



TRANSCEND

Minutes of the TRANSCEND Kick-Off Meeting

February 15th – 16th, 2023

Salamanca, Spain

Written by: Héctor González López

AGENDA:

Day 1, February 15/02/2023

09.30 – 11.15	Welcome and introduction
09.30 – 09.45	Objectives and pillars of the project & meeting <i>C. Dionisio Pérez Blanco, Universidad de Salamanca (USAL)</i>
09.45 – 10.30	Introduction of the partners and teams (3' per institution)
10.30 – 11.15	<i>Coffee break</i>
11.15 – 14.05	Pillar 4: The living labs
<i>Scope and format:</i> Lab coordinators will present the pressures and management challenges of each lab, the TAP to be assessed & updated, and potential collaborations with other labs. 10' presentation followed by 10' min discussion per lab. Keynote presentation opens discussion.	
11.15 – 11.45	Keynote - Climate sensitive? water allocation systems and economic instruments <i>Michael Hanemann, Arizona State University (ASU)</i>
11.45 – 12.05	Júcar River Basin (RB) in Spain <i>Manuel Pulido-Velázquez, Universitat Politècnica de València (UPV)</i>
12.05 – 12.25	Reno RB in Italy <i>Cinzia Alessandrini, Agenzia regionale per la prevenzione, l'ambiente e l'energia dell'Emilia-Romagna (ARPAE)</i>
12.25 – 12.45	Tympaki RB in Greece <i>Marinos Kritsotakis, Region of Crete (KRI)</i>
12.45 – 13.05	Nitra RB in Slovakia

	<i>Radoslav Považan</i> , Slovak Environment Agency (SAŽP) & <i>Miroslava Malatincova</i> , Slovenský Vodohospodársky Podnik (SVP)
13.05 – 13.25	Caplina-Mauri-Desaguadero System in Peru, Chile and Bolivia <i>Tania Santos</i> , Stockholm Environment Institute (SEI)
13.25 – 13.45	Orontes RB in Lebanon, Syria and Turkey <i>Hadi Jaafar</i> , American University of Beirut (AUB)
13.45 – 14.05	Mahanadi RB in the Indian states of Chhattisgarh and Odisha <i>Dinesh Kumar</i> , Institute for Resource Analysis and Policy (IRAP)
14.05 – 15.00	<i>Lunch</i>
15.00 – 16.40	Pillar 1: Knowledge networks
<i>Scope and format:</i> 10' presentations followed by 10' discussion	
15.00 – 15.20	Starting, managing, and maintaining Knowledge Networks <i>Jaroslav Mysiak</i> , Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC)
15.20 – 15.40	Engaging network managers and other stakeholders through the Talanoa Dialogue <i>C. Dionisio Pérez Blanco</i> , USAL
15.40 – 16.00	Serious games and scenathons <i>Javier Sierra</i> , USAL
16.20 – 16.40	<i>Coffee break</i>
16.40 – 17.40	Practical arrangements of working together (I): Coordination
16.40 – 17.00	6-month financial reporting, risk reporting, dissemination reporting
17.00 – 17.20	Communication platform: virtual forum (web & app), logo, Twitter & Facebook, one drive, calendar
17.20 – 17.40	Internal management: General Assemblies and Project Bodies (Management Board, Steering Committee, High Level External Advisory Board) Interventions by <i>C. Dionisio Pérez Blanco</i> (USAL), <i>Héctor González-López</i> (USAL), <i>Cinzia Alessandrini</i> (ARPAE), <i>Jaroslav Mysiak</i> (CMCC), and others
18.00 – 19.30	<i>Social activity – guided tour across Salamanca city center</i>
20.30	<i>Social dinner</i>

Day 2 February 16/02/2023

09.00 – 11.30	Pillar 2: Actionable modeling suite
<i>Scope and format:</i> 10' presentations followed by 10' Q&A, and 30' roundtable discussion	
09.00 – 09.20	Coupling human-water systems for actionable science <i>Giuliano di Baldassarre, Uppsala Universitet (UU)</i>
09.20 – 09.40	Coupling human-human systems for actionable science <i>Francesco Sapino, USAL</i>
09.40 – 10.00	Soft coupling and protocols through open source programming – the OpenMI standard <i>Sina Katami, UU</i>
10.00 – 10.30	Roundtable discussion Moderated by <i>Tim Foster, University of Manchester (UoM)</i>
10.30 – 11.00	<i>Coffee break</i>
11.00 – 13.00	Pillar 3: Monitoring and accounting toolbox
<i>Scope and format:</i> 10' presentations (keynote 20') followed by 10' Q&A, and 30' roundtable discussion	
11.00 – 11.30	Keynote – Establishing fluent and solid collaboration with our “twin” HE project <i>Jingshui Huang, Water Efficient Allocation in a Central Asian Transboundary River Basin (WE-ACT).</i>
11.30 – 12.00	Monitoring approaches and tools <i>Tim Foster, UoM</i>
12.00 – 12.20	Monitoring indicators <i>Maggie Kossida, Solutions for the Environment and Engineering (SEVEN)</i>
12.20 – 12.40	Climate and socioeconomic scenarios <i>Jaroslav Mysiak, CMCC</i>
12.40 – 13.00	Roundtable discussion Moderated by <i>Manuel Pulido-Velázquez, UPV</i>
13.00 – 14.00	<i>Lunch</i>
14.00 – 15.00	Pathways to impact
14.00 – 14.20	Designing successful pathways to impact – insights from H2020 & HE projects <i>Guido Schmidt, FreshThoughts Consulting (FTC)</i>
14.20 – 14.40	TRANSCEND's pathways to impact <i>C. Dionisio Pérez Blanco (USAL)</i>
15.00 – 16.00	Practical arrangements of working together (II): Impact

15.00 – 15.40	Communication, Dissemination, Impact -Stakeholder events: 28+ workshops, 2 international workshops, 34+ training events, 30 policy briefs ahead of workshops -Academic events: 2 summer schools, 12+ webinars, 4+ papers, 45+ outreach events -General public: 14+ local press releases, 14+ citizen science events, 4 webstivals, 14 local citizen panel meetings (1 international meeting) -28+ newsletters, 3+ brochures, 3 video presentations
15.40 – 16.20	Planning the next 12 months
16.20 – 16.30	Closing and farewell
16.20 – 16.30	Closing reflection and next steps <i>C. Dionisio Pérez Blanco, USAL, and Roundtable with interventions from all</i>

Attendants – without any specific order (29)

C.Dionisio Pérez-Blanco (USAL), Francesco Sapino (USAL), Héctor González López (USAL), Javier Sierra Pierna (USAL), Guido Schmidt (FTC), Giuliano Di Baldassarre (UU), Hadi Jaafar (AUB), Adria Rubio Martín (UPV), Eulalia Gómez Martín (UPV), Tania Santos (SEI), David Purkey (SEI), Maggie Kossida (SEVEN), Jaroslav Mysiak (CMCC), Dinesh Kumar (IRAP), Tim Foster (UoM), Rodica Tomozeiu (ARPAE), Cinzia Alessandrinni (ARPAE), Radoslav Povazan (SAŽP), Robert Blasko (SAŽP), Miroslava Malatincova (SVP), Michael Hanemann (ASU), Ben Parkes (UoM), Jeremy Pal (CMCC), Marinos Kritsotakis (KRI), Panos Sourtzinos (SEVEN).

Starting at: 9:39

Welcome and introduction.

Each attendee talks to the colleague by his/her side for 5 min, and then introduces him/her.

After a brief institutional presentation, C. Dionisio Pérez Blanco starts the meeting by presenting the TRANSCEND project and its pillars.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Giuliano Di Baldassarre comments on the impacts of the project and the importance of working not just in “silos” (i.e., each living lab works separately from others) but also working together and building synergies. To this C. Dionisio Perez Blanco replies that a critical aspect is collaborating across WP3-4 (modeling, monitoring) beyond WP1-2.

Jaroslav Mysiak agrees with Giuliano Di Baldassarre’s point.

Tim Foster comments on the importance of leveraging on having different case studies to generate actionable knowledge that is also replicable.

Coffee Break

Pillar 4: The living labs

- **Michael Hanemann** presents the historical evolution of California's water markets and the adaptation policies, where modeling has played a crucial role.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Michael Hanemann comments that a critical aspect is to clearly present the risks to decision-makers, and even to “scare” them with plausible and catastrophic futures. Examples from California are provided on how this strategy has provided better results.

- **Adrià Rubio Martín** presents the Spanish case study (Júcar River Basin).

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Guido Schmidt adds that UPV uses its tools for supporting the decision-making in the River Basin Authorities (AQUATOOL). This should give the project some leverage on the stakeholders, albeit influencing policies will be challenging.

- **Cinzia Alessandrini** Presents the Reno River Basin..

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Jaroslav Mysiak adds that Emilia Romagna is one of the most innovative regions in Italy, which should act in favor of mainstreaming transformational adaptation policies. The drought of 2022 has made decision-makers aware of water scarcity challenges and this may favor political changes and the adoption of TAP.

Michael Hanemann adds that in California future scenarios (including streamflow) are forecasted using a probabilistic process. A brief exchange with other participants follows on whether the use of a probabilistic or non-probabilistic approach for forecasting would be adequate. It is agreed both options can be explored.

- **Marinos Kritsotakis** presents the Tympaki River Basin.

The ppt file and recording of the presentation are available in the Virtual Forum

- **Robert Blasko** presents the Slovakian case study, the Nitra River Basin.

The ppt file and recording of the presentation are available in the Virtual Forum

- **Tania Santos** presents the international Caplina-Mauri-Desaguadero system between Peru, Bolivia, and Chile.

The ppt file and recording of the presentation are available in the Virtual Forum

- **Hadi Jaafar** presents the Orontes River Basin, which is shared among Syria, Lebanon, and Turkey.

The ppt file and recording of the presentation are available in the Virtual Forum

- **Dinesh Kumar** presents the Indian case study, the Mahanadi River Basin.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

David Purkey asks what access we actually have to water managers in the living labs, provided that one of the main pillars of the project is to actively engage them in co-creation. Several participants discuss the degree of access to stakeholders in their living labs. In some cases, the decision-makers rely on information provided by partners of the consortium, as is the case of ARP AE (in the Reno River Basin living lab). Some key stakeholders are engaged as partners, the case of KRI in the Tympaki lab. In other cases, key stakeholders must be contacted and engaged. The Coordinator highlights this is indeed the objective of WP1-2, to which a significant chunk of budget has been allotted.

Lunch

Pillar 1: Knowledge networks

Jaroslav Mysiak explains the methods and processes to reach a successful stakeholder engagement. Dr. Mysiak highlights the relevance of combining the knowledge of different partners within each lab, but also across labs to build a “network of networks”, through research collaborations but also, where possible, through exchanges across stakeholders and in science-policy platforms such as the TRANSCEND international workshops. Dr. Mysiak discusses on the role of the 4 local workshops and the 4 international workshops to create synergistic knowledge and outcomes that generate value added. Contingency planning regarding stakeholder engagement is also discussed.

Comments:

C. Dionisio Perez Blanco adds that is critical to know which stakeholders we want to contact, and there are tasks in WP1 that target precisely this during the first months of the project.

David Purkey comments that there are two transnational basins and it will be really challenging to manage this engagement with the different stakeholders/decision-makers of the different countries.

Michael Hanemann comments that it would be a good idea to take a look at how the issues have been carried out in the past and how they are currently implemented, and design engagement strategies consistent with these actions to more successfully engage stakeholders.

Jaroslav Mysiak also highlights the need to focus our work in labs on the needs of these labs and building on the expertise of these labs: each case study has different demands and needs and the response should accordingly change from one region to another. For example, some labs may need more limited efforts in terms of engagement because they have been conducting collective work and decision-making for a long time, but modeling of some key aspects of the basin may be limited; while other labs may experience the opposite situation.

David Purkey asks if there are examples of European labs which have been a success in stakeholder engagement towards transformational adaptation policies, and whether these policies have improved, using a specific framework upon which we can build. To this Jaroslav Mysiak replies that the key aspect is to find a “hook” that attracts the stakeholders and engages them in a collective effort. One option is to rely on the Mission Adaptation funds, which are more easily accessible than other EU funds.

Guido Schmidt highlights the relevance of monitoring the whole process of this transformative and adaptative project to ensure we can measure impact.

-Javier Sierra Pierna presents serious games briefly. In these games, one or more challenges are shown to the attendees and then they are requested to find a solution, either as groups or as individuals, and enable scientists to understand how different actors deal with these challenges.

Coffee break

Practical arrangements of working together (I): Coordination

C. Dionisio Pérez Blanco shows examples of financial statement, risk and dissemination excel spreadsheets, and explains how to fill them in for ensuring a successful and periodic monitoring of the activities of all partners.

C. Dionisio Perez Blanco also presents the MB and SC members and the calendar proposed for these meetings, and introduces the role of the EAB and calls for nominations. An excel spreadsheet is shared among partners for them to make endorsements.

Day 2

Starting at: 9:10

Pillar 2: Actionable modeling suite

-**C. Dionisio Pérez Blanco** welcomes all the attendees and briefly introduces the agenda of the day.

- **Giuliano Di Baldassarre** presents the use of models to simulate the co-evolution of coupled human-water systems for actionable science. Bidirectional feedbacks are illustrated with the modeling framework used by Uppsala University.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Hadi Jaafar asks how models account for the impacts on society, for instance, in the use of irrigation water. To this Giuliano replies that each model is adapted to the case study, including the socioeconomic conditions that need to be simulated and modeled.

Dinesh Kumar comments on the challenge to assign probabilities to predictions and how some governments are not able to adapt to the future, and whether this modeling can help bridge this gap. To this Giuliano replies that the socio-hydrology modeling is developed based on some assumptions and serves to prove different plausible options and solutions but is not up to modelers to decide what to do in the final decision, it is just an illustration of the impacts of alternative policy patterns.

Michael Hanemann comments that models and society are in constant development and improvement, and that the models and technics we use right now may not be the best ones. He highlights this should be debated during the project.

David Purkey asks about Giuliano's opinion on the information models can provide to drive global adaptation efforts to climate change and on the likelihood of future scenarios. Giuliano replies that models presented focus on the near future (short/medium run) but it could be adapted to longer term simulations and indicators.

- **Francesco Sapino** presents the micro-macro modeling developed by USAL and CMCC. This modeling framework bidirectionally connects hydrological, micro-economic and macro-economic models to assess the socioeconomic and environmental impacts of climatic and policy shocks.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Jaroslav Mysiak asks if the framework could simulate more than one year of farmers' decisions. To this Francesco replies that indeed it can, and also at smaller timesteps within the same year.

Michael Hanemann comments that the decision of farmers, in this case, is not actually based on just one year, is a decision based on several years. He also mentions models should consider more constraints to mimic more accurately the boundedly rational decisions of farmers. Also comments on the sensitivity of the model and what changes should be considered to accurately reflect micro-macro feedback links.

Tim Foster comments that models are not actually accurate, but the basic notion of the presented framework and the basic idea of scientific modeling nowadays is not to offer an accurate forecast and solution for a specific year, but to explore the plausible impacts of alternative solutions under an uncertain future, i.e., a range of scenarios, models and solutions.

Giuliano asks about how this framework could be applied to different contexts and the level of detail that it could achieve. To this Francesco comments that data availability is a significant challenge that constrains the detail of the model.

David Purkey highlight the need to collaborate among living labs and build strong partnerships, including among the early career students hired in the project by each partner, to ensure all the expertise of the consortium is incorporated to each lab.

- **Sina Khatami** presents (online) soft coupling and protocols programming using the OpenMI standard (<https://publicwiki.deltares.nl/display/OPENMI/home>). This tool offers a framework capable of interconnecting different models which communicate with each other following an automatized modular approach.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

David Purkey and Maggie Kossida raise concerns about the use of the MI Standard as a prerequisite in the project, due to the complexity of the programming language, which may not be accessible for stakeholders once the project is over. Both argue in favor of a more flexible approach where other protocols and programming languages (such as R, or Python) can be used. Giuliano and Sina argue that this standard is but one option, which has its advantages and disadvantages. After a brief exchange among participants, it is agreed that, as per the proposal, the use of the MI Standard

is not mandatory – just an option. Since R is the language used for coupling by most partners, it is agreed that R will be the default for coupling – although the MI Standard can be adopted in some labs and/or for some stakeholder models if it is found to be more adequate.

Coffee break

Pillar 3: Monitoring and accounting toolbox

- **Jingshui Huang** presents the WE-ACT project, the “twin project” of TRANSCEND funded under the same call.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

David Purkey asks if the collaboration across projects is mandatory for all laboratories. To this C. Dionisio Perez Blanco replies that is not mandatory to collaborate with any specific project, but it is a requirement to build collaborations with Horizon Europe funded projects of relevance for TRANSCEND—and this seems to be the case of WE-ACT.

Dinesh Kumar asks if the water reallocation in the model is based just on economic aspects or also on the hydrological and social aspects. To this Jingshui Huang replies that also hydrological and social aspects are considered for the water reallocation to bring support to decision-makers.

Michael Hanemann suggests the possibility of bringing Jingshui Huang to General Assemblies and discussing together the cooperation between both projects. Jingshui Huang and C. Dionisio Pérez Blanco agree to have coordination meetings with at least a yearly basis to discuss potential synergies among the two projects.

- **Tim Foster** presents the monitoring and accounting pillar of TRANSCEND.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Michael Hanemann indicates that farmers do not want to be measured, which explains some of the monitoring gaps presented by Tim Foster, but are a critical actor that need to be included in our work. This presents a non-trivial challenge.

A discussion on the accounting of return flows and their relevance emerges, which is interrupted by Tim Foster and the coordinator given the complexity of the topic for the limited time available. The relevance and importance of return flows is highlighted, nonetheless, and the need to model it explicitly.

Hadi Jaafar suggests that all of us should consider the last slide of Tim's presentation as a starting point for the white paper on monitoring. This involves revising what has been done previously in terms of monitoring, what has been successful (including feedback from stakeholders—both in labs and beyond), and building on these inputs, define guidance to what may succeed in the future.

- **Maggie Kossida** presents the monitoring indicators of water availability, water use, water-related impacts, and institutional performance proposed for the project's pillar 3.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Tim Foster comments that these indicators should be mainstreamed within the models to ensure consistency.

Tania Santos comments that these indicators are critical to accurately convey to stakeholders the effect of proposed TAP, and therefore should be carefully designed.

A discussion emerges on the use of SDG indicators and whether this is the best way to proceed. It is agreed that in terms of water use the WEI indicator may work and should be adopted (either under the name of WEI or other indicator of water exploitation intensity), but other socioeconomic indicators may be incorporated (employment, GDP, income, etc.).

David Purkey highlights that the indicators are not static as it is shown in the presentation, and thus it is important to dynamically co-develop these indicators together with the stakeholders.

Maggie Kossida adds that a critical point is to establish the different thresholds that help us monitor good or poor performance in labs.

- **Jaroslav Mysiak** presents the climate and socioeconomic scenarios.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Michael Hanemann comments that a key difficulty is that of developing a scenario that people take seriously. Jaroslav Mysiak comments that the scenarios should show the ambition of the labs and the project. He also highlights that sometimes these scenarios are part of the solution, since they reveal futures stakeholders had not accounted, and may spur themselves more robust adaptation strategies.

Giuliano Di Baldassarre suggests the idea of using already realized scenarios (even if somewhere else), so as to more effectively engage stakeholders. He argues that this offers advantages as compared to showing stakeholders extreme events that have never happened.

Hadi Jaafar asks what variables are considered for the design of scenarios, whether it is temperature, precipitation, or others. To this Jaroslav Mysiak replies that this depends on the pilots, who will design the different scenarios for each case study using a co-creation approach.

Lunch

Pathways to impact.

-Guido Schmidt presents the role of outcomes and impacts of the project, in the context of Horizon Europe. Guido Schmidt highlights that a key aspect of TRANSCEND was a solid impact pathway, which delivers KPIs at the end of the project, but also outcomes (7y) and impacts (10y), alongside a detailed roadmap explaining how to reach them.

The ppt file and recording of the presentation are available in the Virtual Forum

Comments:

Michael Hanemann asks about the availability of national or regional climate forecast scenarios, and the level of detail, because the US has developed regionally downscaled climate scenarios. California has several reports on this topic. Jaroslav Mysiak and others highlight that the EU has similar information readily available, with significant detail, which offers a source of information that indeed TRANSCEND is set to exploit.

Dinesh Kumar asks how to address the ambitious target of outcome O-4 (table- slide outcomes (5-6 y)).

C. Dionisio Perez Blanco comments that we have to pay attention to the timeline of the outcomes and impacts, since they are expected to realize after the project is over, not during the project's lifetime.

- **C. Dionisio Pérez Blanco** presents the pathways to impact from project outputs to outcomes (7y) to impacts (10y), as well as the pathways to achieve them. This session finishes without questions and is immediately followed by the practical arrangements session.

The ppt file and recording of the presentation are available in the Virtual Forum

Practical arrangements of working together (III): Impact

-**C. Dionisio Pérez Blanco** presents the deliverables and milestones for the project; the tools for Communication, Dissemination, and Impact, including:

-Stakeholder events: 28+ workshops, 2 international workshops, 34+ training events, 30 policy briefs ahead of workshops

-Academic events: 2 summer schools, 12+ webinars, 4+ papers, 45+ outreach events

-General public: 14+ local press releases, 14+ citizen science events, 4 webstivals, 14 local citizen panel meetings (1 international meeting)

-28+ newsletters, 3+ brochures, 3 video presentations

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C. Dionisio Pérez-Blanco suggests to have a first draft of the deliverable at least 2 weeks in advance of the deadline, to have time for the revision. He also reminds the participants of the date of the next SC by the end of February. Finally, C. Dionisio Pérez-Blanco reminds the assistants of the need to comment of the first project deliverable, the Inception Report and Roadmap, which will be sent to all PIs by 22 February.

Comments:

Guido Schmidt suggests sending out the first draft of each deliverable for review at least 6 weeks before the deadline, instead of just 2, and sending back the review to authors at least 4 months ahead of the deadline. This is agreed by all, and the proposal is accepted.

Closing and farewell

A group photo is taken and the meeting closes at 16:35h.

Materials are available in the project website (<https://transcend.usal.es/>) at the following address: Events > Past Events > Kick-off meeting