PURPOSE OF THE EVALUATION
ICOS ERIC shall undertake and coordinate activities, including but not limited to:

(h) scientific and management evaluation of the activities, the strategic orientation and operation of all components of ICOS RI by external evaluators.
Interest and concepts by ESFRI

Long-Term Sustainability of Research Infrastructures

WORKING GROUP REPORT
Monitoring of Research Infrastructures Performance
December 2019

Interest and concepts by ESFRI

Supporting the Transformative Impact of Research Infrastructures on European Research
Report of the High-Level Expert Group to Assess the Progress of ESFRI and Other World Class Research Infrastructures Towards Implementation and Long-Term Sustainability

Last but not least: National evaluations!
Multiple purposes

• Multiple stakeholders: national authorities, ESFRI, EC
• unfortunately, this means multiple evaluations
• Ideally, there would be a better harmonisation between ESFRI, EC, national agencies and General Assemblies of the ERICs

Main purpose defined by the ICOS ERIC General Assembly

Five main criteria to review ICOS performance:

1. Internal management that oversees, integrates, and steers all core activities;
2. Finances with focus on financial sustainability
3. Based on this, how well the different parts function together and as entities and how well ICOS functions as one distributed and well-integrated infrastructure;
4. How well ICOS outputs (i.e., data and services) fulfil user expectations;
5. How well ICOS integrates into European and global greenhouse gas information systems.
The mission of ICOS

The Integrated Carbon Observation System (ICOS) is a distributed research infrastructure operating standardized, high-precision, and long-term observations and facilitating research to understand the carbon cycle and to provide necessary information on greenhouse gases. ICOS-based knowledge supports policy- and decision-making to combat climate change and its impacts. ICOS is the European pillar of a global GHG observation system. It promotes technological developments and demonstrations, related to GHGs, by the linking of research, education and innovation.
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Effects of activities according to strategic areas is demonstrated via results from measuring KII.

Objectives and Inputs for activities are defined by strategic areas.

ICOS Activities

- Governance Management
- Conducting Measurements
- Providing Data
- Providing Services
- Communication Community support

ICOS Effects

- Effects on Sustainability
- Effects on Science
- Effects on Policy support
- Effects on Cooperation
- Effects on Innovation

Key Impact Indicators

Quality of activities is demonstrated via results from measuring KPIs.
ICOS
THE REAL APPROACH
Categories to review ICOS performance:

1. **Internal management** that oversees, integrates, and steers all core activities;
   - 3 sub-categories
   - 11 KPIs – some specific to the life-cycle situation

2. **Finances** with focus on financial sustainability
   - 2 sub-categories
   - 4 KPIs – some specific to the life-cycle situation

3. **Internal engagement and integration**;
   - 2 sub-categories
   - 5 KPIs – some specific to the life-cycle situation

4. How well **ICOS outputs** (i.e., data and services) fulfil **user expectations**;
   - 5 sub-categories
   - 11 KPIs – some specific to the life-cycle situation

5. How well ICOS integrates into. **European and global greenhouse gas information systems**
   - 7 KPIs
Effects of activities according to strategic areas is demonstrated via results from measuring KIIs.

Objectives and Inputs for activities are defined by strategic areas.

Quality of activities is demonstrated via results from measuring KPIs.
Evidence by documents and data

- Analysis of internal rules and policies, agreements between ERIC and non-ERIC parts of the RI etc.
- Data analysis (e.g. on use of ICOS data in publications)

**ICOS-related publications**

**ICOS Science Conference**

- Submitted Abstracts
- Number Participants
Evidence by surveys

Very general and very detailed survey questions to internal and external target groups.

1. ICOS RI is well managed.  
2. The management of ICOS RI activities has improved over the past five years.  
5. ICOS RI has a clear mission and strategy  
6. ICOS RI has the ability to further develop and improve its activities.
Timeline

- Mandate was given by General Assembly in November 2019
- Constitution of the Evaluation Committee in January 2020
- Concept development during spring 2020
- Surveys in September 2020
- Evidence report November 2020
- Final report scheduled for end of December 2020
Some experiences

• The development of the evaluation concept was much more work than expected. Unclear mandate by the General Assembly required thorough conflict of interest management.
• High overall workload for ICOS ERIC Head Office for supporting concept development and preparing evidence report: 2 FTE
• Some ‘first-time experience‘ will give solid ground for future evaluations.
• Timing at the transition from implementation to operation very useful.
• Important and very useful feedback for optimising operations.
Questions
Welcome!