

Minutes & action of the September 23rd 2015 meeting on impact indicators and CLIPC portal at PIK (Germany)

Meeting agenda:

Time	Topic	Responsible
8:00 - 9:00	Arrival and welcome	
9:00 - 10:30	<p>Gaps and challenges priority impact indicators (Update of the status on priority indicators, existing gaps and challenges e.g., metadata, WP interaction)</p> <ul style="list-style-type: none"> • Urban theme (9:00 - 9:20) • Rural theme (9:20 - 9:40) • Water theme (9:40 - 10:00) <p>General discussion (10:00 - 10:30)</p>	<p>Luis (coordination & urban theme)</p> <p>Stefan (Water theme)</p> <p>Niall (Rural theme)</p>
10:30-10:50	Impact functions, D7.2 status & further work	Luis
10:50-11:00	Break/Coffee	
11:00-11:30	Uncertainty assessment of climate change indicators	Juliane
11:30-12:00	Tier 1 indicators progress.	Lars
12:00-13:30	Lunch	
13:30-14:10	Data exchange with WPs 3, 4 and 5, and parallel data analytics workflows for computing climate indicators	Wim & Alessandro
14:10-15:10	Toolbox interface and delivery of results (indicator availability/prototype feedback) according portal releases.	Peter
15:10 - 15:20	Break\Coffee	
15:20-15:40	User consultation to MY CLIPC and uncertainty	Annemarie
15:40-16:00	Indicator combinations from D8.2	Johannes
16:00 -	Wrap-up and follow-up actions	Luis

Attendants list:

Milka (CERFACS)
Stefan (SYKE)
Juliane (CSC2.0)
Andreas (CSC2.0)
Martin (STFC)
Johannes (TUDO)
Uwe (TUDO)
Sarah (TUDO)
Rob (ALTERRA)
Kari (FMI)
Niall (JRC)
Peter(MARIS)
Wim (KNMI)
Andrej (KNMI)
Lars (SMHI)
Alessandro (CMCC)
Annemarie (ALTERRA)
Eleni (CMCC)
Luis (PIK)

Morning session on indicators:

- Luis welcomes the participants and introduces the PIK work performed for the development of “new” indicators, notably for the urban theme, coupling city surface temperatures and minimum mortality.
- One question which will return in discussions on other indicators is the **possibility of including meaningful scenarios**, in this case taking into account the Urban Heat Island effect.
- Luis and other impact data providers need **assistance on uploading/migrating resulting data to be available in WP3, 4 and 8**, which will be provided now by KNMI (Wim), as well as with standard metadata completion initiated by CERFACS (Milka).
- Niall updates the meeting on the JRC work on rural indicators such as growing season for crops, annual vegetation stress and tree species habitat suitability. Some of these are **observation-based, others model-based, which has to be taken into account in the portal.**
- Stefan updates the meeting on the water indicator work, **mostly related to snow and ice**: snow water equivalent, standardized snowpack indicator, snow extent, heavy precipitation days, and sea-surface temperature).

- **Some indicators** (e.g., Baltic Sea ice) are **not spatial**. This reminds the meeting of the agreement to include non-spatial graphical functionalities in the portal (common graphic formats for graphs in visualization WP).
- Inclusion of sea level rise is briefly discussed – **a decision on if and if so how SLR will be included in CLIPC** (taken into account the controversiality of projections) is yet **to be taken**.

Actions:

(During October)

- Indicators calculated under each theme that are currently available will be migrated to WP3/4 and 8.
- The indicators should include a minimum set of metadata information that will be agreed upon.
- Indicator providers to contact Maarten (KNMI) and supply their IP in order to be able to upload data to KNMI.

Morning session on uncertainty:

- Juliane summarizes the plans for uncertainty management, noting that **most existing portals either ignore this important issue** or are limited to statistical information and are not informed by user feedback.
- The **proposed qualitative assessments based on expert judgments would be one of the CLIPC novel components**. The methods and criteria for qualitative expert assessment used should be transparent. If quantitative information is available information on external sources and metadata will be included.
- An important issue to consider is to **what extent the metadata template will be able to include qualitative information of uncertainty**. This raised the question of how to proceed with more descriptive metadata e.g., template proposed by Mikael, in the CLIPC portal

Actions:

(28 Sep. to 2 Oct.)

- Juliane to circulate the NUSAP assessment for characterizing uncertainty and others to comment on the potential to use it for CLIPC indicators.

Afternoon session on CLIPC portal:

(due to time constraints the order of the presentation was rearranged.)

- Wim summarizes the planned workflow/interactions between WPs 3, 4, 5 7 and 8. Indicator and metadata uploading is possible now. As to the metadata, it is important for the **cross-WP metadata working group** to agree on one common standard for CLIPC/NetCDF metadata including uncertainty information, keywords and vocabulary.
- Alessandro presents the infrastructure and methods developed for parallel indicator calculation available at CMCC. To be discussed with Wim how to integrate these into CLIPC.
- Peter presents the recent **developments** in developing the interface and visualisation/viewing services on the basis of the **recent meeting in Haarlem**. This raises the point of how to include ancillary (mostly socio-economic) datasets. Peter to work with Johannes on this. Other distinctions to be included in the portal: individual versus ensemble data, and observations and projections.
- Lars presents the current status and outlook regarding the Tier1 indicators work done in CLIPC. Presentation of **different software available for calculating climate indices** as well as some advantages and disadvantages of each.
- **Request for metadata standards to be discussed in a broader working group** with focus on ESGF publishing and CF conventions. Need to have providers of all Tier indicators on board. Milka's suggestion is seen as a good starting point but needs to be simplified.
- Annemarie pledged for **regaining momentum on engaging users for new rounds of consultation**. The experience done with the consultation on the uncertainty assessment tool was very useful and underlines the need to engage actively with users.
- Johannes presents the first ideas on the **challenges of indicator combination/aggregation** for the CLIPC toolbox. Main challenges relate to differences in data format, data units and data ranges.
- Discussion of **data normalization and the adequate level of spatial aggregation**. Presentation of several examples of the spatial detail "lost" via spatial aggregation of variables. Presentation of methods to normalize heterogeneous data ranges such as min-max normalization with and without logarithmic transformation.

Actions:

(28 Sep. to 2 Oct.)

- Peter and Johannes to work together on integrating auxiliary data (socio-economic) in the CLIPC portal. Also to include Luis.
- Wim to revive the metadata working group with a doodle pool.
- Peter to propose Annemarie dates in October for user consultation on the CLIPC portal and MyCLIPC processing environment.
- Annemarie requests that others revisit their contact lists and suggest further users/resource person that can be contacted.
- Johannes to circulate MS36 on the comparison, ranking, and aggregation of indicators. Others to comment.

- Due to lack of time the presentation of the status of D7.2 did not take place.

Further general points:

- In case the development of new indicators is partly implemented with other projects' funds, this will be acknowledged in the deliverable.
- Care has to be taken to use clear and transparent terminology and definitions.
- A draft impact indicator report has been made available for a limited expert review. **Eleni (CMCC) will check if this draft can be used for internal CLIPC purposes** (e.g., literature update) and if CLIPC indicator work may be relevant for specific report chapters, preferably before 6 October (to be taken into account by the 13 October Advisory Group meeting).
- **Two other links with the EEA** have to be followed up: **technical integration** (Wim and Peter, later this year) and **feedback on portal** (January version).
- In October one indicator will be migrated for each theme, to check if the data flows work for the three associated providers (PIK, JRC, SYKE). Full first version of the portal will be released in **January** for user consultations – suggestion is to have **8 indicators included for the three themes together**.
- Suggested not to maintain the separation between the three themes as they are overlapping.

Actions:

(28 Sep. to 2 Oct.)

- Eleni (CMCC) to check if the EEA impact indicator report can be made available to CLIPC internally.

(Until January 2016.)

- 6/8 indicators of each theme to be supplied to the portal.