

Description of the process for stakeholder involvement and consultation in view of delivering the integrated Implementation Plan 2016-2018

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*"Support to R&D strategy in the area of SET Plan activities in
smart grids and energy storage"*

Deliverable D1.1

by

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1. Executive summary

The purpose of this deliverable is to describe the consultation process which will be implemented to deliver the integrated Implementation Plan (IP) 2016-2018. This specific consultation will lean as the main sources of information on the existing [EEGI roadmap 2013-2022](#) and related [Implementation Plan \(IP\) 2015-2017](#), as well as the [EASE/EERA Energy Storage Technology Development Roadmap towards 2030](#).

Based on a critical analysis of consultations implemented by the EEGI and by EASE in previous years, a consultation process has been elaborated in order to consult relevant stakeholders in an efficient, transparent and non-discriminatory manner:

- Categories of stakeholders potentially involved in or impacted by R&D activities in the area of smart grids and energy storage have been identified by the consortium. These categories are the following:
 - Electricity Distribution System Operators (DSOs);
 - Electricity transmission, distribution, storage and ICT technology providers and project developers;
 - Electricity generators and generation technology providers;
 - Electricity market players (retailers, aggregators, traders, power exchanges, industrial and residential consumers);
 - Energy regulators and Member States;
 - Gas infrastructure operators;
 - Heat network operators;
 - Academia, energy research centres, think tanks;
 - Public-Private Partnership (PPP) initiatives, European Technology Platforms (ETPs);
 - Non-Governmental Organisations;
 - Funding organisations.
- For each of these categories, associations or organisations representing stakeholders of EU28 have been identified. These “Primary targets” will be contacted directly by the consortium (“push” mode).
- Other stakeholders (national associations, individual companies, individual citizens) will be informed and given the possibility to provide their views through the online publication of consultation documents on the website of the project. The consultation will also be advertised on the websites of all consortium partners. The consultation will be announced at the Innogrid2020+ event, held on 31 March and 1st April 2015. This will allow informing hundreds of targeted professionals at once.

In order to facilitate the processing of responses, focused questions will be raised in an online questionnaire. Respondents will also have the possibility to submit free comments.

Dissenting views will be addressed in the following way:

- Provided the topic on which dissenting views are expressed belongs to one single cluster of the EEGI roadmap, the views of each respondent will be considered with a predefined weight, depending on the involvement of this respondent in the activities related to the cluster in question. The representativeness of the respondents (for instance, association representing X members versus one single company) will also be taken into account.
- In case of dissenting views between consulted stakeholders and the consortium, the consortium will provide a transparent argumentation to their choice.

A document analysing the consultation responses will be built by the consortium and published on the project's website. It will include, for each question submitted to consultation:

- the number of organisations having responded to that question, and their names;
- a synthesis of the different responses;
- how those responses have been addressed;
- conclusions of the consortium with the accompanying rationale.

The final IP 2016-2018, integrating the feed-back gathered from the public consultation, is foreseen to be published in May 2015.

The information and views set out in this document are those of the author and do not necessarily reflect the official opinion of the European Commission, herein referred to as the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

2. Purpose and structure of this deliverable

2.1 Purpose

The purpose of this deliverable is to describe the consultation process which will be implemented to deliver the integrated Implementation Plan (IP) 2016-2018.

This specific consultation will lean on, as the main sources of information, the existing EEGI roadmap 2013-2022 and related IP 2015-2017, as well as the EASE/EERA Energy Storage Technology Development Roadmap towards 2030. It will also announce the upcoming consultations for the 2018-2025 integrated roadmap and the 2017-2019 integrated implementation plan in line with this new roadmap.

This deliverable will be presented by the consortium to the EC before the end of January 2015, and at the next EEGI team meeting, yet to be scheduled.

2.2 Structure

The deliverable is structured along four main parts:

- **Parts 3 and 4 - Critical analysis of the previous consultation processes implemented by the EEGI and by EASE in previous years:** How were previous consultations (upon similar topics) carried out? What needs to be improved in the involved consultation processes?
- **Part 5 - Description of the proposed consultation process:** What is submitted for consultation? Who is consulted? When will the consultation be launched? How will the consultation be carried out to maximise the number and quality of responses?
- **Part 6 - Processing of the consultation responses:** How will dissent be managed? How will stakeholders' inputs be prioritised? How will stakeholders' feedback be integrated into the resulting integrated IP 2016-2018?

3. Critical analysis of the previous consultation processes implemented at EEGI level

The previous consultation processes which were implemented to build the EEGI roadmap and related implementation plans have followed several steps of increasing complexity.

3.1 Period May 2008-June 2010

During years 2008 and 2009, the draft TSO and DSO roadmaps were presented at workshops organised at the Florence School of Regulation on the following dates in Florence and where Member State representatives involved in the SET Plan were invited:

- 15 May 2009;
- 14 October 2009: issues raised in October 2009 were answered by CEER.

In parallel, direct discussions involved the other industrial initiatives attached to the SET Plan which had direct connections:

- PV initiative;
- Wind initiative;
- Solar thermal initiative.

A specific cooperation document with these players had been edited on 17 July 2009 and validated by the parties. The resulting adjustments were introduced in the complete original version of the joint R&D roadmap (dated 31 July 2009).

The final version of the roadmap and the first two-year implementation plan (2011-2012) were approved by the Member States upon presentation of the European Commission on 3 June 2010 in Madrid.

3.2 The GRID+ coordination and support action (October 2011-September 2014)

A new version of the R&D roadmap was approved by the EEGI in January 2013. This roadmap and its first implementation plan have been debated according to three sets of consultation processes:

- Public consultations using the websites of ENTSO-E, EDSO and the GRID+ project: no specific consultation targets were chosen, and readers were invited to propose improvements directly in the draft documents;
- Dissent management meetings with invited players followed the public consultations to address the raised issues;
- Gap analysis meetings involving mainly network operators and technology manufacturers.

Overall, only the gap analysis has provided further insights into the R&D topic of European value. T&D Europe and EUROPACABLE, to a lesser extent, have helped clarifying the knowledge gaps at European level which must be bridged in order to meet the high level objectives of the R and D roadmap.

3.3 Lessons learnt from the past public consultations

The past public consultations did not allow the EEGI arousing a significant level of feedbacks from stakeholders. For instance, only a few Member States were represented by respondents, and mostly manufacturers fed inputs into the proposed R&D activities. These mixed results can be explained by several factors:

- Stakeholders from many Member States have not felt compelled to respond to the public consultations, either because they had nothing to add on the European added value of the proposed R&D topics or they were not concerned by R&D on electricity networks at the time of consultation: there is therefore an urgent need to question the Member State public authorities about the coming implementation plan, this in order to show how their contribution can help avoiding possible double funding of some topics, or possibly agree on adding some extra workforce to contribute to the knowledge production of the new implementation plan.
- The selection criteria of the proposed R&D topics have not been clearly explained: they mix indicators of importance (via the KPIs that show which contribution they are supposed to bring) at European level, and urgency (or timeliness) due to problems which are faced by network operators in the real life, whereas they were not thought of as so urgent when the roadmap was designed. A presentation of the methodology and selection criteria will certainly raise more questions on the ranking given by the network operators, thus opening debates about what to keep and what to be left over.
- Several groups of key stakeholders of the electricity value chain have not been addressed directly during past public consultations: let us mention, for instance, electricity consumers.
- ENTSO-E contribution to the EEGI roadmap has a legal dimension since it must comply with Regulations (EC) No 713/2009¹ and No 714/2009². This roadmap and the related implementation plans are reviewed every year by the Agency for Cooperation of the Energy Regulators (ACER). Two opinions have been published so far (28 May 2013 and 16 May 2014) concerning the implementation plans 2014-2016 and 2015-2017 of the new roadmap version 2014-2022. Several issues have been raised by ACER:
 - How consensus on R&D topics is reached?
 - How to publish the outcomes of the public consultations?
 - How to cope with possible disagreements between the R&D topics proposed by ENTSO-E (according to importance and urgency) and a different vision of relevant topics or priorities assessed by ACER?

3.4 Impacts on the forthcoming public consultations

Based on the above lessons learnt from past consultations, the present report proposes to address public consultations using an approach that aims at reinforcing the expected impacts of such a process:

¹ Article 6(3)(b).

² Articles 8(3)(a) and 9(2).



- A majority of EU28 Member States involvement at public authority level is desirable in order to confirm the European importance and the timeliness of the proposed topics. Any dissent between the public authority stakeholders should then be argued: they may indeed mean that the European Added Value as perceived by the network operators is not as high as expected when analysed by public authorities, or that the proposed research topics can be positioned at a later stage since perceived as less urgent by public authorities. Conversely, a wide agreement will reveal the possible contributions of operators in more Member States to a new R&D topic, which in turn increases the critical size of the consortia who will produce R&D proposals to address the topic.
- Involving all the stakeholders of the electricity value chain allows validating the topic importance and timeliness, with, again, improvement suggestions by players that can reinforce the size of the future R&D consortia. This is of special relevance when, for the first time at SET Plan, an integrated R&D roadmap is proposed by network operators and energy storage researchers, manufacturers, project developers and operators.
- Involving other energy players at a systemic level should allow accounting for interactions with other parts of the energy systems (like gas and heat networks, flexible energy end-users): looking at interfaces between several energy systems may have an impact on regulations or innovative business models to further optimise energy production and use in EU28.

4. Critical analysis of the previous consultation processes implemented by EASE

4.1 Preparation of the EASE roadmap

Prompted by a dialogue with the European Commission, DG R&I, EASE late December 2012 took the initiative to develop recommendations for a European Energy Storage Technology Development Roadmap towards 2030. The initiative and work was private and independent and was financed by the contributing organisations themselves.

The work took place over the first two calendar months of 2013 and resulted in publishing of the "Joint EASE/EERA recommendations for a European Energy Storage Technology Development Roadmap towards 2030" by March 2013.

EASE is an independent association significantly dominated by European private industry. It was therefore clear that European research communities would have important inputs to a storage technology roadmap, but rather than consulting European universities and research institutions, it was decided to include the research community directly in the work. Therefore EERA Joint Programme on Energy Storage, was invited to join the work. EERA, the European Energy Research Alliance, is an alliance of European public research centres and universities and is one of the cornerstones of the European Union's Strategic Energy Technology Plan (SET-Plan). EERA JP Energy Storage willingly accepted the invitation and thus the roadmap recommendations were prepared in close collaboration between EASE and EERA JP ES.

4.2 The EASE/EERA joint external stakeholder consultation process

Following principles of transparency and openness a group of relevant stakeholders was invited to contribute to the joint EASE/EERA Roadmap. The stakeholders were identified together with the European Commission.

The stakeholders were offered a spectrum of possibilities to provide feedback along the process.

In February 2013 EASE and EERA organised a stakeholders' workshop to introduce the first draft of the roadmap, which had been distributed prior to the meeting. During the meeting the opinions and comments of the participants were gathered

- By sending written comments on the first draft;
- By sending written comments on the second draft.

Very many valuable comments and suggestions for additions were received during the external stakeholder consultation process and important discussions were opened as a result.

A list of invited stakeholders is shown below:

Association of European Automotive and Industrial Battery Manufacturers (EUROBAT); European Association of Gas and Steam Turbine Manufacturers (EUTurbines); Energy Efficient Buildings Association (E2BA); Energy Efficient Building European Initiative (E2B EI); European Electricity Grid Initiative (EEGI); European Green Vehicle Initiative (PPP EGVI); European Hydrogen Association (EHA); Energy Materials Industrial Research Initiative (EMIRI); European Network of Transmission System Operators for Electricity (ENTSO-E); European Photovoltaic Industry Association (EPIA); European Photovoltaic Technology Platform (EU PV TP); European Solar Thermal Electricity Association (ESTELA); European Technology Platform for Electricity Networks of the Future (SmartGrids ETP); European Technology Platform on Renewable Heating & Cooling (ETP RHC); Fuel Cells and Hydrogen Joint Undertaking (FCH JU); Hydro Equipment Association (HEA); International Energy Agency (IEA); Union of the Electricity Industry (EURELECTRIC).

4.3 Lessons learnt from the past consultation

The most substantial lessons learnt are summarised as follows:

- Stakeholder selection is vital. Inviting associations rather than their individual members yields a much more representative and much more directly applicable result.
- Consultations are optimally handled based on written, traceable communication. This procedure leaves least room for time-consuming misunderstandings and erroneous interpretations.
- Sufficient time must be reserved to reach consent in the form of a result, which can be accepted and supported by the invited stakeholders.
- Reaching consent about solutions to technical challenges is sometimes difficult.
- The consultation process was very fruitful for the final outcome of the work. The process gave appreciated new problem aspects and new arguments and led to refined results.
- Setting up and sticking to strict requirements for organising the consultation process is crucial for minimising efforts and maximising added value to the result.
- Important how questions are asked or comments invited.
- The importance of presenting an appropriate basis for the consultation process can hardly be overestimated. Explaining underlying issues like methodology, criteria, aims, restrictions and time perspective is essential.

The learnt lessons described above have been accounted for in the planned consultation processes of the present activity.

5. Description of the consultation process

5.1 Documents and questions submitted to consultation

The subject of the consultation will be the **initial integrated IP 2016-2018** (D2.1, due in Month 3), which should be in line with the existing EEGI roadmap 2013-2022 extended to the integration of storage technologies into the grid.

The selection criteria applied to prioritise the R&D topics in the Implementation Plan (task 1.2) will be explained in a transparent manner.

The purpose of the consultation is to seek the validation of all the stakeholders of the electricity value chain about the topics identified by the consortium as priorities in terms of R&D needs.

Focused questions will be submitted to consultation in order to facilitate the processing of responses; however, respondents will have the possibility to submit free comments.

Such questions could be formulated as follows, for each topic included in the initial IP:

- Do you agree that this topic is important and/or urgent enough to be addressed during the period 2016-2018?
 - If no, please explain why you consider this topic should not be a priority in order to improve the sustainability, competitiveness and security of supply in the Internal Electricity Market.
 - If yes,
 - Do you agree with the proposed budget to address this topic? If no, please propose another range for the budget and justify your proposal.
 - Do you agree with the proposed duration for projects addressing this topic? If no, please propose another duration and justify your proposal.
 - ...
- More generally, do you consider that other topics are more important and urgent and should be included in the implementation plan 2016-2018? If yes, which topics? Please explain why.

Questions will be adapted to the content of the initial integrated IP 2016-2018 currently under elaboration by the consortium.

5.2 Stakeholders targeted by the consultation

Categorisation of relevant stakeholders

The 3 associations involved in the project (ENTSO-E, EDSO and EASE) will consult their members when elaborating the initial IP 2016-2018 (D2.1). The internal consultations carried out by ENTSO-E, EDSO and EASE are out of the scope of this deliverable: it is assumed that the documents for public consultation have got the approval of the three associations prior to the start of the consultation of the other stakeholders.

Other stakeholders are potentially involved in R&D in the area of smart grids and energy storage, but are not members of the three associations participating in the project:

- Either active within the scope of these associations , but not members of these associations³;
- Out of the scope of these associations but potentially involved in R&D in the area of smart grids and energy storage (for instance the ERANETPLUS organisation).

These stakeholders will be consulted about the initial integrated IP 2016-2018 (D2.1) elaborated by the consortium. Organising this consultation is the key topic of this deliverable.

The consortium proposes to consult the categories of stakeholders listed in Table 1.

Table 1 – Categories of stakeholders to be targeted by the consultation

Categories of stakeholders	Short name
Electricity Distribution System Operators	DSOs
Electricity transmission, distribution, storage and ICT technology providers and project developers	Techno providers
Electricity generators and generation technology providers	Generators
Electricity market players (retailers, aggregators, traders, power exchanges, industrial and residential consumers)	Market players
Energy regulators and Member States	NRAs & MS
Local and regional authorities	Local authorities
Gas infrastructure operators	Gas Infra
Heat network operators	Heat Networks
Academia, energy research centres and networks, think tanks	Research
Public-Private Partnership (PPP) initiatives, European Technology Platforms (ETPs)	PPPs
Environment-oriented Non-Governmental Organisations	NGOs
Funding organisations	Funding

Level at which targeting each category of stakeholders

These stakeholders are many. The consortium therefore proposes to apply the following rules in order to consult broadly but efficiently the various stakeholders:

- For each category of stakeholders, European associations representing the professionals of this category shall be targeted (**Primary Targets**) since concerned by the European Added Value of projects;

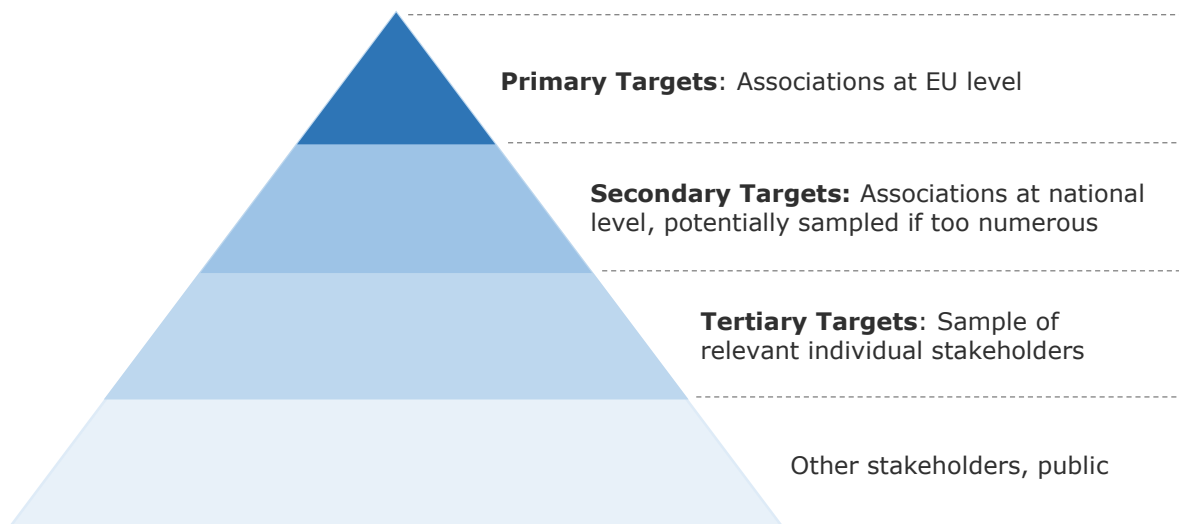
³ This case does not concern TSOs in EU, since all of them are represented by ENTSO-E.

- If such association at EU level does not exist, then national associations shall be targeted (**Secondary Targets**); if those are too numerous, then a sampling of relevant associations shall be performed with the support of Member States representatives within the EEGI⁴;
- If associations at national level do not exist, then a sampling of relevant individual stakeholders shall be performed with the support of EEGI members (**Tertiary Targets**).

This approach is illustrated by Non identified stakeholders, including the European citizens, would be consulted via the project website (see section 5.4).

Figure 1 below. Non identified stakeholders, including the European citizens, would be consulted via the project website (see section 5.4).

Figure 1 – Approach to consult external stakeholders



List of stakeholders to be targeted by the consultation

The associations listed in Table 2 below have been identified by the consortium as Primary Targets for the consultation.

⁴ The list of Member states representatives within the EEGI is available on <http://www.gridplus.eu/eegi/eiiteam>.



Table 2 – List of Primary Targets to be consulted

Categories of stakeholders (short name)	Relevant associations at EU level (Primary targets)	Comments (potential need to look for Secondary Targets)
DSOs	<ul style="list-style-type: none"> ▪ CEDEC – Represents the interests of local and regional energy companies in ten European countries ▪ EURELECTRIC⁵ – Union of the Electricity Industry ▪ GEODE – European Voice of local Energy Distributors across Europe 	The European coverage of these associations (+EDSO as consortium partner) is satisfactory.
Techno providers	<ul style="list-style-type: none"> ▪ CEN-CENELEC-ETSI - European Standards Organizations (ESOs) ▪ DIGITAL EUROPE – Represents the digital technology industry in Europe ▪ EHA – European Hydrogen Association ▪ ESMIG – European Smart Metering Industry Group ▪ Eu.bac - European Building Automation and Controls Association ▪ EUROBAT – Association of European Automotive and Industrial Battery Manufacturers ▪ EUROPACABLE – The voice of the wire and cable manufacturers in Europe ▪ HEA – The Hydro Equipment Association ▪ ORGALIME – European Engineering Industries Association ▪ T&D EUROPE – European Association of the Electricity Transmission and Distribution Equipment and Services Industry 	The European coverage of these associations (+EASE as consortium partner) is satisfactory.

⁵ EURELECTRIC represents different categories of stakeholders (DSOs, generators, retailers...). The relevant units shall be targeted by the consultation separately, in such a way their responses can be prioritised according to Table 3.



Categories of stakeholders (short name)	Relevant associations at EU level (Primary targets)	Comments (potential need to look for Secondary Targets)
Generators	<ul style="list-style-type: none"> ▪ AEBIOM – European Biomass Association ▪ COGEN EUROPE – European Association of the Promotion of Cogeneration ▪ EGEC - European Geothermal Energy Council ▪ EPIA – European Photovoltaic Industry Association ▪ EPPSA – The European Power Plant Suppliers Association ▪ EREF – European Renewable Energies Federation ▪ ESHA – The European Small Hydropower Association ▪ ESTELA – European Solar Thermal Electricity Association ▪ ESTIF – European Solar Thermal Industry Federation ▪ EUBIA – European Biomass Industry Association ▪ EUTurbines – European Association of Gas and Steam Turbine Manufacturers ▪ EURELECTRIC⁶ – Union of the Electricity Industry ▪ EWEA – European Wind Energy Association ▪ OEE – European Ocean Energy Association 	The European coverage of these associations is satisfactory.
Market players	<ul style="list-style-type: none"> ▪ ANEC - The European consumer voice in standardisation ▪ BEUC – The European Consumer Organisation ▪ E2BA – Energy Efficient Buildings Association ▪ EFET – European Federation of Energy Traders ▪ EURELECTRIC⁷ – Union of the Electricity Industry ▪ EUROPEX – Association of European Energy Exchanges ▪ IFIEC – International Federation of Industrial Energy Consumers ▪ SEDC – Smart Energy Demand Coalition 	The European coverage of these associations is satisfactory.

⁶ See footnote 5.

⁷ See footnote 5.



Categories of stakeholders (short name)	Relevant associations at EU level (Primary targets)	Comments (potential need to look for Secondary Targets)
NRAs & MS	<ul style="list-style-type: none"> ▪ CEER – Council of European Energy Regulator ▪ ACER – Agency for the Cooperation of Energy Regulators⁸ 	Regarding NRAs, ACER and CEER represent the NRAs of all EU MS. <u>Adequate representatives of Member States will be contacted through the EEGI.</u>
Local authorities	<ul style="list-style-type: none"> ▪ CEMR - Council of European Municipalities and Regions ▪ COVENANT OF MAYORS – Movement of local and regional authorities, voluntarily committing to increasing energy efficiency and use of renewable energy sources on their territories 	The European coverage of these associations is satisfactory.
Gas Infra	<ul style="list-style-type: none"> ▪ ENTSOG – European Network of Transmission System Operators for Gas ▪ EUROGAS – Association representing the European gas wholesale, retail and distribution sectors ▪ GIE – Gas Infrastructure Europe 	The European coverage of these associations is satisfactory.
Heat Networks	<ul style="list-style-type: none"> ▪ EUROHEAT & POWER – International association representing the District Heating and Cooling (DHC) and Combined Heat and Power (CHP) sector in Europe 	The European coverage of this association is satisfactory.
Research	<ul style="list-style-type: none"> ▪ EERA – European Energy Research Alliance ▪ EUA – European University Association⁹ ▪ EUREC – European Association of Renewable Energy Research Centres ▪ INSIGHT_E project – An Energy think tank informing the European Commission ▪ Research Experts involved in Technology platforms dealing with smart grids and /or energy storage (like ETP Smart Grids, Wind, PV, etc...) 	The European coverage of these associations and organisations is satisfactory.

⁸ ACER provides formal opinions on ENTSO-E implementation plans of R&D roadmaps (see part 3.3), but not on DSOs R&D activities. They should therefore be consulted specifically upon the latter.

⁹ EUA has created the European Platform of Universities Engaged in Energy Research (EPUE)



Categories of stakeholders (short name)	Relevant associations at EU level (Primary targets)	Comments (potential need to look for Secondary Targets)
PPPs	<ul style="list-style-type: none"> ▪ E2B EI – Energy Efficient Building European Initiative ▪ EGVI PPP – European Green Vehicle Initiative ▪ EMIRI – Energy Materials Industrial Research Initiative ▪ ETP RHC – European Technology Platform on Renewable Heating & Cooling ▪ ETP SG – European Technology Platform for Electricity Networks of the Future ▪ EU PV TP – European Photovoltaic Technology Platform ▪ FCH JU – Fuel Cells and Hydrogen Joint Undertaking ▪ TP Wind – European Wind Energy Technology Platform 	The European coverage of these organisations is satisfactory.
NGOs	<ul style="list-style-type: none"> ▪ RGI – Renewable Grid Initiative (gathering <i>inter alia</i> BirdLife Europe, CAN Europe and WWF International) ▪ EEB – European Environmental Bureau 	The European coverage of these organisations is satisfactory.
Funding	<ul style="list-style-type: none"> ▪ EIB – European Investment Bank ▪ ERANETPLUS smartgrids - Gathers financing institutions in several European countries 	The European coverage of these organisations is satisfactory.



The analysis of Table 2 shows that the European coverage of the Primary Targets is sufficient for all categories of stakeholders. There is therefore no need to explicitly seek the views of Secondary or Tertiary Targets (with the exception of Member States representatives who will be contacted through the EEGI). However, if national associations, individual companies or even individual citizens respond to the public consultation, their views will of course be considered.

5.3 Date and duration of the consultation

The consultation will be publicly announced at the 2015 Innogrid2020+ conference (to be held on 31st of March and 1st of April 2015). It will last at most 3 weeks to allow enough time to the consortium to write the final IP 2016-2018 due at Month 5 (Tasks 2.1, 2.2 and 2.3).

The consortium aims at presenting the project in general, and this consultation in particular, during a plenary session of the conference. This will allow detailing the process for stakeholder involvement and consultation for the 2016-2018 Implementation Plan to stakeholders of the electricity value chain.

5.4 Consultation means

The consultation will be performed using web-based tools¹⁰ in a push mode, with dedicated messages to different stakeholders.

For the Primary Targets listed in Table 2 and the Secondary and Tertiary Targets to be identified with EEGI members, two complementary means will be used:

- Letter signed by the project coordinator sent to the associations' management, accompanied by a letter from the EC which explains the objectives of the Grid+Storage project in order to support the dialogue with stakeholders;
- Best efforts from the whole consortium to directly contact representatives or members of these associations, with the above-mentioned letter in copy.

For the sake of transparency and non-discrimination, and in order to reach potentially interested stakeholders which may not be directly targeted (fourth level of stakeholders in Figure 1), the consultation will be advertised and consultation documents will be published on:

- The project's website (D6.3, due at Month 2);
- Each project partner' website.

¹⁰ The web-based tool will allow to post amended documents and short position papers coming from the different stakeholders.



6. Processing of consultation responses

Clear rules have to be established to process the consultation responses in a transparent and non-discriminatory way, in order to maximise the level of acceptance of the final IP 2016-2018.

6.1 Prioritisation of stakeholders' inputs

Stakeholders' inputs will be sorted by order of importance, depending on the clusters which the topic concerned belongs to, as indicated in Table 3 below.



Table 3 – Prioritisation of stakeholders’ inputs for each cluster

Cluster #	Cluster name	Consulted stakeholders (ranked by inputs’ priority order)	Justification
TSO 1	Grid architecture	1. NRAs & MS 2. Techno providers 3. NGOs 4. Local authorities 5. Gas infra 6. Heat networks 7. Research 8. All others	<p>The main functional objective of TSO cluster 1 is to provide a set of validated methods for developing network infrastructures. In particular, attention is focussed on the definition of realistic yet dimensioning scenarios, the development of simulation software to define and assess the different network development options and the improvement of public acceptance when reinforcing or building new cable links, overhead lines, etc.</p> <p>As a consequence, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • The policy makers and implementers at Member State level who are used to analyse the sequence of ENTSO-E’s ten-year development plans and to deduce the expected impacts for their own TSOs, and the regulators, who assess and approve the network developments proposed by TSOs, • Power technology providers since they will deliver the necessary technologies (e.g. HVDC overlay grid) fulfilling the specifications of the TSOs, • NGOs proposing energy scenarios and/or focused on nature protection, • Local authorities in relation with public acceptance of grid development, • Gas and heat infrastructure operators so as to efficiently integrate power, gas and heat in view of the future flexibility needs when integrating large shares of renewable energies, • Research institutes which will be involved in the development of methodologies and algorithms for grid planning.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
TSO 2	Power technologies	1. Techno providers 2. Generators 3. Heat networks 4. All others	<p>The main objective of TSO cluster 2 is to demonstrate the opportunity of implementing new technologies (ICT, storage, hybrid AC/DC...) into the transmission system. In particular, technologies allowing for increasing network flexibility and operation means, novel network architectures and interfaces allowing for integrating more RES into the system are to be explored.</p> <p>Consequently, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none">• Power technology providers because they are, by definition, primarily concerned with these topics,• Both RES and thermal generators (and generation technology providers) since they are primarily involved in interfaces between the grid and generation units,• Heat network operators, because they presently depend heavily on power generation technologies (CHP) and the link will be important in the future as well.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
TSO 3	Network operation	<ol style="list-style-type: none"> 1. Research 2. Techno providers 3. Gas infra 4. Heat networks 5. NRAs and MS 6. All others 	<p>The main objective of TSO cluster 3 is to develop new tools and methods that will allow TSOs to ensure security of supply and system reliability while the environment in which they have to do this is increasingly challenging, with growing uncertainties and an increasing need for coordination at pan-European level. These tools and methods shall concern the monitoring and control of the EU network, the harmonisation and coordination of operational procedures, the development of coordinated training tools at regional and EU level, and the pan-European network reliability assessment.</p> <p>Consequently, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • Expert research organisations, since they will be primarily involved in the development of innovative methods, new algorithms, etc., • Power technology and ICT providers, since the performance of the tools they develop has great influence on network operation, • Gas infrastructure operators because of the potential interactions between electricity and gas balancing, • Heat network operators because of increasing importance of the interface between electrical power and heat at transmission level in some EU countries, • NRAs and Member States, since cross-border market design depends on Network Codes initiated by regulators (ACER Framework Guidelines) and eventually adopted by Member States (comitology).



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
TSO 4	Market designs	<ol style="list-style-type: none"> 1. NRAs & MS 2. Market players & generators 3. Techno providers 4. Heat networks 5. Gas infra 6. Research 7. All others 	<p>The main objective of TSO cluster 4 is to develop and demonstrate new market designs that maximise the efficiency of short-term markets, provide the right signals to investors through efficient long-term markets and make it feasible to integrate massive amount of RES in a coordinated and efficient manner. In particular, advanced tools and market mechanisms for ancillary services and balancing (including active demand management), for capacity allocation and congestion management, and for ensuring system adequacy and efficiency while integrating large amounts of RES, shall be developed.</p> <p>As a consequence, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • NRAs and Member States, since the IEM is at stake and cross-border market design depends on Network Codes initiated by regulators (ACER Framework Guidelines) and eventually adopted by Member States (comitology), • Participants in the wholesale electricity markets, organisers of the markets (power exchanges) as well as generators, since they are primarily concerned by topics related to market design, • Technology and ICT providers in particular regarding the tools needed by TSOs to improve cross-border capacity calculation and allocation close to real-time, • Heat networks and gas infrastructure operators because of increasing importance of interactions between the two sectors and the electricity sector, • Research organisations and think tanks having an expertise in electricity market designs and economics.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
TSO 5	Asset management	<ol style="list-style-type: none">1. Techno providers2. NRAs & MS3. Research4. All others	<p>The main objective of TSO cluster 5 is to formalise and improve asset management of transmission systems. In particular, determining and maximising the lifetime of critical power components, optimising asset maintenance thanks to quantitative cost/benefit analysis, and demonstrating new asset management approaches at EU level are at stake.</p> <p>Consequently, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none">• Power technology providers, regarding the monitoring of their products' lifetime; and ICT providers regarding the new ICT tools to be developed to monitor the network assets,• Regulators since transmission networks' OPEX and CAPEX are at stake,• Expert research organisations regarding new methods to optimise asset management.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
TSO-DSO	Joint R&I activities	<ol style="list-style-type: none"> 1. DSOs 2. Market players 3. NRAs & MS 4. Techno providers 5. Research 6. All others 	<p>The overall aim of this joint TSO-DSO cluster is to evaluate the possible services that DSOs could provide to TSOs, and the information that both should share improving the interface between transmission and distribution grids. More specifically, the following aspects need to be explored: the observability of the distribution system for transmission network management, the integration of demand side management at DSO level into TSO operations, the ancillary services provided through DSOs, and improved defence and restoration plans. Developing methodologies for scaling-up and replicating is also an objective of this cluster.</p> <p>Consequently, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • DSOs¹¹ operating distribution networks of different sizes under different regulations, different boundary conditions, • Market players, including notably consumers, aggregators and retailers, for the purpose of integrating demand response at the wholesale and transmission level, • Regulators, concerned notably by the rules for providing ancillary services, and Member States representatives involved in energy policy regarding demand-side management, • ICT providers, because of the need for a specific communication infrastructure connecting transmission and distribution levels.

¹¹ As already mentioned, some DSOs are not represented by EDSO and shall be consulted upon the initial integrated IP 2016-2018. EDSO members, as well as ENTSO-E and EASE members, will have been consulted beforehand.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
<p>DSO 1</p>	<p>Integration of smart customers</p>	<ol style="list-style-type: none"> 1. DSOs 2. Market players 3. NRAs & MS 4. Techno providers 5. Heat networks 6. Gas infra 7. Research 8. Local authorities 9. All others 	<p>The main objective of DSO cluster 1 is the integration of smart customers into MV and LV networks so as to achieve more flexibility through peak shaving and energy savings. In particular, attention is focussed on active demand (AD), thus enabling the participation of consumers in electricity markets, and on energy efficiency (EE) in cities. As a consequence, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • DSOs operating distribution networks of different sizes under different regulations, different boundary conditions, • Consumers (domestic, commercial and industrial including electricity to heat and gas technologies) as well as other market players offering services based on AD and EE (for instance aggregators, BRPs, ESCOs), • Member States and regulators who will participate in the definition of appropriate incentives to motivate consumers to participate in AD and EE while addressing key issues such as privacy and cyber security, • Power technology providers providing systems for distributed control and real-time network management (including decentralised storage), as well as ICT players ensuring the advent of suitable communication infrastructures (including smart metering and home energy management systems), • Research institutes who will provide methods and algorithms to better model and forecast consumer behaviour and thus demand, • Local authorities in relation with public acceptance.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
DSO 2	Integration of DER and new uses	<ol style="list-style-type: none"> 1. DSOs 2. Generators 3. Market players 4. Heat networks 5. Gas infra 6. Research 7. NRAs & MS 8. Techno providers 9. All others 	<p>The main objective of DSO cluster 2 is to manage the transition from a power system with unidirectional power flows to a system with increasing reverse flows related to the development of small DER units feeding in at low or medium voltage levels. The following aspects need to be explored: the integration of DER at different voltage levels, the integration of storage in network management and the integration of infrastructure to host Electrical Vehicles (EV).</p> <p>As a consequence, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • DSOs operating distribution networks of different sizes under different regulations, different boundary conditions, • Generators operating distributed units, • Other market players as VPP operators, retailers and consumers, • Heat network and gas infrastructure operators because of the links with distribution networks through CHP units and new power to heat and gas technologies, • Research institutes which can provide models for simulating the development of DER and develop new routes for energy storage, • Regulators and Members States in the perspective of elaborating new market rules to continue promoting distributed generation based on renewables, to promote the use of storage and optimised EV charging, • Power technology providers able to provide tools to monitor and control the power exchanges with the grid through bi-directional communication tools.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
DSO 3	Network operations	<ol style="list-style-type: none">1. DSOs2. Techno providers3. Research4. NRAs & MS5. All others	<p>The main objective of DSO cluster 3 is to improve network flexibility so that power quality and reliability, massive renewable integration and increased use of smart metering will be made possible. Focus is needed on monitoring and control of LV networks, automation and control of MV networks, network management methodologies and smart metering data utilisation.</p> <p>As a consequence, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none">• DSOs operating distribution networks of different sizes under different regulations, different boundary conditions,• Power technology and ICT providers, notably software providers (SCADA, DMS,...), automation providers and those involved in the integration of smart metering data into control systems,• Research to develop new effective technologies for energy storage focussing on power quality and grid stability,• Regulators and Member States, in particular regarding the utilisation of smart metering data and the development of associated services.



Cluster #	Cluster name	Consulted stakeholders (ranked by inputs' priority order)	Justification
DSO 4	Network planning and asset management	<ol style="list-style-type: none"> 1. DSOs 2. NRAs & MS 3. Research 4. Techno providers 5. Local authorities 6. All others 	<p>The main objectives of DSO cluster 4 are to develop new planning and asset management methodologies in order to increase reliability of the distribution networks while optimising costs.</p> <p>As a consequence, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • DSOs operating distribution networks of different sizes under different regulations, different boundary conditions, • Regulators in charge of approving OPEX and CAPEX of DSOs, • Research institutes for the development of models allowing intelligent network planning, assessment of ageing under real network conditions, etc., • Power technology providers in the perspective of evaluating the impact of connecting storage, EV, DER and other devices to the distribution systems, • Local authorities in relation with public acceptance of grid development.
DSO 5	Market design	<ol style="list-style-type: none"> 1. DSOs 2. Market players 3. Generators 4. NRAs & MS 5. Research 6. All others 	<p>The main objective of DSO cluster 5 is to develop a market design able to encourage the development of DER, demand response and storage through smart grids.</p> <p>As a consequence, the responses of the following stakeholders should be considered in priority:</p> <ul style="list-style-type: none"> • DSOs operating distribution networks of different sizes under different regulations, different boundary conditions, • Consumers, aggregators, retailers and generators, • Regulators, for instance in the perspective of elaborating tariffs mechanisms encouraging demand response (temporal differentiation), • Research institutes and think tanks, regarding in particular the involvement of small actors in electricity markets.

6.2 Analysis of the consultation responses

The analysis will be based on an Excel table gathering all the responses, as illustrated by table 4.

Table 4 – Analysis of consultation responses

Respondent	Type of respondent ¹²	Question 1		Question 2		...
		Priority order of the respondent for this question ¹³	Responses	Priority order of the respondent for this question	Responses	
Respondent A						
Respondent B						
Respondent C						
...						
Analysis						
<i>Number of "yes"</i>						
<i>Number of "no"</i>						
<i>Reasons for "no"</i>						
<i>Main comments</i>						

This table will be shared with the European Commission, as will also the complete list of responses.

6.3 Dissent management rules

It is to deal with dissenting views that the following rules will apply:

- Dissenting views amongst consulted stakeholders:
 - Provided the topic on which dissenting views are expressed belongs to one single cluster, the order given in Table 3 should apply;
 - The representativeness of the stakeholders (for instance, association representing X members versus one single company) should be taken into account;
- Dissenting views between consulted stakeholders and the consortium: in this case, the view of the consortium should prevail. The consortium will then provide a transparent argumentation to their choice.
- Dissenting views amongst the consortium members: in this case, the rules stated in the Consortium Agreement shall apply.

The European Commission will be informed about all points of dissent and about how dissent have been addressed.

¹² See categories from Table 1.

¹³ See priority order from Table 3.



6.4 Integration of stakeholders' inputs into the final IP 2016-2018

A document analysing the consultation responses will be built by the consortium, shared with the EC and published on the project's website. It will include, for each question submitted to consultation:

- the number of organisations having responded to that question, and their names;
- a synthesis of the different responses;
- how those responses have been addressed;
- conclusions of the consortium with the accompanying rationale.

The final IP 2016-2018 (D2.2 due at Month 5) will integrate the feed-back gathered from the public consultation, taking account of the above prioritisation and dissent management rules.