



**Research Infrastructure Network for
Nordic Atmospheric and Earth System Science**

**4th Nordic ENVRI workshop on data and
access management**

Sanna Sorvari, FMI, Feb 2016

RI Network for Nordic Atmospheric and Earth System Science - project objectives

- ✓ to build and ensure deeper Nordic collaboration and participation in the individual RI activities (Nordic nodes for ICOS, ACTRIS, ANAEE, SIOS)
- ✓ to enhance the cross-RI collaboration in topics related to data, access, services, management, and policies at the Nordic level
- ✓ to strengthen the Nordic participation and position in ESFRI RI projects
- ✓ to strengthen a coordinated communication with relevant Nordic and national agencies and ministries for a two-way communication on possibilities, political and societal needs.

Long-term visions

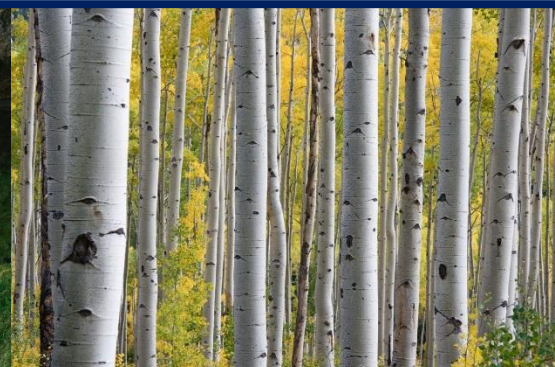
- Sustainability of the RIs
- Collaborative work in Nordic RI nodes
- Implementation of joint strategies
- Improved harmonization and interoperability
- Coordinated transnational usage and access management



Workshop topics



- **RI design and planning**
- **Sensor and technology development**
- **Data management and data interoperability**
- **Data and RI cross-usage and access management**
- **Provision of RI services**
- **Training**
- **RI policies and strategies**
- **International RI collaboration**



Project partners



Finnish Meteorological Institute (FMI)

University of Helsinki (UHEL)

Norwegian Institute for Air Research (NILU)

Bioforsk - Norwegian Institute for Agricultural and Environmental Research

Norwegian Institute for Water Research (NIVA)

Bjerkness Center for Climate Research/University of Bergen

Technical University of Denmark (DTU)

Stockholm University (SU)

Umeå University (UmU)

Lund University (LU)

+ workshops are open for all the interested research infrastructures operating in Nordic Countries (both national and international RIs)

People

Norwegian Institute for Air Research (NILU)

Cathrine Lund Myhre	ICOS, ACTRIS
Markus Friebig	ACTRIS
Georg H. Hansen	ICOS, ACTRIS, SIOS
Jon Børre Ørbæk	SIOS

Bioforsk - Norwegian Inst. Agricultural and Environmental Research

Daniel Rasse	ANAEE, ICOS
Helen K. French	ANAEE
Hanna Silvennoinen	ICOS

Norwegian Institute for Water Research (NIVA)

Claus Beier	ANAEE and CLIMMANI
Heleen de Wit	ICOS and CLIMMANI
Raoul-Marie Couture	NETLAKE

Bjerkness Center for Climate Research/Univ Bergen

Truls Johannessen	ICOS
Are Olsen	ICOS

Lund University (LU)

Erik Swietlicki	ACTRIS
Birgitta Svenningsson	ACTRIS
Anders Lindroth	ICOS
Harry Lankreijer	ICOS
Margareta Hellström	ICOS
Maj-Lena Linderson	ICOS
Torben Christensen	DEFROST
Margareta Johansson	DEFROST, INTERACT
Ben Smith	ANAEE

Stockholm University (SU)

Hans-Christen Hansson	ACTRIS, SIOS
Leonard Barrie	ACTRIS, IAGOS, WMO-GAW
Patric Crill	ICOS

Technical University of Denmark (DTU)

Kim Pilegaard	ICOS
Klaus Steenberg Larsen	ANAEE
Ebba Dellwik	ICOS

Umeå University (UmU)

Jan Karlsson	ANAEE
Sebastian Diehl	ANAEE, SITES

Finnish Meteorological Institute (FMI)

Sanna Sorvari	ICOS, ACTRIS, ANAEE, ENVRI, COOPEUS
Tuomas Laurila	ICOS
Lauri Laakso	ICOS, marine RIs
Hannele Hakola	ACTRIS
Annalea Lohila	ANAEE
Kirsti Kauristie	SIOS
Ulpu Leijala	COOPEUS, marine RIs

University of Helsinki (UHEL)

Markku Kulmala	ACTRIS
Tuukka Petäjä	ACTRIS
Hanna Lappalainen	ACTRIS
Timo Vesala	ICOS
Marjut Kaukolehto	ICOS
Eija Juurola	ICOS
Ari Asmi	ACTRIS, ENVRI, COOPEUS
Magdalena Brus	ENVRI, COOPEUS
Jaana Bäck	ANAEE

Work plan - workshops



- KoM and ws on policies and strategies
 - FMI Oct > Dec 2014
- ws on RI design and RI cross-usage
 - SU Jan 2015 > April 2015
- ws on data management and data interoperability
 - LU May 2015 > Oct 2015
- **ws on data and access management**
 - **NILU Oct 2015 > Feb 2016**
- ws on RI services and training /sensors & technology development
 - DTU Feb 2016 > **May/June 2016**
- Final meeting and workshop on international RI collaboration
 - UHEL June > **August 2016**

Helsinki ws outcomes (1st ws)



Sustainability of the RIs

- Enhancing ICOS– ACTRIS collaboration, ACTRIS to ESFRI/Nordic roadmaps
- Roadmap for terrestrial ecosystem RI collaboration
- Concept for Integrated Marine RI

Collaborative work in Nordic RI nodes

- Terrestrial ecosystem (Jaana)
 - Nordic RI plan for terrestrial ecosystem research with concrete recommendations and timeline
- Arctic collaboration
 - Task sharing of the operations, who is hosting what (SIOS-ICOS-ACTRIS, ANAEE) (Geog)
- Marine (Lauri)
 - Building a Nordic community

Implementation of joint strategies

- Nordic ENVRI topics (Improved harmonization and interoperability, coordinated transnational usage and access management)

Stockholm ws outcomes (2nd ws)

Toward coordinated RI landscape

- ENVRIplus cluster at the European level – latest developments

Developing further the concept for Nordic terrestrial ecosystem RIs

- Introducing national RIs
- Inclusion of RIs - SITES and INTERACT (+ ANAEE, ICOS)

Introduction for integrated marine RI concept

- e.g. FINMARI, initiating community building

Arctic collaboration

- Opportunities + needs restarting of activities

Lund workshop outcomes (3rd)



Session I: RIs - ICOS, ACTRIS, SIOS, ANaEE, LifeWatch + ENVRI RM

- Increased knowledge on RIs' data centres, data management/data lifecycles, ...
- Maturity level varies > it can work!, opportunities to learn, share best practices
- Current challenges > looking solutions from others

Session II: Collaboration with e-infrastructures and supercomputing centers

- Possibilities to outsource some activities – EUDAT services (sustainability, funding model?)
- Possibilities to collaborate within the context of NeIC and EUDAT (NeIC projects, EUDAT pilot projects)
- Challenge to keep up with the fast development in the data /e-infra/RDA/...

Session III: Novel approaches in open data access and science

- Citizen science > opportunity for supporting data provision > scalability, huge data volumes, requires resources to handle, how to include to RIs data management and funding models (EGI.EU action)
- Data publishing > trustworthy data centres, certification, latest developments on data publishing (funders, publishers requirement)
- RDA PID recommendations > how to adopt new requirements?
> plenty of new requirements > no need to do by yourself! Collaborative actions with other initiatives

Oslo ws on Data and physical access management

- EUDAT B2ACCESS to follow (RI requirements, feedback)
- Setting-up a task group for further work on ws ideas + inputs

Oslo meeting

– sessions and expected outcomes



Focus on RI data services and access, linked policies and non-technical aspects of the data management and access

Session I: Data policies, attribution, and Intellectual Property Rights

Session II: Access management for data, products and facilities

Session III: Collaboration between Nordic RIs and Nordic e-infrastructures

Expected outcomes

- Increased awareness of the importance of the data policies and access management
- Knowledge on the different aspects of the data policies
- Understanding on the process of establishing data policies
- Information on how the access is planned to organise in the different RIs
- Identification of challenges related to access management
- Further developed plans for RI and e-RI collaboration
- Feedback on the European Open Science Cloud initiative

Agenda of the 4th Nordic ENVRI workshop on data and access management at NILU on 3-4 February 2016



Wednesday 3 February

- 12.00 - 13.00: Light lunch served in the meeting room at NILU upon arrival
- 13.00 - 13.20: Welcome and introduction of the workshop topics.
(Kjetil Tørseth (NILU), Cathrine Lund Myhre (NILU) and Sanna Sorvari (FMI))
- 13.20 - 13.50: Implementation of research infrastructures in ESFRI Roadmap
(Odd Ivar Eriksen, Chair of ESFRI Implementation Group)
20 min + 10 min discussion.

Session I – Data Policies, Attribution, and Property Rights

Chair: Sanna Sorvari

13.50 - 14.20: European Commission perspectives on data policy, attribution, and property rights

(Anna Maria Johansson, Research Programme Officer, European Commission) 20 min + 10 min discussion.

14.20 - 14.50: Intellectual property rights and development of data policies for RI: the legal side

(Pirjo Kontkanen, legal advisor at University of Helsinki) 20 min + 10 min discussion.

14.50 - 16.40: One presentation per RI covering data ownership, data policies and licences used by RIs.

All presentations are 15 min + 5 min discussion. Coffee and refreshments ca 15.00 - 15.20

ICOS (Eija Juurola, ICOS ERIC), ACTRIS (Markus Fiebig, NILU), SIOS (Ole J Lønne, UNIS), AnaEE (Daniel Rasse, Bioforsk), EISCAT (Anders Tjulin, EISCAT)

16.40 - 17.00: Summing up of session I – Similarities and differences, possibilities and collaboration

(Alex Vermeulen, Lund University)

19.00 Dinner at Café Skansen (<http://www.cafeskansen.no/>) in Oslo city centre (Rådhusgata 32). We go together by train from NILU.

Thursday 4 February

Session II – Access Management for Data, Products, and Facilities

Chair: Cathrine Lund Myhre

09.00 - 09.10: Welcome to day 2, and introduction of the day

09.10 - 09.50: **www.yr.no: Dissemination of weather and climate information to various users: Experiences and strategy for data access, commercial use, attribution, property rights, etc.**

(Jørn Kristiansen, Met.no), 30 min + 10 min discussion.

09.50 - 10.10: **Guidelines for access management for Research Infrastructures: ENVRIplus access guidelines**
(Anders Tjulin, EISCAT) 15 min + 5 min discussion.

10.10 - 10.40: **Access to data from various sources; A model user's perspective** (Michael Schulz, Met.no)
20 min + 10 min discussion

10.40 - 11.00: Coffee break

11.00 - 12.15: **RI Presentations on access to research facilities, data access management, monitoring of access, data use tracking.**

(each 20 min + 5 min discussion)

One presentation per RI on ICOS (Alex Vermeulen, Lund University), ACTRIS perspective (Cathrine Lund Myhre, NILU), SIOS (Ole J Lønne, UNIS),

12.15 - 13.00: Lunch served in the NILU cantina

13.00 - 13.30: Presentations on – Access Management for Data, Products, and Facilities (continue)

19.2.2016 AnaEE (Jaana Bäck, University of Helsinki), EISCAT perspective (Anders Tjulin, EISCAT)

13.30 - 13.50: NorDataNet = Norwegian Scientific Data Network (Bard Saadatnejad, Met.no)
15 minutes + 5 minutes discussion

13.50 - 14.00: Summing up of session II – Similarities and differences (Sanna Sorvari, FMI)

Session III – Collaboration between Nordic RIs and Nordic e-Infrastructures: Use Cases and Demonstrators

Chair: Markus Fiebig

This session is to inspire new collaborations between RIs and e-infrastructures by reporting about existing examples of such collaborations, use cases, e-learning, etc.

14.00 - 14.10: EUDAT Call for Data Pilots (Ulpu Leijala, FMI)

14.10 - 14.40: Technologies behind EUDAT services (Ari Lukkarinen, CSC) 20 min + 10 min discussion.

14.40 - 15.00: Discussion on Nordic ENVRI – e-infrastructure collaboration

15.00 - 15.30: Summing up session III: Summing up the session and WS and preparation of next meeting (Sanna Sorvari, FMI)

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- **ws on data and access management**
 - **NILU Oct 2015 > Feb 2016**
- ws on RI services and training /sensors & technology development
 - DTU Feb 2016 > **May/June 2016**
- > **Site visit? Svalbard or Bergen (marine)**
- Final meeting and workshop on international RI collaboration
 - UHEL June > **August 2016**

Summary of the Oslo ws

Session I on data policies

- EC promoting Open research data, data pilot and data management plan (DMP need to be, no guidance on the format)
- IPR and attribution: Who actually have IPR, no transfer, give the right further, attribution chain (identification), licenses, user perspective
- ICOS, data policy approved by ICOS ERIC GA, now working on details, attribution chain, CC4.0 BY, PI/institutional IPR right given to ICOS ERIC (will be defined in national network agreement)
- ACTRIS, first version of data policy done (for separate policies for data centre nodes > integration and development needed), redistribution restricted
- SIOS deliverable of PPP, main principles drafted and agreed
- ANAEE, working on deliverable, main principles drafted and not agreed
- EISCAT running operations several decades, data policy relatively new, approved by Members

General: in the data policies challenge to find a balance between user requirements and data provides (often written by stakeholders and providers)

Session II access management

- World-class example on well working services with open data policy, demonstrator of open access and services (user numbers and applications)
- ENVRIplus working on Access guidelines and testing multidisciplinary TNA
- User requirements (modelling) for observational data – Michael's slide
- ICOS working on technical solutions for PIDs > attribution and KPI, collaboration with EUDAT, sustainability of the services ?
- ACTRIS, long history of providing access but in a network mode > transition to more institutional framework and creation of feasible access – funding model

Session III

Deliverables - ws reports

MS1 Project web-page set-up Sept 2014 > April 2015

MS2 Kick of meeting and 1st workshop organised Oct 2014 > Dec 2014

D1 Report on policies and strategies Nov 2014 > JAN 2015 > APRIL 2015 > Nov 2015

MS3: Nordic ICOS, ACTRIS, ANAEE and SIOS nodes established Feb 2015

D2: Report on RI design, sensors and technology development Feb 2015 > April 2015 > Nov 2015

D3: Report on data management and interoperability Jun 2015 > Oct 2015 > Nov 2015

D4: Report on data and RI cross usage & access management Nov 2015 > March 2016

D5: Report on RI development of products, services and training March 2016 > Jun 2016

MS4: Final meeting held Jun 2016 > Aug 2016

D6: Synthesis report on the Nordic collaboration & future perspectives Aug 2016 > Oct 2016