



## Circumarctic Environmental Observatories Network. CEON

*Background document for the meeting of the Senior Arctic Officials  
of the Arctic Council, Selfoss, Iceland, May 4-5, 2004.*

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### **Purpose of this Document:**

The co-chairs of the CEON interim Steering committee wish for the Senior Arctic Officials (SAO) to be formally aware of the continuing developments within CEON since this effort relates to many ongoing Arctic Council (AC) activities such as ACIA, AMAP, CAFF and SDWG. We request the advice of the SAO regarding how the further development of CEON might be strengthened and possibly aligned with the activities and undertakings of the AC.

### **CEON's Mission:**

CEON's mission is to strengthen the capacity for monitoring the environment of high northern latitudes by making data available that is adequate and suitable for answering key questions relating to science, policy and management issues.

### **Background of CEON:**

CEON is founded on the rationale that:

- Relative to other regions on the globe, the Arctic is experiencing some of the most dramatic environmental change.
- The detection and prediction of environmental change in the Arctic is limited and threatened by the loss of sustained long-term environmental observations.
- A **Circum-arctic Environmental Observatories Network** that can provide adequate, diverse and sustained observations that meet the requirements of a broad range of groups and have the potential to dramatically improve our understanding of the Arctic system and how it is responding and affecting environmental and social change.
- The established scientific infrastructure and considerable ongoing research and monitoring throughout the Arctic form the basis from which a CEON can be initiated.
- CEON is not a network of networks but is instead a network of sites that may be partnered with other networks.

The concept of CEON was initiated by the Forum of Arctic Research Operators (FARO – [www.faro-arctic.org](http://www.faro-arctic.org)). The International Arctic Science Committee (IASC – [www.iasc.no](http://www.iasc.no)) will consider adding CEON to its portfolio of Working Projects at its April 2004 meeting. Development of CEON has been sponsored by the National Science Foundation of the United States, The Royal Swedish Academy of Sciences' Abisko Scientific Research Station, The Scandinavian-North European Network of Terrestrial Field Bases (SCANNET), and a grant to Abisko Scientific Research Station from the Swedish Environmental Protection Agency for its participation in the Arctic Climate Impact Assessment (ACIA).

## Development of CEON:

The early enthusiasm for CEON has benefited from the ‘bottom-up’ approach that has been used in its development. The scoping of CEON to date has been rapid and met with unbridled support from all nations, disciplines, collaborations and scientific platforms that have been approached. Full accounts of the activities undertaken during development of CEON are given at [www.ceoninfo.org](http://www.ceoninfo.org), which also includes a report from the initial CEON international planning meeting convened at the Royal Swedish Academy of Sciences in Stockholm, October 2003.

Future development of CEON seeks to:

- Solicit further sponsors, partners and participants
- Establish a secretariat and determine how CEON will operate

In order to:

- Stimulate, facilitate and enhance scientific discovery in the Arctic along thematic interdisciplinary lines of investigation.
- Address issues of concern relevant to global change to arctic residents and increase awareness of the importance of the Arctic to non-arctic residents.
- Provide a resource for arctic and non-arctic residents, scientists, and policy makers.
- Foster international participation and collaboration in arctic science.

An online interactive circumarctic mapping system and geographical information system ([www.ceonims.org](http://www.ceonims.org)) has been built by CEON to facilitate these objectives and synthesize research and monitoring activities in the Arctic.

The interim leadership of CEON sees a potential for links with the AC and its Working Groups. CEON is an idea arising from discussions in IASC and in this sense mirrors the origin of ACIA. The latter has been extremely successful at assessing the status of existing knowledge about the changing Arctic. Initially, CEON, in order to test its structure and modus, will focus on terrestrial observatories however it will expand to include marine observatories. It is intended that CEON will be operational in time for the International Polar Year 2007-2008. The CEON leadership is interested in the plans of the Group on Earth Observations (GEO – [www.earthobservations.org](http://www.earthobservations.org)). Most of the Arctic Nations will be contributors to GEO along with international science and environmental organizations.

## Project Leadership:

At present, an interim steering group heads the development of CEON. Members of the steering group include Terry Callaghan (UK and Sweden) and Craig Tweedie (US, Co-Chairs), Bill Heal (UK), Patrick Webber (US) and Margareta Johansson (Sweden). Contact details for the co-chairs of CEON are listed directly below.

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