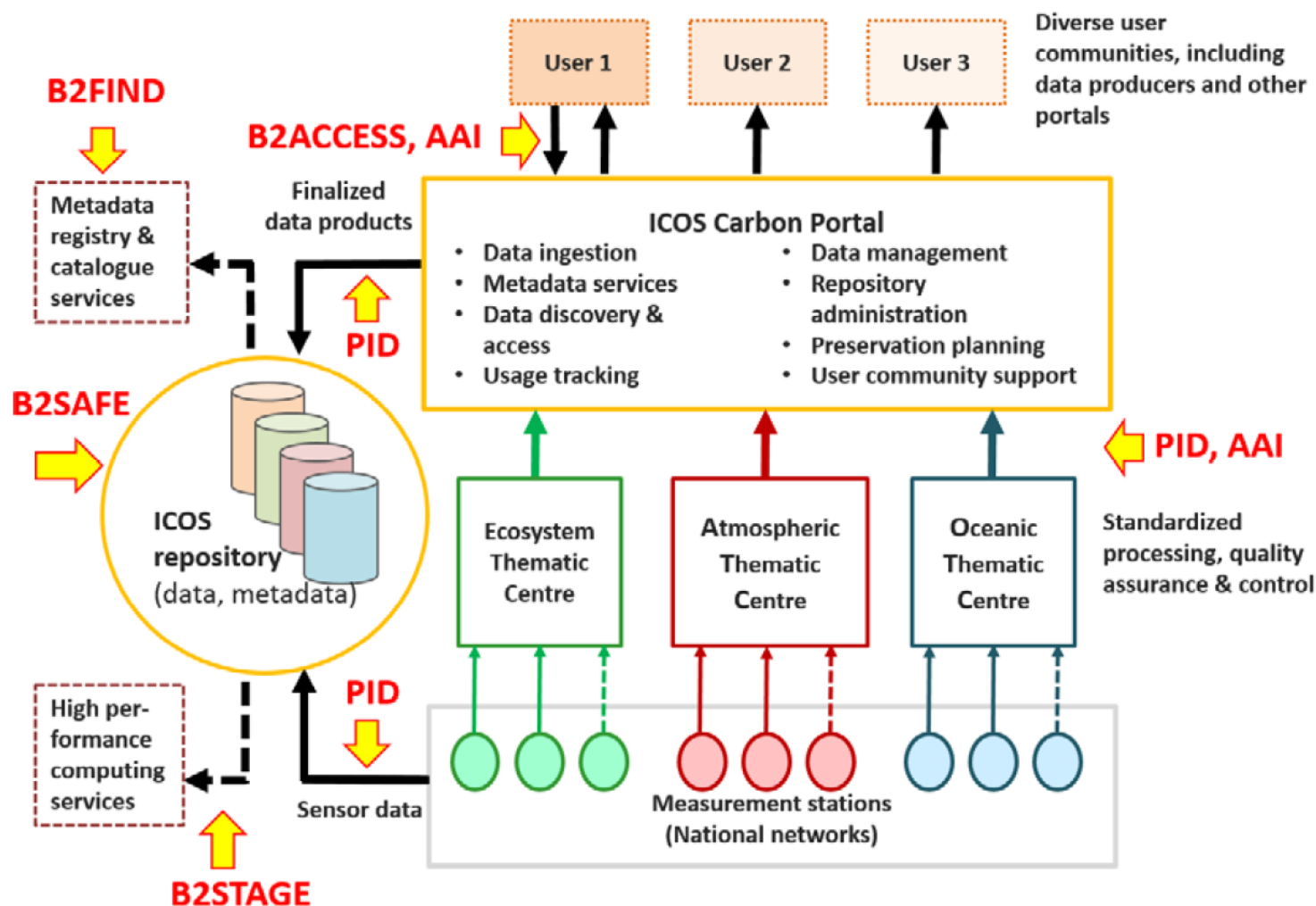
1. The General Assembly shall establish an independent Ethical Advisory Board ***to advise and give periodic reports on ethical issues***. The Ethical Advisory Board shall be composed of three to five independent persons.

2. The membership and the rules of procedure of the Ethical Advisory Board shall be decided by the General Assembly and included into the internal rules.

# Why ethical guidelines?

- ICOS provides important and sensible data. This requires highest standards for data quality, curation and provenance.
- ICOS provides integrated products out of these data that are influential in societal and political processes.
- ICOS is turning over high amounts of money.
- ICOS community is conducting research in a highly competitive environment.
- ICOS has a very open data policy, nevertheless the data have to be attributed and should be used in a fair way.

# The ICOS data lifecycle



## Problems/resistances

- ICOS is a distributed research infrastructure with a very complicate structure that includes ~60 institutions in 11 countries. Many of them have their own ethical standards. Conflicting documents possible.
- ICOS has some very specific but also some very general ethical questions.
- the phenomenon of "flexible ethics": I use ethical arguments when they are supporting my point of view and deny the necessity of ethical categories when they disturb my interests.



# The process

- ICOS uses an iterative process to discuss with all levels of the infrastructure coordinated by a central working group;
- ICOS Head Office has evaluated a number of existing documents to compile first drafts.
- The goal was consensus and adoption by General Assembly.

# Content

## 1. Conflicts of Financial Interests and Secondary Occupations

Relations to companies: shareholding, membership of managing bodies, employment, service or management or other agreement. Double payment for services.

## 2. Conflicts of interest arising from accumulation of different roles within ICOS RI

CF personnel as GA members, multiple membership in bodies, ICOS RI interests vs personal, national or institutional interests,

## 3. Data ethics

Fraud, '*the rule of systematic skepticism*', documentation of data life cycle, transparency on data quality, four eyes principle,

## 4. Data dissemination and scientific publication

Dissemination of 'critical' data, political and social responsibility of dissemination, communication of risks, media relations.

Fair data dissemination

fair recognition (co-authorships, citation of data), conflicts arising from financial benefits of publications,

# The current situation

- Consensus was reached on the conflict of interest chapter
- No consensus in all other chapters
- Parts were transferred from ethical guidelines to more 'hardwired' documents (Rules of procedure of General Assembly, data life cycle document, ...)
- It's under discussion whether the existing good practice document by ESF can be adopted.



European Science Foundation Policy Briefing

## Good scientific practice in research and scholarship

December 2000

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### Foreword

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The European Science Foundation acts as a catalyst for the development of science by bringing together leading scientists and funding agencies to debate, plan and implement pan-European initiatives.

At a time when the need to build trust between science and society is becoming ever more important, it is vital that the conduct of science itself is based on the highest ethical considerations and that misconduct within science itself can be identified and dealt with in an open and transparent manner. Several cases of misconduct have been reported over recent years from across the World. This does not mean that there is an epidemic of such cases but each one destroys trust both in the science system itself and between scientists. Most agencies concerned with science have taken action to deal with these problems and develop best practice. The ESF statement which follows and the report on which it is based reflects the very large amount of work which has already been undertaken by our Member Organisations. Although we may have overlooked some activities, nevertheless, I trust that this report will help in the ongoing actions necessary to develop and further improve good research practice across Europe. This report is not the end of such efforts. Further developments in the way in which science is conducted are inevitable in a rapidly changing world and there will always be a need to update and refine our approaches and this calls for ongoing action. ESF hopes that this may be carried out in close partnership with other European organisations representing institutions such as academies of sciences and the universities. Finally, I should re-iterate that the public must have confidence in the conduct of science. We in ESF and our Member Organisations are determined that only the highest standards should prevail.

Enric Banda  
ESF Secretary General

#### ESF statement

Good scientific practice in research and scholarship is essential for the integrity of science. It sets internationally valid benchmarks for quality assurance, which enable replication and further studies by other scientists. And it provides safeguards against scientific dishonesty and fraud. Good practice, thus, nurtures trust within the scientific community and between science and society, both of which are necessary for scientific advance.

Several European Science Foundation (ESF) Member Organisations and some individual research institutions and universities have already published guidelines, or codes, for good scientific practice across the full range of the natural and social sciences, engineering and the humanities. However, to be fully effective, such codes have to be more widely adopted by European universities and research institutions, observed by all researchers and scholars and monitored for compliance. Both institutional and individual commitment are prerequisites.

Procedures for investigating allegations of scientific misconduct complement codes of good scientific practice. Such investigations are commonly carried out at local (institutional) level, with guidance and oversight by national bodies. Some countries, however, prefer to carry out investigations at national level.

To achieve full compliance, and thus demonstrate effective self-regulation, the various players – national academies and research funding agencies, universities and research institutions employing scientists and the scientists themselves, each has distinctive advisory, managerial or regulatory responsibilities.

# Conclusion and outlook

- Process is more difficult than expected.
- ICOS is going to adopt an Ethical Advisory Board and will ask it to steer the further process.
- The experiences will be provided for other infrastructures in the framework of ENVRIplus.

# ICOS

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## Thank you for your attention!

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