Bridge General Assembly 12 & 13 March 2019

Conclusions of the General Assembly

General

- 35 Bridge Horizon2020 projects, meaning all projects that are Bridge members participants[1] joined the Bridge General Assembly. Furthermore, projects on cyber-security that are about to start, as well as some 'lower-TRL' projects and a Member States' coordination structure for ERA-Nets on smart grids, also participated, representing 8 projects;
- Aim of the Bridge cooperation is to increase the impact of projects, by closer feedback loop with policy issues and by sharing experiences, best-practices as the basis for quality standards;
- The General Assembly appreciated the presentations in the plenary session, and thanked the Working Group chairs for the presentations of their reports;
- The Commission will explore ways to for closer cooperation between Bridge and its projects with other important structures/initiatives to foster cooperation among R&I on smart grids, namely the Smart Energy Systems ERA-Net[2], ETIP SNET[3], and the Pantera project[4];
- As the consultant managing the cooperation under Bridge, Dowel will follow-up with the projects and persons involved on the work as agreed in these conclusions;
- Topics for the Bridge Group to discuss and work on, will be determined based on EU policy priorities and based on project participants' needs, for the benefit of increasing the impact and quality of the projects;
- All work and tasks to be done by WGs (and TFs) will be based on discussions at and validated by the Bridge General Assembly;
- If there is a need for new types of work or new tasks throughout the year that can't wait for validation at the General Assembly, the Commission will organise a validation with the projects participating in Bridge;
- Horizon2020-funded and nationally-funded projects that are not members of Bridge may be invited on an ad-hoc basis to Bridge meetings if the project(s) in question are considered to make an important contribution to the discussion;
- All participants will be asked for their feedback on the Bridge General Assembly through an evaluation survey. The survey will include a call for ideas for topics for future work and next Bridge meetings;
- Possible topics raised in the meeting were:
  - Islands
  - Sector coupling & integration
  - Consumer interface and experience
  - TSO-focussed market integration issues;

Organisation of follow-up work

- The Working Groups on Regulation and Data Management are expected to deliver reports on:
  - TSO-DSO cooperation (WG Regulation and WG Data Management);
  - Cybersecurity (WG Data Management);

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[1] See list of participants in the Annex
[2] https://www.eranet-smartenergysystems.eu/
[3] https://www.etip-snet.eu/
[4] https://pantera-platform.eu/

See the sections below per topic for further details on the tasks for the WGs;

- Three Task Forces will be set up to organise follow-up work that came out of the various sessions:
    - Energy Communities: Leen Peeters & Ludwig Karg
    - Replicability: Rafael Cossent and Lola Alacreu Garcia
    - Joint Communication: Thomas Mikkelsen

See the sections below per topic for further details on the tasks for the TFs;

- The Task Forces are open to all projects involved in Bridge, and **volunteers who are interested in contributing to the work in TFs are asked to register with Dowel by 26 April** – to be validated by the European Commission;
- The project coordinators of all Bridge-projects are asked to communicate this request to the (relevant) participants in their projects;
- Meetings of WGs and/or TFs can and should happen as much as needed to deliver on the tasks agreed in these conclusions. The European Commission can help in organising/hosting if necessary;
- The European Commission will consider how to reflect the new roles and Task Forces in the Bridge Terms of Reference;
- **Bridge WGs and TFs will meet in half a year to discuss progress. The Commission will, in cooperation with the WG and TF chairs and Dowel, invite for these meetings;**
- The current working groups will be maintained, but the way of working will be flexible: not all working groups will necessarily have the same type or amount of work at or in preparation of the Bridge General Assembly meetings, and on some topics multiple working groups will cooperate: Working groups follow the topics and priorities to discuss;
- All Working Groups can contribute to tasks of other WGs or of the TFs, based on the WGs own assessment of the relevance of these tasks;
- In the next half a year, WGs will either have specific tasks or to contribute to TF's, in particular:
    - Business Models WG is expected to contribute most to Replicability
    - Consumer Engagement WG is expected to contribute most to Joint Communication
- The following WGs will have new chairs:
    - Data management: Olivier Genest
    - Regulatory: based on the response the call for volunteers organised by Dowel a new chair will be appointed

Session 1 - Innovation in network management: data, services, TSO-DSO cooperation
Smart grid market model classification

- The Regulations WG is asked to agree on a common methodology to describe projects, that will take USEF as the basis but that will complement this with market model dimensions and/or interactions (e.g. peer2peer trading) that are not included in USEF;
- **The Regulations WG is asked to present a proposal for a common market model classification methodology at the next Bridge meeting in half a year (see above);**
- Based on an endorsed methodology, each Bridge project that sets up a platform or market for grid services will be asked to describe its market model according to the common classification method.

Report on key issues for TSO-DSO cooperation

- All projects are asked to answer the questions that were distributed for this session in advance of the meeting;
- In addition 3 more questions will be added:
  - In your project, do you consider/address ways to prevent/remedy strategic bidding and market abuse in congestion management?
  - For project dealing with e-mobility: do you use dynamic tariffs for smart charging, and if so, what is the business case for such services? [this question came out of the session on e-mobility]
  - What standards and data models do you use to ensure interoperability of communication and data exchange at the level of appliances and at the level of companies/platforms/markets (for example IEC CIM and Data exchange for meter reading DLMS/COSEM)? What further need for standards do you see?
- **The Regulation WG is asked to organise the answers to questions related to regulatory issues and produce a report on this basis by 1 July;**
- **Taking into account the answers to the regulatory questions, the Data Management WG is asked to answers to questions related to data exchange issues, and produce a report on this basis by 1 October;**
- **The report(s) that gather the answers to both sets of questions will be presented at the next Bridge meeting in half a year (see above);**
- The list of questions, as well as the WG that should organise the reporting on them, is added as an Annex to these conclusions.

Session 2 - Energy Communities & Self-consumption

- The discussion on energy communities and self-consumption was very useful as input for the study that the Commission has ordered under the Asset Contract;
- In order to support Member States and the European Commission in further work on energy communities, in particular in relation to the implementation of the Clean Energy Package, it is agreed that it is useful to gather from the relevant projects:
  - Experiences with the setting up of energy communities;
  - Issues identified that require legal/regulatory/policy attention;
- A Task Force will be set up to deliver the follow-up work (see above) , namely:
- **The questionnaire circulated by STORY will be enriched based on the discussion in the session, and will be sent to the European Commission for validation by 1 June;**
- **The Commission will validate and/or send feedback by 1 July;**
- **All projects that address Energy Communities will be asked to reply to the questions by 1 September;**
- **The Task Force will consolidate the replies into a draft report to be presented at the next Bridge meeting in half a year (see above).**

Session 3 & 6 - Replicability of projects: best practice as a basis for a common methodology? / Replicability of projects: can projects use each other's solutions? How to scale up?

Common guidelines for a scalability and replicability analysis

- There is a general agreement that it is useful for projects to use common guidelines to ensure a methodological approach to tasks that all or many projects in Bridge need to do. The discussion focussed on a key task for many projects, namely the scalability and replicability analysis (SRA);
- Therefore, a task force will be set up to develop common guidelines on SRA, taking into account the following:
  - The aim is to agree on guidelines that Bridge projects can follow to ensure they do the SRA of their project in a high-quality manner, i.e. to agree on quality standards that a good scalability and replicability analysis needs to meet;
  - Such guidelines need to distinct between different aspects of the SRA, that may depend i.a. on the Technology Readiness Level(s) addressed in the project, in particular the technology aspects and the market aspects of the SRA;
  - The guidelines need to define the relevant data needed (e.g. data on grid topology or market rules) to make a good SRA;
- A Task Force will be set up to deliver the follow-up work (see above), namely:
  - **Deliver a draft methodology in 6 months, for discussion at the next Bridge meeting;**
- At the next Bridge meeting, projects will be asked to volunteer to implement/apply the guidelines on SRA;

Toolbox/repository of experiences and best practices:

- There is an interest among Bridge projects to ensure that experiences and best-practices from past projects can be shared better, by creating a written track of these through a toolbox of tips and/or a repository of past experiences;
- The scope of such a toolbox or repository is however difficult to define, but there are experiences with such work, in particular in the ERA-Net on Smart Grids (lecs.eu) but these also show that this is costly;
- **The Task Force that will be set up to develop a common guidelines for SRA, is asked to develop ideas on how to define the scope and implementation of such a toolbox/repository, and present its ideas in a (short) report to be presented when ready (possibly at the next Bridge meeting in 6 months);**

Session 5 - Cybersecurity & Resilience

- All projects agree that cybersecurity is key to ensure smart grid solutions are resilient, and that this is a relevant issue in all projects. The practical experiences from current projects on how to address cybersecurity can help the European Commission and Member States to identify issues that need to be addressed in the EU's cybersecurity policy;
- The Data Management WG will develop a questionnaire that will ask projects how they deal with cybersecurity in current projects, in particular:
  - how they address or take into account cybersecurity of components/software used and the view of projects on the best way to ensure these are cyber-secure (e.g. through certification of products, systems and/or processes);

- o how the European Commission Recommendation on cybersecurity in the energy sector in relation to real-time requirements, cascading effects and the combination of legacy systems with new technologies, published on 3 April 2019 (https://ec.europa.eu/energy/en/topics/energy-security/critical-infrastructure-and-cybersecurity), can be applied in projects and what the key issues are;
- **The draft questionnaire will be sent to the European Commission for validation by 1 June;**
- **The Commission will validate and/or send feedback by 1 July;**
- **All projects will be asked to reply to the questions by 1 September;**
- **The WG will consolidate the replies into a draft report to be presented at the next Bridge meeting in half a year (see above);**

Session 7 - Organising joint communication and events among projects

- Dowel will, based on input for the various projects prepare a calendar of events to be included in the Bridge website, so that projects can easily identify possibilities for cooperation in communication and dissemination with other Bridge projects;
- Projects may be invited to present (individually or for a group of projects) at future meetings related to the TEN-E Guidelines and its Projects of Common Interest, as well as in the framework of the PANTERA project that aims to promote Smart Grid R&I in countries that are underrepresented in current Horizon2020 Smart Grid projects;
- A Task Force on Joint Communication and Dissemination will be set up, to disseminate results of the Working Groups, results of the projects, contribute to preparation of events like EUW. **In the next half a year, it will focus on the following**:
- discuss further the possibility to organise joint events. As outcome of the session, the following joint workshops/events are proposed:
  - o At the European Sustainable Energy Week, Bridge will present a session on "**H2020 bridging the way to the future energy systems**" . The potential topics could be: "Why is flexibility needed", "Platforms to enable energy efficiency", "Legal framework", "Energy storage solutions", "Building energy communities"
  - o Thematic BRIDGE conference "**Energy Storage to Enable Flexibility***" in autumn 2019 to be organised back to back to other big energy event in Brussels or other regions (using ETIP SNET and H2020 project PANTERA);
- Under the guidance of DG Energy, DG CNECT and INEA, engage in a discussion with the European Utility Week Conference to elaborate a cooperation between interested projects of Bridge and these expositions for a joint stand/zone in 2019.
  The EUW is seen as a political event giving an opportunity to present technical solutions that are becoming available in the context of political trends. Representatives of the BRIDGE projects group should be involved early in the planning and shaping of the joint participation to make participation more attractive and having bigger impact. The costs of participation are considered high. Collective subscription based on thematic subjects leading to lower costs of participation should be explored with the organisers;
- Under the guidance of DG Energy and INEA, engage in a discussion with the Smarter-E Conference to elaborate a cooperation between interested projects of Bridge and these expositions for a joint stand/zone in the edition in 2020. ENER/INEA will get in contact with the Smarter-E organisers in September/October 2019. Smarter-E is mainly relevant for the ending projects willing to present mature products ready for the market. (For the 2019

edition, projects will consider individual participation and will get in contact with the organisers directly);

- Explore further the scope of Bridge projects for more (coordinated) international cooperation and communication beyond the EU;

Other questions on TSO-DSO Cooperation

The Clean Energy package puts a lot of emphasis on a more interactive way of managing the electricity network. Data exchange, new energy services, and the cooperation between TSOs and DSOs is key in this respect.

The questions below were partially discussed at the Bridge General Assembly, and it was agreed that all projects will answer them in writing in more detail, with the aim to identify: what can the projects starting in 2019 learn from the ongoing projects?

For the Regulations Working Group

1) What are the types of (grid) services you develop in your project? Are they suitable under the new framework of the Clean Energy package? Under which conditions? What are the challenges for their replicability and implementation?
2) What is the value (now and in the future) of such services for the network operator, the supplier/aggregator, the consumer?
3) How does a TSO/DSO communicate with the market/grid users its needs for grid services? Who fixes the merit order of such grid services and how? And the price?
4) (How) do you include location-specific information in your communication with the market/grid users?
5) How do actions by the TSO affect the DSO or vice versa in your project? How do you solve conflicts?
6) What are the different ways to incentivise predictability and avoid congestion in the grid?
7) How to deal with the impact on the balancing position of suppliers/aggregators that is caused by the use of flexibility services for grid purposes?
8) Can you use existing markets for the services you developed? or do you need to develop new markets? What do you think are the challenges to develop such new markets?
9) would you propose novel planning models for networks to meet future demands?
10) In your project, do you consider/address ways to prevent/remedy strategic bidding and market abuse in congestion management?
11) For project dealing with e-mobility: do you use dynamic tariffs for smart charging, and if so, what is the business case for such services?

For the Data Management Working Group

12) What type of data, and for what purpose, do you share among different parties (e.g. TSO, DSO, supplier, aggregator)? In your opinion, how you would ensure transparency and non-discrimination to access to these data?
13) How do you ensure interoperability between platforms, both in terms of interoperability with other DSOs/TSOs, and in terms of interoperability with other markets (e.g. mobility, health or home-security services)

14) If applicable, what standards and data models do you use to ensure interoperability of communication and data exchange at the level of appliances and at the level of companies/platforms/markets (for example SAREF, IEC CIM, DLMS/COSEM)?

15) What further need for standards do you see?