

REPORT OF SHORT TERM SCIENTIFIC MISSION

COST Action ES 1306: CONNECTEUR



Title: **Stakeholder analysis of perceived relevance of connectivity issues across the EU**

Reference code: COST-STSM-ECOST-STSM-ES1306-011215-063624

Host: Dr. Eva N. Paton
Chair of WG 5: Connectivity & Society
Institute of Earth and Environmental Sciences, University of Potsdam, Germany

Applicant: Dr. Anna Smetanová
Post Doc LISAH, INRA, Montpellier, France
anna.smetanova@supagro.inra.fr

COST WG: Working Group 5: Society & Connectivity

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1. PURPOSE OF THE STMS

Transfer of knowledge across the science-society interface is essential for both, ethical and economic reasons, and inevitable for successful climate change adaptation and integrated management of sustainable, resilient landscapes. The trans-disciplinary research of water and sediment connectivity has the potential to supply monitoring, modelling and management tools to land and water managers in order to reach these goals. The effective communication and transitions of the progress in connectivity research enabled by the scientific cooperation in the framework of the COST Action ES1306: Connecting European connectivity research (Connecteur), is the core target of the action and its working group Connectivity & Society. The aims of the STMS was to (i) collect, structure and analyse the outcome of the interviews with stakeholders (details in Section 2), (ii) to describe the dimensions of and develop projections on the understanding of connectivity issues and tools of different stakeholders; (iii) and feedback the perceived knowledge gaps and demands of stakeholders back to the working groups of the action.

2. DESCRIPTION OF THE STMS PROJECT

In order to appropriately address the transfer of the cutting edge research developments of the Connecteur network, the collaborative research project on stakeholders' perception of connectivity was proposed by the Working Group 5 "Transition of connectivity research towards sustainable land and water management". A questionnaire addressed to the stakeholders involved in water and land management was compiled during the Think Thank of the working group 28.-29.4.2015 in Berlin, Germany.

A semi-structured interview was proposed with questions concerned (i) the statistical information on the respondents (including type of employer, the years of experience, gender and education); (ii) the information about their responsibilities and spatial range of influence, (iii) the type of data they collect or use, (iv) people and organisation they cooperate with, (v) the biggest challenges of their work in current water and land management, (vi) the understanding of connectivity and importance in management, (vii) the expectation on connectivity science / scientist. Prior to the interview, the respondents were informed about the anonymity of the interview, and its purpose according to the ethical regulations. The questionnaire was created in English, with purpose to be translated to national languages.

The questionnaire was pre-tested, and the final English version, and the project itself were presented to the Connecteur community at the 3rd MC meeting and WG meetings, 14-16.9. 2015 in Durham, UK. The calls for voluntary translators of the questionnaire to national languages, and voluntary interviewers of stakeholders among the Connecteur scientist were launched. The data were collected by individual Connecteur members during 2.5 months, until the end of November 2015. Short questionnaire manual, with a list of preferred institutions, and instruction how to pursue the interview was provided. Each interviewer was asked to find a stakeholder who they might or might not previously work with. The stakeholder was supposed not to work in scientific institution, but ideally in one of the preferred, or in an organisation with responsibilities in water and land management. The questionnaires from Connecteur scientist were collected, and each interviewing scientist was asked to fill up a short follow-up questionnaire. The responses of both questionnaires were analysed via Short Term Scientific Mission (COST-STSM-ES1306-011215-063624).

Anna Smetanová was actively involved in all these activities. She contributed to the questionnaire

development in April 2016, pre-tested the interview, presented the project at the Durham meeting, engaged colleagues to take part in the project, translated the interviews, interviewed further stakeholders and collected both questionnaires, before the actual start of the STMS.

The STMS was dedicated to the analysis of the data, that followed the qualitative research analysis based on the grounded theory. Complete coding procedure, and later inductive redefining through subsequent selective coding was applied. Multiple analysis of the dataset was performed according to different criteria (e.g., stakeholders' occupation, opinions, questions topic, etc.) within according to criteria redefined groups. Four main topics were answered: (i) how connectivity as a concept / as a method is perceived (directly or indirectly and through what (which issues), (ii) how do different groups manage connectivity and connectivity related linkages they observe in landscapes (iii) Is the connectivity a key challenge in water and land management, (iv) with whom and how stakeholders communicate, and what they expect from connectivity research.

3. RESULTS

Together 92 questionnaires from 20 countries were collected, from which 85 met the requirements and could be used for the qualitative analysis. The questionnaire was translated in 14 languages. The results of the STMS would be published in prepared joint publication. Summarizing briefly, the stakeholders perceive connectivity mostly via links and fluxes they observe in landscape. They understand it based on the part of landscape they manage, and despite many of them think that management of connectivity related linkages is important, they do not name connectivity as the main challenges of their work.

4. THE IMPORTANCE FOR THE ACTION AIMS

The STMS is relevant to the aims of WG 5, and the results and implication will be reported to other working groups of the action on the future Connecteur or scientific meetings and via publication (section 5). This will (i) bring insights on how the stakeholder perceive and use connectivity concept and / or tools and methods to the Connecteur and transdisciplinary scientist, and (ii) help to formulate the knowledge gaps in their research needed to be tackled to benefit stakeholders. Furthermore, the project contributes to (iii) strengthening of cooperation of WG5 with action members and other WG, (iv) engaging Connecteur scientist to speak with stakeholders, (v) confronting the scientist and stakeholders mental models, and last but not least, (vi) creating a preliminary network of stakeholders who might be interested in further cooperation with WG5.

5. PRESENTATION OF THE RESULTS

Publication:

A joint publication targeting connectivity and transdisciplinary researchers about the perception of connectivity, its role in management, the connectivity related challenges of stakeholders and the way to communicate with stakeholders is being prepared.

Presentation at international conferences:

EGU 2016 (17-22.04.2016, Vienna, Austria): Session: SSS2.5/BG1.16/GM3.7/NH1.23 Connectivity in hydrology and sediment dynamics: concepts, measuring, indices and societal implications

Smetanová, A., Müller, E.N., Fernández-Getino, A.P., José Marqués, M., Vericat, D., Dugodan, R., Kapovic, M., Ljusa, M., Ferreira, C.S., Cavalli, M., Marttila, H., Lucas Broja, M.E., Swiechowicz, J., Zúmr, D., Connecteur expert Team. 2016. Stakeholder analysis of perceived relevance of connectivity – the implication to your research. Geophysical Research Abstracts, Vol. 18, EGU2016-1103-2, 2016.
- ECSTA grant, requested oral presentation

EGU 2016 (17-22.04.2016, Vienna, Austria): Session: EOS21 Geoscience for Society: Knowledge transfer and collaborative research management

Smetanova, A., Paton, E.N., Keesstra, S. 2016. Stakeholders' expectations on connectivity research for water and land management addressed by a survey in the collaborative EU-COST Connecteur network. Geophysical Research Abstracts, Vol. 18, EGU2016-13065-1, 2016.
- oral presentation requested.

Presentation at Conencteur meetings:

Hydrological and Erosion processes in Mediterranean Landscapes: Impacts of land management on connectivity, February, 28 to March, 5, 2016, Palermo (Italy)

Smetanová, A., Paton, E.N., Connecteur expert team, 2016. ES 1306 Connecteur survey: Stakeholders' perception of connectivity in water and land management.

- poster presentations

Presentation of whole project, its results and implications for all WG groups is prepared for the MC & WG meeting in 2016.

6. CONFIRMATION OF THE STAY

With this I, Dr. Eva N. Paton, confirm that Dr. Anna Smetanová was working under in my group in December 2015 and January 2016, and executed all the above described work. Our cooperation before and during the STMS was very pleasant and fruitful, and we are continuing our cooperation. The results that Anna Smetanová gained in her research are of high importance for the further work of the COST Action ES 1306: CONNECTEUR WG 5: Connectivity & Society, and have useful implications for the work of other groups too. The publication and presentations, she plans will help to promote her work, the STMS concept, the working group and Connecteur as a whole.

7. AUTHORISATION OF THE POST OF THE REPORT ON CONNECTERU WEBSITE

I, Anna Smetanová, consent to the publication of the report on the Connecteur's website.

8. ACKNOWLEDGEMENT

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