

EuroGOOS Arctic ROOS

An informal association fostering Arctic cooperation on the Global Ocean Observing System

The EuroGOOS Arctic ROOS Memorandum of Understanding

This Memorandum of Understanding (to be known in brief as the Arctic ROOS MoU) serves as the initial document establishing EuroGOOS Arctic ROOS as an informal association whose members seek to foster Arctic cooperation on the Global Ocean Observing System. EuroGOOS Arctic ROOS is established with full recognition of the importance of existing systems in research and operational oceanography at national and pan-Arctic scales. By signing the MoU organisations become members of EuroGOOS Arctic ROOS, and agree to cooperation in promoting GOOS activities for the Arctic Ocean. EuroGOOS Arctic ROOS will provide regional operational observing and forecasting services in the European sector of the Arctic and contribute to a circumpolar Arctic GOOS.

Aims of EuroGOOS Arctic ROOS

Members of EuroGOOS Arctic ROOS will in co-operation establish a concerted Arctic approach to the following goals:

- maintenance and development of arrangements and partnerships that are necessary for a sustained, cost-efficient provision of Arctic ocean and ice information, with a near-term emphasis on the management of the legacy of the International Polar Year 2007-2008
- contributing to international planning and implementation of GOOS and promoting it at national, Arctic and global level
- identifying emerging priorities for an Arctic observing system and its operational component
- promoting the development of the scientific and technical components of the Arctic observing system
- assessing and reporting on the economic and social benefits from operational oceanography
- supporting sustainable operation of Arctic Marine Core Services under GMES
- contribute to a GOOS Regional Alliance for the whole Arctic

Activities

EuroGOOS Arctic ROOS activities will be designed to collaborate with and maximise the benefits from existing activities in operational oceanography, promoting the integration of these activities within the framework of GOOS. Members of EuroGOOS Arctic ROOS will collaborate and support the following groups of activities:

Promoting EuroGOOS

- i) To develop policies for the furtherance of GOOS and coordinating the best Arctic participation in GOOS, identifying where greatest value is added by collaboration
- ii) To actively collaborate within existing Arctic multi-national agencies, programmes, organisations, and initiatives having expertise in oceanography, operational systems, and remote sensing of the ocean
- iii) To provide, as appropriate, expertise, working groups, consultants, etc. to GSSC (GOOS Scientific Steering Committee) and I-GOOS (the Intergovernmental-GOOS governing board)
- iv) To promote studies and evaluation of the economic and social benefits produced by operational oceanography in Arctic regions
- v) To cooperate as appropriate within organisations concerned with climate change, global environmental research, and the impacts of climate variability and climate change
- vi) To encourage publication of findings of meetings, workshops, studies and other documents commissioned by the EuroGOOS Arctic ROOS members, joint representation at and submission of documents to international meetings related to GOOS
- vii) To coordinate GOOS data acquisition with existing Arctic and national data gathering under Agreements and Conventions relating to pollution monitoring, marine meteorology, navigation and safety at sea.

Advancing Arctic operational oceanography in GOOS

- viii) Promoting development of Arctic regional and local operational oceanography, taking into account the Modules of GOOS
- ix) Promoting development of common Arctic operational data procedures and services, including data quality control and data management for operational oceanography
- x) Promoting research and pre-operational research which will solve problems relating to operational oceanography
- xi) Promoting development of common infrastructure and promoting major systems or capital installations required to support Arctic operational oceanography, including Arctic Marine Core Services under the European GMES
- xii) Promoting pilot studies in local, regional or global GOOS operations
- xiii) Promoting development of common Arctic operational oceanographic services and products of maximum value to Arctic Governments and Agencies, furtherance of Arctic industries and service companies, and the protection of the environment and health in the Arctic coastal and shelf seas.

Promotion of Instrumentation and Technology

- xiv) To promote the development of low-cost, efficient and sustainable operational instrumentation, observing systems, and data acquisition systems, to support scientific challenges and operational services in the Arctic
- xv) To promote collaboration with space agencies and remote sensing scientists and engineers so as to ensure optimum integration of both in situ and remote sensed data in Arctic oceanography, including operational services.

Membership

EuroGOOS Arctic ROOS members will be national and international organisations (authorities, agencies, institutes and companies) willing to advance GOOS in their country and actively contribute to its extension at the Arctic level. The initial list of Members will be the organisations listed in Appendix 1 invited to sign this MoU. EuroGOOS Arctic ROOS members participate in the activities listed above and contribute to the costs of running those activities, New Members shall be designated by the Annual meeting. The Members are free to terminate their membership without a period of notice and justification. A current set of guidelines shall be available at the time of signature of this MoU.

Nothing in this Agreement shall be deemed to create any formal business organization or legal entity among the Members. The Members are not allowed to make binding appointments for the other.

EuroGOOS Arctic ROOS Officers

The Members will appoint at the Annual Meeting a Chairman, one or more Vice-chairmen and a Secretary, who will serve as the EuroGOOS Arctic ROOS Officers (who collectively form the Board) for two years, and be responsible for following all EuroGOOS Arctic ROOS activities between Annual Meetings. The Officers will meet as necessary. They will be eligible for re-appointment for up to a maximum of eight successive years.

EuroGOOS Arctic ROOS funding

Members shall bear their own costs for attending meetings and participation in the activities of EuroGOOS Arctic ROOS. Members shall contribute to the costs of running EuroGOOS Arctic ROOS by contribution in kind to activities such as hosting meetings, organising workshops, ad hoc study groups or pilot projects, employing consultants, financing publications in their own series, providing for their own costs of communications and other as agreed upon by Members at the Annual Meeting. The EuroGOOS Arctic ROOS Secretariat shall be hosted by one or more Members offering to provide accommodation, support services, and/or professional staff for a number of years. Members may second additional staff to the EuroGOOS Arctic ROOS Secretariat. The location of the EuroGOOS Arctic ROOS Secretariat may be rotated from Member to Member as agreed by Members at an Annual Meeting.

Rules

The procedures for the work of EuroGOOS Arctic ROOS shall be established through rules decided by the Annual Meeting by consensus.

Foundation meeting

The Conveners will invite representatives of organisations listed in Appendix 1 to attend a Foundation Meeting of EuroGOOS Arctic ROOS to be held during 2007. A minimum quorum of 5 signatories shall be sufficient to establish EuroGOOS Arctic ROOS. The Foundation Meeting will approve the Memorandum of Understanding, appoint a Chairman and Officers, fix a date for the first Annual Meeting, and confirm the proposals for establishing the EuroGOOS Arctic ROOS Secretariat and on an initial programme of work.

Duration

EuroGOOS Arctic ROOS will come into effect at the Foundation Meeting on the signing of the EuroGOOS Arctic ROOS MoU by at least five members. It will continue until such time

as an Annual Meeting of members decides that it should end or the number of members falls below five.

ADDENDUM

Conveners

Representatives of Agencies and Institutes who are potential Members of EuroGOOS Arctic ROOS met on 12 September 2006 to review the draft MoU. These representatives were:


Hans Dahlin, EuroGOOS; Vladimir Smirnov, AARI, Russia; Lena Shalina, NIERSC, Russia; Ari Seina, FIMR, Finland; Tapani Stipa, FIMR, Finland; Lars Axell, SMHI, Sweden; Erik Buch, DMI, Denmark; Eberhard Fahrback, AWI, Germany; Pierre Bahurel, MERCATOR, France; Nick Hughes, SAMS, UK; Jan Piechura, IOPAS, Poland; Helge Tangen, met.no, Norway; Øyvind Sætra, met.no, Norway; Harald Loeng, IMR, Norway; Einar Svendsen, IMR, Norway; Peter M. Haugan, GI-UoB, Norway; Sverre O. Haugland, Storm Weather Center, Norway; Gard Hauge, Storm Weather Center, Norway; Dominique Durand, NIVA, Norway; Henning Wehde, NIVA, Norway; Laurent Bertino, NERSC/MSC; Knut Arild Liseter, NERSC/MSC; Johnny A. Johannessen, NERSC; Lasse H. Pettersson, NERSC; Stein Sandven, NERSC; Vladimir Ryabinin, WMO/WCRP

Presentations were also provided by Georg Heygster, University of Bremen and Malcolm Davidson, ESA who could not participate in the meeting.


Foundation members of EuroGOOS Arctic ROOS


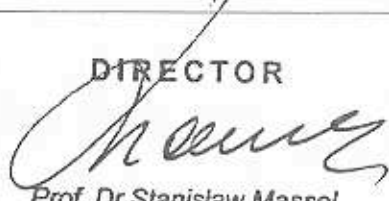
Country	Organisation	Official Contact
Norway	Nansen Environmental and Remote Sensing Center, Bergen	Stein Sandven
Norway	Norwegian Institute for Water Research	Dominique Durand
Norway	Norwegian Meteorological Institute	Lars Petter Røed
Norway	Institute of Marine Research	Einar Svendsen
Sweden	Swedish Meteorological and Hydrological Institute	Bertil Håkansson
Finland	Finnish Institute of Marine Research	Tapani Stipa
Russia	Nansen International Environmental and Remote Sensing Center, St. Petersburg	Leonid Bobylev
France	GIP Mercator Ocean	Pierre Bahurel
France	Institut français de recherche pour l'exploitation de la mer (IFREMER)	Bertrand Chapron
Poland	Institute of Oceanology, Polish Academy of Sciences	Jan Piechura
Germany	Alfred-Wegener-Institut für Polar- und Meeresforschung	Eberhard Fahrbach
Germany	University of Bremen	Georg Heygster
Denmark	Danish Meteorological Institute	Erik Buch
UK	University of Cambridge	Peter Wadhams

Signatories to the EuroGOOS Arctic ROOS MoU



Institute and stamp	Signature	Name and date
 HAVFORSKNINGSINSTITUTTET Postboks 1870 Nordnes N-5817 Bergen - Norway		EINAR SVENDSEN JULY 1, 2007

Institute and stamp	Signature	Name and date
 MERCATOR OCEAN 8/10, rue Hermes Parc Technologique du Canal 31520 RAMONVILLE ST AGNE	MERCATOR OCEAN Le Directeur  Pierre BAHUREL	P. BAHUREL 3.07.07



Institute and stamp	Signature	Name and date
NORWEGIAN INSTITUTE FOR WATER RESEARCH GAUSTADALLEEN 21 0349 OSLO, NORWAY		5/7-2007 JARLE NYGARD



Institute and stamp	Signature	Name and date
 INSTITUTE OF OCEANOLOGY POLISH ACADEMY OF SCIENCES 81-712 SOPOT, POLAND Powstańców Warszawy 55 Tel. (48 58) 551-72-81 Fax (48 58) 551-21-30	DIRECTOR  Prof. Dr Stanislaw Massel	Stanislaw Massel 31.07.07

Signatories to the EuroGOOS Arctic ROOS MoU

Institute and stamp	Signature	Name and date
 DMI		Erik Buch 31-8-07


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 Lyngbyvej 100
 DK 2100 København Ø
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Institute and stamp	Signature	Name and date
 Ifremer INSTITUT FRANÇAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER Siège social 155, rue Jean-Jacques Rousseau 92138 ISSY-LES-MOULINEAUX CEDEX	26 OCT. 2007	 Le Directeur Général Adjoint Jacques SERRIS


Institute and stamp	Signature	Name and date
 Swedish Meteorological and Hydrological Institute S-601 76 NORRKÖPING		2007-11-13 Bodil Aarhus Andre

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Institute and stamp	Signature	Name and date
Nansen Environmental and Remote Sensing Center		Ola M. Johannessen 14 November 2007

Institute and stamp	Signature	Name and date
Stiftung Alfred-Wegener-Institut für Polar- und Meeresforschung in der Helmholtz-Gemeinschaft Am Handelshafen 12 27570 Bremerhaven		Prof. Karin Lochte 14.11.2007

Institute	Signature	Name
DEPARTMENT OF APPLIED MATHEMATICS AND THEORETICAL PHYSICS (DAMTP), UNIVERSITY OF CAMBRIDGE		PROF. PETER WADHAMS


Institute and stamp	Signature	Name and date
Finnish Institute of Marine Research		Geva-Liisa Penttinen 13.12.2007

Signatories to the EuroGOOS Arctic ROOS MoU

Institute and stamp	Signature	Name and date
Hansen International Environmental and Remote Sensing Centre (NIERSC)		Leonid P. Bobylev Director 24 December 2007



Institute	Signature	Name
Institute of Environmental Physics, University of Bremen, Germany		Georg Heygster on Dec. 14, 2007

Institute and stamp	Signature	Name and date
NORWEGIAN METEOROLOGICAL INSTITUTE (MET. NO) Meteorologisk institutt Postboks 43 - Blindern 0313 OSLO		OSLO 11 Jan 2008 ANTON E. E. E. E.