

Printed and Digital Materials

Different kind of printed and digital materials (such as brochures, flyers, leaflets, reports, posters, infographics, videos, roll-ups etc.) are important part of the traditional dissemination methods. Materials should be tailored based on the target audience and dissemination method (electronic versus printed) and place. For example, private sector, policy makers and scientific communities are interested in different kinds of contents. In addition to advertise RI's missions, impacts, data or other products, these can be used to advertise upcoming events. It is good to be aware that material planned for printing does not necessary look good in electronic form and vice versa. Printed and electronic versions of the same material might assist effective communication. Translation of some of the material to local language and/or RI's member countries languages might be worth considering. This might help for example communicating with local policy and decision makers.

Flyers, leaflets, and brochures can provide quick-to-look information particularly for new user groups. They can include QR code, NFC chip or website address for further information. They can be distributed in several different scientific or policy relevant workshops, conferences and events. We see that using printed flyers to dissemination is a cost-effective as relatively large user groups can be reached. However, one needs to pay attention how to hand such a material as example scientists are often hesitant on taking flyers on subjects they are not very familiar with. The efficacy of the flyers is hard to evaluate in practice, but using e.g. QR code one might track the analytics. As digital material can be distributed via other dissemination channels (website, newsletter, emails).

There are several freely available tools to make a printed and digital materials. One option is to use commercial company (visual designer) to plan the brochures/flyers layout based on the RI's visual identity. Some RIs make the material, both content, visual planning and layout by them self. This requires some special skill from the person as well as professional software for the graphic design (e.g. Adobe Creative Suite).

Advantages: Cheap (relatively low cost) method of disseminating basic facts. Can reach large groups if properly distributed (printed material eg. in events). Relatively easy to tailor for different audiences, including different language variants.

Challenges: Difficulty of reaching new user groups (interest of taking a flyer). Design is crucial; as is the way they are distributed. There can also be limited information content. Lifetime of the material.

Resources: Cost are from visual planning, providing content and printing. Printing costs depends on the design, paper quality, and amount. Often external companies have planned the RI's promotion materials. The materials need regular update which increases the costs. Printed material: Cost to transport, weight, etc. Consider on-site printing.

Recommendation: Connect with other dissemination tools. To be used together with personal connection method (presentation, booth, etc.) and connected directly to the other sources of more detailed information (websites, documents). Consider in which of the participating countries the actual printing of the material is most relevant to do (printing and distribution costs and environment effects).

COOP+ has a flyer with brief description of the project aims, participants and main expected outcomes. It was distributed in several different scientific workshops and conferences (COOP+ events, ENVRI booths at EGU and ICRI 2016).



ENVRIplus is a Horizon 2020 project bringing together Environmental and Earth System Research Infrastructures, projects and networks together with technical specialist partners to create a more coherent, interdisciplinary and interoperable cluster of Environmental Research Infrastructures across Europe.

ENVRIplus has 37 partners from 13 European countries. Find out more about the partners at <http://www.envriplus.eu/partners/>

CONTACT US

ENVRIplus Coordination Office
Eric Palmérin aukio 1 (PO Box 48)
FI-00014 University of Helsinki, FINLAND
envriplus-coordination@helsinki.fi

FOLLOW US

Twitter - @ENVRIplus
Facebook page - ENVRIplus
LinkedIn Group - ENVRIplus

www.envriplus.eu

What are the Research Infrastructures?

- Research Infrastructures refers to facilities, resources and related services used by the scientific community to conduct top-level research in their respective fields.
- Environmental Research Infrastructure facilities were developed to respond to the needs from specific research communities. Internal cooperation within certain domains created diverse research traditions, specific skills and cultures.
- The intertwined nature of the Earth System however requires the scientific communities to transcend the well-established and familiar boundaries of disciplines and domains, and work towards common holistic understanding of the environment as a one Earth system.

What is ENVRIplus?

- It is a project gathering Research Infrastructures from all domains of Environmental science (Atmospheric, Marine, Biosphere and Solid Earth) to work together, capitalise the progress made in various disciplines and to strengthen interoperability amongst Research Infrastructures and domains.
- Collaboration within the ENVRIplus will enable multidisciplinary Earth system science, which is so important in order to address today's global challenges that have no boundaries.
- The cooperation will avoid the fragmentation and duplication of efforts, making the Research Infrastructures products and solutions easier to use with each other, improving their innovation potential and cost/benefit ratio of the Research Infrastructure operations.

ENVRIplus

Environmental Research Infrastructures providing shared solutions for Science and Society

ENVRIPLUS

Date	Partners	Structure
Starting Date: 1.2.2015	17 partners	4 Environmental Domains
Project Duration: 4 years	13 European countries	6 Themes
End of the Project: 30.4.2019	21 Research Infrastructures	19 Non-Framework

Goal	Products	Domains
Enhancing interoperability	Interoperable policies	Interoperable Domains
Enhanced understanding of the Earth system	Standardisation	Marine domain
Innovative concepts	Innovative solutions	Biosphere/Ecosystem domain
Improved communication	Public services	Solid Earth
Co-ordination among RIs		

ICOS in a nutshell

- Producing harmonised European greenhouse gas emissions and concentrations of greenhouse gases
- Integrating atmospheric, ecosystem and ocean observations across the European continent
- Central facilities for data processing, quality control, calibration, instrument development and training
- Reference data location and open data access through the ICOS Carbon Portal
- State-of-the-art infrastructure for the European research community, policy makers and public

CONTACT US

info@icos-eu.eu
ICOS EUC Head Office
10000 Helsinki, Finland
www.icos-eu.eu

Knowledge Through Observations

ICOS

Joining AnaEE

Joining AnaEE is a European-wide infrastructure for agricultural and ecological innovations ensuring food security, ecosystem services provision and contribution to bioeconomy.

ICOS

ICOS EUC Head Office
10000 Helsinki, Finland
www.icos-eu.eu

RELIABLE GREENHOUSE GAS DATA NEEDED FOR DECISIONS

Many human activities, such as transportation and industrial operations, produce emissions that are leading to more greenhouse gases in the atmosphere, and changing to climate change. As a result, many other natural processes are being changed and affected as well.

To make informed and sustainable decisions on any climate related matters, it is vital to base the decisions on scientific knowledge about natural processes and human emissions.

PRODUCING RELIABLE, LONG-TERM DATA

In the past, measurements of greenhouse gases in Europe have suffered from varying methods, discontinuity and lack of consistency.

However, decisions related to climate change, as well as any scientific studies must be based on reliable data. The only way to have this, is to produce cost-effective, quality controlled and precise measurements, that are comparable with each other. This is the key focus of ICOS.

FIGURING OUT HOW EARTH IS BREATHING

ICOS, Integrated Carbon Observation System, produces high quality and open greenhouse gas data, which is based on the observations made on its own 400 measurement stations across the Europe and beyond. The greenhouse gas data is needed to understand and mitigate climate change.

STANDARDIZED MEASUREMENTS ACROSS EUROPE

ICOS Research Infrastructure integrates atmospheric, ecosystem and ocean greenhouse gas and climate network in order to provide data for a full European carbon balance and its trends.

DATA PRODUCTION PROCESS

Measurement stations

Central facilities

ICOS Carbon Portal

ICOS Station Networks

- Ecosystem
- Atmospheric
- Ocean
- Open shipping time

ICOS Research Infrastructure aims to:

- Quantify and understand the greenhouse gas emissions and sinks and the whole carbon cycle in the Europe and the neighbouring regions
- Provide long-term integrated observations on how much greenhouse gases are taken in the atmosphere, and what are the fluxes between atmosphere, land and ocean surfaces
- Produce on how the carbon cycle, the emissions and sinks will behave in the future
- Communicate this scientific knowledge for the benefit of decision making, innovation and policy

ICOS will study the impact of global changes on the functioning and productivity of ecosystems. Data and models will allow the development of agricultural and ecological innovations ensuring food security, ecosystem services provision and contribution to bioeconomy.

ICOS Station Networks

- Ecosystem
- Atmospheric
- Ocean
- Open shipping time

Examples of flyers and brochures. From top to down: ENVRIplus flyer, ICOS and AnaEE brochures