



## Workshop: Towards open climate knowledge

### Potentials and weaknesses of the Access to Knowledge approach on Climate Services

*Federal Ministry of Science, Research and Economy, Vienna*

*January 13-14, 2015*

**Please note:**

- ❖ A complete list of participants is available at the end of this report.
- ❖ All presentations from the workshop are available at the JPI Climate website (<http://www.jpi-climate.eu/news-events/events/workshoptowardsopenclimateknowledgejanuary2015>).

### Workshop Report

*By Alexis Sancho-Reinoso (Centre for Global Change and Sustainability, BOKU, Vienna)*

According to the workshop's agenda, the aim of the workshop was to **discuss the relevance of the Access to Knowledge (A2K) approach in climate research related activities**. Such discussion was originally structured in 2 blocks during the first day (Jan 13):

(a) a **plenary meeting** divided into 2 sessions

(b) a **group session** in which the participants were expected to participate in 4 different groups.

The second workshop day (Jan 14) had again a plenary character for putting together the group sessions' output and obtaining a set of conclusions from the joint final discussion.

This **scheduled agenda** was slightly **changed** during the workshop by the steering committee. The most relevant change was to **merge the 4 groups into 3**, i.e. by cancelling the group "G1" (titled "Implementing the *JPI Climate Guidelines on Access to Knowledge* in the ERA-Net on climate services text call" –see *workshop's agenda*). The reason for such restructuring was related to the nature of the participants (see *section on the group discussion below*).

#### ***First day (Jan 13, 2015): Plenary Sessions***

After the welcome words from Irene Gabriel (Federal Ministry of Science, Research and Economy and Austrian representative at the JPI Climate Governing Board), Patrick Monfray (ANR) and Alexis Sancho Reinoso (BOKU) presented the workshop, highlighting its background, aims and structure. During the presentation the participants were explicitly called to actively participate in the *JPI Climate Guidelines on Access to Knowledge* implementation process in future operations, like the ERA-Net on integrated quality climate services.

The first plenary session was started by a keynote from **Hans Pfeifferberger**, from the Alfred Wegener Institute, who

- Emphasized the crucial role of the so-called “intelligent openness” (i.e. open data needing to be accessible, assessable, intelligible and usable).
- Warned that open access policies might not coincide between international organisations (e.g. G8 Open Data Charter) and national actors, even when the latter are the members in the former.
- Reflected on the fact that despite being seen as a “positive” issue, there is no significant advance in open data. In his opinion, the key lays in the fact that open data is not rewarded, but on the contrary: it is perceived as a risk or a cost.
- Highlighted some positive examples of open data “experiments” (e.g. ARGO), publishers (e.g. PLOS) and organisations (e.g. AGU).
- Gave some details on the journal he coordinates, *Earth System Science Data*.

The presentation ended up in a set of **suggestions for JPI Climate**, i.e.

- (i) **to try to copy already existing policies rather than making new regulations which might have little real impact in research communities;**
- (ii) **to work more closely with actors like publishers and societies.**

An open discussion started with the inputs from 5 participants: Ari Asmi (University of Finland), Michel Schouppe (European Commission), Denis Didier Rousseau (CNRS) and Raphael Ritz (Research Data Alliance). Their (and also other participants’) contributions were concentrated in issues like

- (i) demanding JPI Climate to specify what kind of data are promoting in order to make the Guidelines more specific;
- (ii) the importance of developing means to specify meta-data in order to make them available for re-use;
- (iii) the possibility to create “safe environments for personal data” in those cases where barriers for publishing may appear (see, for instance, the Policy WG on Science Europe on Access to Data). The debate on the limits of public availability of data was intensive, and several participants highlighted the impossibility to publish certain data due to public security reasons or even economic reasons.

**Jean-Noël Thepaut**, coordinator of the Copernicus Climate Change Service at ECMWF, was the key speaker during the second plenary session. In his presentation the C3S (Copernicus Climate Change Service) was presented (including all its features) as

- (i) an operational service (i.e. not going to fund research),
- (ii) to be built upon national investments for complement national climate service providers, and
- (iii) being focused on the so-called Essential Climate Variables (ECVs).

Regarding open access (to data), some aspects from the recent Copernicus Regulation were stressed. They might become key references for the JPI Climate policy on the same issue. The C3S has being currently launched and should reach its operational phase by 2018.

The discussion in the session 2 was leaded by the round table members: Roger Street (UKCIP), Matthias Themessl (Climate Change Centre Austria), Hans Sanderson (BASE project) and Harilaos Loukos (Climate-KIC).

- R. Street insisted in the need of achieving a balance between science (climate services “providers”) and user needs, and that we are unfortunately far away of a user-driven model of climate services providing.
- H. Sanderson argued that JPI climate needs to be more specific by identifying what data is and from the experience of the BASE-project stated that the level of detail is very uneven within actors/countries.
- The contribution from H. Loukos was focused on Climate-KIC, a platform on “adaptation services” rather than “climate services”. A debate raised on the issue on borders between information for free and requiring be purchased. Some interesting opinions stressed the importance of bearing in mind the time horizon, and precisely the relevance of the long-term perspective when funding data infrastructures. In this respect, one crucial experience is weather services (most of them of public character).

### **First day (Jan 13, 2015): Group Sessions**

As a consequence of having merged the 4 groups into 3, a previous input on the ERA-Net on climate services (with plenary character) was introduced in the agenda in order to make possible the call to all participants to brainstorm in possible contributions for future calls (*see introduction above*). After the slides facilitated by P. Monfray, a debate on several technical details of the ERA-Net, but also on its contents, developed.

After this input, the groups were set up on the basis of the input provided by the steering committee, as originally scheduled:

**G1: The public and the private dimension of climate services**

**G2: Reassuring data quality standards**

**G3: Towards a comprehensive access to climate knowledge approach**

The participants’ distribution in the groups can be seen in the list at the end of the report.

### **Second day (Jan 14, 2015): Plenary Session**

The second day was structured exclusively in plenary sessions in order to pool the group sessions’ output. Each group presented its own output in slide presentations.

Eva Baños de Guisasola (CMCC) presented the **output from G1**. The subsequent discussion showed the central elements of the current discussion on such topic, like

- (i) the uncertainties regarding the concept of climate services (due to the lack of a universally recognised definition);
- (ii) the need to translate data into a business and decision-making language through “knowledge brokers”;
- (iii) the need to involve the private sector in addition to the users in the discussion; or
- (iv) the need to prioritize in certain sectors or even in geographical entities like cities.

In addition to these concrete demands were formulated for the ERA-Net:

- (i) it should attend the long-term perspective as well as users when defining business models, but also
- (ii) involve other non-JPI partners and stress investment opportunities,
- (iii) demand driven tools,
- (iv) stimulate stress tests, and
- (v) promote risk models.

Ari Asmi was in charge of presenting the **output from the G2 discussion**. In such group the discussion turned around the idea of quality and the difficulties associated to that (what is quality? What aspects should be taken into account? How to measure it?), concluding that there might be a moral responsibility, but no liability on this issue, since quality is strongly dependent on purposes.

Another discussed issue was on the role of traceability and related to that the concept of “data curation” was raised and was linked to the role of metadata and data sources (i.e. software, “linked open data”).

Concrete output for the ERA-Net (and for the *Guidelines*) was

- (i) The need to define what aspects of quality JPI Climate is interested in to promote and fund. For such purpose the G2 suggested collaboration with Copernicus on determining these aspects.
- (ii) In the same parallel, metadata has to be also specified according the kind of research.
- (iii) And in front of the emerging of a new scientific field (i.e. “data science”), JPI Climate was asked to position itself.

Finally, Alexis Sancho Reinoso facilitated the **G3 outcome**, concentrated in a first brainstorming session on the concept of “open knowledge” and its versatility, including the role of stakeholders (and therefore the need to clearly define who such stakeholders are).

The debate continued under the question on how scientific actors’ and stakeholders’ objectives can converge and not diverge, and that brought the group to reflect on the way research activities are built-up and the absence of rewarding collaboration with non-scientific actors.

**Five different fields of action (related to science communication, research impact, research transfer, stakeholder involvement and inter-disciplinarity) were identified as the session’s output both for the ERA-Net call text(s) and for the *Guidelines*.**

The last workshop session was devoted to a **final discussion** facilitated by A. Sancho Reinoso and P. Monfray, who summarized the main outcome from the previous presentations.

- Common demands from the different groups could be identified, like e.g. becoming more precise when dealing with certain concepts (i.e. climate services, open data, open knowledge).
- That includes looking at the whole ecosystem of initiatives in such fields in order to avoid overlapping and, thus, to search for complicities and smart collaboration.

## List of participants

### Workshop 13-14 January 2015, Vienna

#### "Towards Open Climate Knowledge: Potentials and Weaknesses of the Access to Knowledge Approach on Climate Services"

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