

**Study regarding grid infrastructure development:
European strategy for raising public acceptance**

European Commission Tender No. ENER/B1/2013/371

Revised Final Report

23 June 2014

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A. Project background and objectives

The purpose of this Revised Final Report is to present the results of our work in the framework of the European Commission Tender No. ENER/B1/2013/371 "Study regarding grid infrastructure development: European strategy for raising public acceptance".

The approach of this project is to cater to the needs of crucial stakeholders of power grid development projects across Europe, e.g. TSOs, NGOs, public authorities and local communities. In the initial kick-off Steering Committee it was agreed not only to fulfil the tasks of the Terms of Reference and submit the required deliverables in the form of this Revised Final Report but also additionally compile the results as an online "**toolkit**": a website that contains communication and stakeholder involvement elements with high potential to raise public acceptance and participation for individual grid infrastructure development projects in Europe.

In this regard, we have complemented the final deliverable of the project with an online database for easy access and use by stakeholders at the level of an individual grid development project – potentially anywhere across Europe. With this innovative approach, we began to develop a framework for such a toolkit both in technical form and structural content, including tables for toolkit elements such as stakeholders, stages, communication contents, channels, formats and practice examples. Moreover, the final toolkit includes communication messages and user guides for making it easier to be applied on the ground.

The Steering Committee decided to keep **the toolkit fully accessible to any user** via a public web-interface being potentially beneficial and usable by all stakeholder groups to collectively raise public acceptance for any specific grid project in a multi-stakeholder dialogue. However, the Steering Committee acknowledged that the primary users of the toolkit would likely be TSOs and other project promoters as most frequent initiators of communication and stakeholder involvement activities to raise public acceptance. Other stakeholders (e.g. NGOs and local stakeholders) are invited to use the toolkit to engage in a multi-stakeholder dialogue, contribute their expertise, and play a constructive part in the process.

The Steering Committee moreover affirmed the **overall objective of the project** to produce as a primary output:

- A web- and database-based "toolkit"
- On communication and stakeholder integration elements,
- Intended for multi-stakeholder use,
- To raise public acceptance for power grid development
- At the local level of – in principle – any grid development project
- Across Europe.

We have conducted **test events** to validate important recommendations and assumptions contained in the toolkit. The learnings from the successful test events were fully included into the relevant toolkit profiles.

Furthermore, we underline the considerable efforts that we have undertaken to upgrade the web interface of the online toolkit with several features in order to increase its user friendliness further.

We have considered and **included as much as possible of the valuable feedback** that we received in two extensive feedback loops from members of the Steering Committee and other experts. The final version of the toolkit is presented with this Revised Final Report, which is structured as follows:

Chapter B outlines the toolkit structure as well as the methodology for content generation. **Chapter C** presents the updated version of the toolkit including profiles of key elements for successful communication and stakeholder integration such as important stakeholder groups, project stages, communication channels, formats and content types as well as practice examples for stakeholder dialogue and integration. Moreover, section 7 of chapter C details communication messages presented in a customisable storyline-framework for compelling stories about grid projects on the ground. This section also shows a more elaborated European message for grid development. Lastly, section 8 presents User guides for how different stakeholder groups can apply elements of the toolkit. In the annex to the User guide for TSOs we give specific recommendations on how to deal with communication risks. In **chapter D**, we explain background and objectives of the test events and report the key takeaways from our test events.

B. Project methodology and approach

This chapter outlines the methodology behind the final toolkit that this Revised Final Report presents. Our overall approach has been guided by the objective of this project, i.e. to deliver a web- and database-based “toolkit” on communication and stakeholder integration elements, intended for multi-stakeholder use, to raise public acceptance for power grid development at the local level of – in principle – any grid development project across Europe.

For the content generation of the draft toolkit presented in this report, we have borne in mind that communication and stakeholder integration activities alone will hardly be enough to raise public acceptance to its fullest and we were fully aware that policy changes, material forms of stakeholder engagement (e.g. legislative reforms of compensation measures) and regulatory reform at various levels would need to complement improved stakeholder communication and participation. This project focuses on the latter two aspects. Building on the latest academic research, we distinguish between the notions of “public acceptance” and “public support” and focus our content development only on the former one.

In the following, we outline the toolkit structure (1.) and explain the actual content generation (2.) considering inputs like stakeholder interviews, desk research and our firms’ expertise as well as several evaluation criteria for including input into the draft toolkit.

1. Toolkit structure

The toolkit consists of a three-tier structure that is delineated as such in the web-interface of the back-end database where the toolkit content is stored: (a.) toolkit sections (i.e. tables in the database), (b.) profiles per section (i.e. unique identifiers per table in the database), and (c.) standardised templates for profile content per section (e.g. attributes per table in the database):

a. Sections

The toolkit sections (or tables as a technical reference) represent different elements to systematise and organise a stakeholder and communication strategy of any transmission grid project under development. Through multiple rounds of internal brainstorming and categorisation workshops as well as benchmarking with existing documentation about stakeholder outreach strategies by TSOs, we identified eight different sections as part of the toolkit and its presentation via a web-interface. We also considered the deliverables required under the Terms of Reference. The toolkit sections are as follows:

- **Stakeholders:** This section comprises groups of organisations and individuals with vested interests in power grid development projects.
- **Project stages:** This section structures a grid project along the main, overall phases of the project cycle.
- **Content types:** This section presents content types that are essential to be communicated over the course of a grid project.

- **Communication channels:** This section lists a selection of different channels for engaging with stakeholders and staging a stakeholder dialogue.
- **Communication formats:** This section contains selected formats that can be used in the context of different communication channels.
- **Practice Examples:** This section presents small case studies of practice examples for stakeholder involvement activities across Europe.
- **Communication messages:** This section stands apart from the toolkit in a narrow sense and presents a storyline-framework for how project developers should structure a comprehensive messaging when engaging with stakeholders in a specific project.
- **User guides:** This section features manuals for different stakeholder groups for how to use the toolkit, e.g. initiating and participating in stakeholder involvement measures. The User guide for TSOs features an annex on **Communication Risks** with recommendations for how to communicate on highly controversial issues.

b. Profiles

Per section of the toolkit, we identified a selection of specific elements that we intended to develop in further detail. Through internal workshops, desk research as well as benchmarking with existing stakeholder involvement approaches (especially by TSOs, but also regulatory authorities and multi-stakeholder initiatives like the Renewables Grid Initiative), we identified selections of profiles (or datasets) for each section. In selecting the profiles, we were generally guided by the core principles for evaluating content input to the toolkit as they are outlined in the next section. Above all, we chose to abstract from project- and country-specific particularities, keep the number of profiles within a manageable range and focus on elements for which the toolkit can add value by providing recommendations specifically tailored to the context of grid projects. We selected profiles per section as follows¹:

- **Stakeholders:** TSOs, Power producers, Permitting authorities, Regulators, Local elected officials, Environmental NGOs, National/Regional policy makers, Adjacent communities, Local citizens' initiatives, Land owners, Industrial consumers, Private consumers, Media.
- **Project stages:** Most importantly, we abstracted from different national legislations regarding the grid planning process and found a common denominator with six distinct project stages: Determination of need, Project preparation, Spatial planning, Permitting, Construction, and Operation.
- **Content types:** Project location/Map, Project timetable/events, Technical details of project, Compensation measures, Information on project developers.
- **Communication channels:** Public space event, Town hall meeting, World Café, Roundtable, Closed-door meeting, Citizens helpline, Project information office, Doorstep visits, Field visits, Project website, Social media, Mediation.

¹ To distinguish certain terms that refer to a toolkit profile from other content, the profile title always starts with a capital letter, e.g. Power producers, Permitting authorities etc.

- **Communication formats:** Brochure / flyer / Fact sheet, Presentation, Exhibition, Infographics.
- **Practice Examples:** The toolkit presents practice examples by the following TSOs: 50Hertz (Germany), REE (Spain), EirGrid (Ireland), MAVIR (Hungary), TenneT (Germany).
- **Communication messages:** The messages section does not feature profiles per se, as it presents instead a framework for how project developers can organise and customise a storyline of successful messaging in the context of grid projects.
- **User guides:** To reflect the multi-stakeholder design and ambition of the toolkit, we included four User guides for the principal stakeholder groups involved in a stakeholder dialogue of a grid project: TSOs, Environmental NGOs, local stakeholders (comprising Land owners, Local citizens' initiatives, and Adjacent communities at large), as well as National and Regional policy makers.

The selection of toolkit sections and profiles per section hence yields the following overview of the toolkit structure:

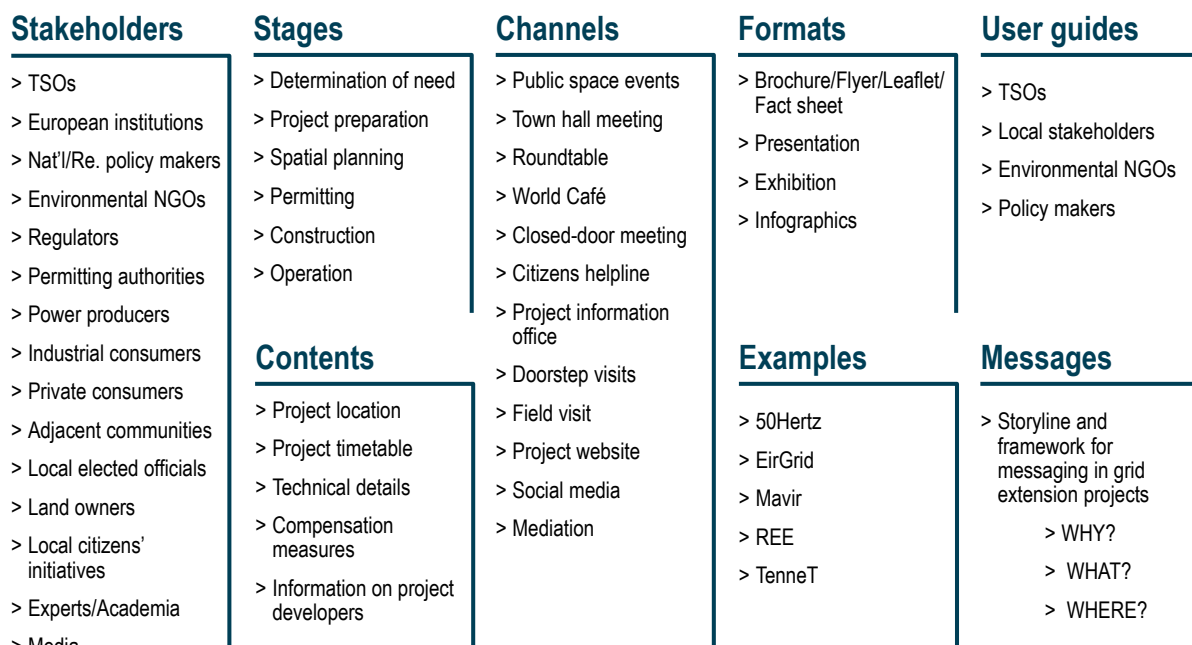


Figure 1: Toolkit overview

c. Standardised templates

For the each section in the toolkit (except the storyline-framework for messaging), we designed a specific template for profiling each element covered in this section.

For all sections with templates (excluding the Practice examples) we chose to include a two-column structure that allowed us to present one column with “usual patterns” of a toolkit

element that are typically true for the case of any grid project, but also a second column with “project specific questions” that would likely be answered differently in the specific context of a given project.

The templates moreover provide two types of categories for profiling a toolkit element: First, specific content features of a given elements depending on the section (e.g. “primary concerns” for profiling the section “Stakeholders”, or “required resources” for the section communication “Channels”); second, links to other profiles in other sections of the toolkit with brief explanations in order to reflect the complex possibilities for designing inter-linked, comprehensive stakeholder integration and communication plans for individual projects.

In addition, we included a category called “Country-specific examples” in many profiles of the toolkit that features specifics that we found to be unique for grid development projects in one or more Member States, but that are nevertheless a telling source of inspiration across Europe. We put special emphasis on the priority Member States as defined by the Steering Committee.

2. Content generation

In the following, we briefly outline the process and methodology for researching and drafting the content of the toolkit elements. We distinguish between our sources as content input, our evaluation and judgement for what to include and what not to, as well as the output that is the textual content of the draft toolkit.

As stipulated in the Inception Report, the Interim Report and the Final Report, our project approach in terms of producing content and results has been driven by the methodology of *rapid prototyping*, i.e. quickly producing results such as a draft version of the toolkit, in order to obtain feedback from the Steering Committee and subsequently refine our final product based on comments and suggestions. This Revised Final Report thus represents a refinement of the results of the Final Report.

Input sources

We have relied on three different types on input and sources for the compilation of the draft toolkit: external stakeholder interviews, desk research, and internal knowledge as well as creative ideas of the three companies that make up our consortium, i.e. chiefly internal workshops and interviews.

- **External stakeholder interviews and events:** Over the course of the last months, we have conducted more than twenty external interviews in person and via telephone with representatives of stakeholder groups that are involved in the grid development debate as well as specific projects in the field. The following is an overview of our external interviews:

No	Stakeholder group	Institution
1	TSO	50Hertz, Germany
2	TSO	50Hertz, Germany
3	TSO	50Hertz, Germany
4	TSO	TenneT, Germany
5	TSO	EirGrid, Ireland

6	TSO	EirGrid, Ireland
7	TSO	REE, Spain
8	TSO	Elia, Belgium
9	TSO	Elia, Belgium
10	TSO	PSE, Poland
11	TSO	MAVIR, Hungary
12	TSO	APG, Austria
13	TSO	RTE, France
14	TSO	Terna, Italy
15	NGO	RSPB, United Kingdom
16	NGO	Germanwatch, Germany
17	NGO	NABU, Germany
18	NGO	Climate Action Network (CAN), Belgium
19	Experts/Academia	University of Exeter, United Kingdom
20	Power producer	European Wind Energy Association (EWEA), Belgium
21	Local citizens' initiatives and citizen action groups	Bürger PRO-ERDKABEL Harzvorland e.V., Bürgerinitiative "Auf dem Berge", Bürgerinitiative "Erzhausen unter Strom". Germany
22	Multi-stakeholder forum	Renewables Grid Initiative, Germany

Figure 2: List of external stakeholder interviews

Additionally, we participated in two one-day multi-stakeholder events – both for an exchange of best practices at the policy level as well as for an information event in the frame of a specific grid project in Weimar, Thuringia, Germany:

No	Event	Hosting institution
1	RGI PCI Workshop Brussels, Belgium	Renewables Grid Initiative, Germany
2	Information Event Gleichstrom-passage Süd-Ost, Weimar, Germany	50Hertz, Germany

Figure 3: List of events

- Desk research:** Moreover, we have conducted extensive desk research online on the various elements of the toolkit as well as general background research on grid development at large, e.g. in terms of different technologies (e.g. HVAC vs. HVDC) or the overall debate on grid development in different EU Member States. Our research covered both general features of stakeholder dialogues and communication measures as well as grid-specific information about the application of such measures on previous projects. Sources that we have consulted and took into account include among others academic literature, publications by think tanks and NGOs, as well as information made available by key stakeholders via their websites, e.g. TSOs, institutions of Government (Ministries of Energy, Regulators, Permitting authorities), and even websites of local citizen action groups in opposition to specific projects.

- **Internal expertise, knowledge and creative ideas:** Furthermore, we activated our companies' internal expertise and knowledge base by tapping our own project experience with stakeholder involvement and communication projects.

Conversion

During the various interviews with external stakeholders, through our findings from desk research, and based on our own innovations we came across numerous ideas for input regarding every specific toolkit element. The overall project objectives and boundary conditions for the toolkit (please see chapter A) defined our underlying, qualitative criteria for evaluating and judging the propositions for specific toolkit content. The following benchmarks guided our decisions to include or not to include specific input into the toolkit:

- **Specific relevance for grid projects:** Any proposition that interviewees raised had to withstand our scrutiny in terms of its relevance for the specific issue at stake: transmission grid projects. Toolkit content had to bring value added to stakeholder involvement debate *regarding grid projects* in particular, not just any communication plan in general.
- **Specific reference to stakeholder involvement and communication:** Additionally, any proposition provided as potential toolkit input, had to have a specific link to matters of *stakeholder integration or communication activities*, considering in mind the special focus of the toolkit on these topics.
- **Proven record or strong potential of enhancing public acceptance:** Given the mandate of the project and the ambition of the toolkit, any potential toolkit input had to have either a proven record or strong potential/promise to *enhance the public acceptance* of a specific power grid development project.
- **Multi-stakeholder utility:** Against the backdrop of the objective of the toolkit to be publicly accessible and usable by multiple stakeholder groups, any content element of the toolkit had to be valuable for multiple stakeholder groups and not only cater to the needs and motivations of one group in particular.
- **Generalisability across projects and EU Member States:** Moreover, a proposition had to be generalisable across at least more than one project and at least across more than one Member State in order to be included into the toolkit. We even only incorporated specific examples – that are labelled as such – whenever it appeared plausible to us that they provided useful insights for stakeholders of other grid projects and in other countries.
- **Practicability/ plausibility in the context of the grid planning process:** Finally, we applied a plausibility check to the content elements that we gathered from our input sources. Specifically, we evaluated and judged whether a proposition would fall within what we deemed reasonable endeavours of stakeholders, whether a proposition would be flat out unrealistic or whether it would clearly overburden the overall project planning process.

These criteria delivered an overall framework that is deliberately open and general in order to fulfil the toolkit's purpose as a flexibly applicable tool at the project level of potentially any

grid project across Europe. We intend for the toolkit content to become a modular "menu of choice" and a source of inspiration for various stakeholder groups involved in grid projects on how to enhance their public acceptance through more elaborate communication and stakeholder involvement activities.

Output

The output produced from the input sources we outlined above – benchmarked against the aforementioned criteria – constitutes the toolkit that we detail in the following chapter of this report. Not only the content, but also the language and tone of how it is presented intend to reflect the objectives of the toolkit as specified in chapter A, as being intentionally generalising, nevertheless nuanced, neutral and objective.

C. Toolkit

In this chapter, we present the complete contents of the final toolkit along the structure that we have outlined above. Please note that underlined terms represent references to other toolkit elements, i.e. hyperlinks in the database/website to another profile in a different table. The introductory text (“About the toolkit”) is equal to the “About”-section of the toolkit website.

About the toolkit

All across Europe, immense efforts are undertaken to develop and upgrade our power transmission networks that enable the reliable, sustainable and affordable supply of electricity to every European citizen across the continent. This power transmission network is the blood-system of our private and public life, the backbone of Europe’s economy and a key enabler of future energy systems largely build on renewable sources of energy. Clearly, it is a vital infrastructure priority for every one of us.

At the same time, power grid projects impact our daily lives and the environment in their specific context on the ground. Because of their strategic importance on one hand and their local effects on the environment and adjacent communities on the other hand, public acceptance for power grid development projects is indispensable. The common European effort to make our power transmission grids ready to secure a reliable, sustainable and affordable supply of electricity has to be jointly undertaken by all stakeholders of power grid projects. It is crucial to find the most acceptable way of implementing each one of them and thus eventually achieve high public acceptance for each project. To this end, improved project communication and an intensified multi-stakeholder dialogue can make a significant contribution.

In order to raise public acceptance for power grid development through a comprehensive multi-stakeholder dialogue, this website features a toolkit with essential components for successful, inclusive project communication and stakeholder integration, intended for multi-stakeholder use at the local level of – in principle – any grid development project across Europe.

In the end, public acceptance for power grid projects is a local priority in the context of specific grid links under development – as much as it is an overarching, more global issue for the general public. Against this backdrop, this toolkit is intended for use by supra-national, national and local audiences. It may serve to support stakeholders to identify relevant aspects for communication and stakeholder involvement activities surrounding grid development projects. The toolkit is purposefully directed at a multi-stakeholder audience as it calls upon every stakeholder group to play its distinct and constructive part in the context of a grid project. For all local stakeholders, Transmission System Operators (TSOs), NGOs and policy makers, the User Guides are a good place to start exploring the toolkit as they intend to give some guidance how to use and explore the website.

The toolkit is structured along categories of communication and participation elements in the context of power grid projects. These include the different Stakeholders involved, the Project Stages, the Communication Channels, the Communication Formats and the Contents conveyed. Each of these categories contains several profiles specifying, for example, the different types of stakeholders or the different project stages. These profiles do not only provide a thorough description but also link the profiles to one another showing how

communication elements in the context of grid projects work together. The descriptions are accompanied by questions that help to identify where further, project-specific considerations are important. In addition, the toolkit provides several Practice Examples showing how different toolkit elements have proven to work in the frame of real-life grid projects.

This website and the featured toolkit for project communication and stakeholder integration in the context of power grid development projects have been developed in the framework of a project financed by the European Commission (DG Energy). Roland Berger Strategy Consultants, supported by BIO Intelligence Services and Arctik srpl, designed, drafted and delivered the toolkit as well as the website under the Commission's mandate.

1. Stakeholders

“Stakeholders” presented in this part of the toolkit comprise groups of organisations and individuals with vested interests or functions in power grid development projects. These stakeholders are either directly or indirectly concerned with grid development projects and their involvement in a certain project might either decrease or increase throughout the stages. Since some stakeholders of grid development projects have different needs and interests than others, it is crucial to ensure a constructive dialogue on debatable issues from an early stage on, seeking to find common ground and the best solution for all parties involved. All stakeholders are invited to call upon each other to make use of the information and assistance this toolkit offers in order to establish a sustainable and fruitful dialogue at eye height among each other.

Stakeholder Transmission system operators (TSOs)

Stakeholder role in grid projects

Transmission system operators are companies that own and operate electrical power transmission grid lines, i.e. high-voltage main power lines, and are responsible for transporting electrical energy. They are also typically the main owners of grid development projects since they are the primary entity in charge of planning and constructing new grid lines.

TSOs are usually private sector companies in which governments may hold a significant share. In the EU, the grid covered by one TSO comprises – with the exception of Germany – the entire area of a Member State. Due to the fact that TSOs do not face competition in the areas they cover, i.e. they hold so-called “natural monopolies”, they are heavily regulated by the respective government authorities, including Regulators and Permitting authorities. Hence, their leeway in planning and constructing new grid lines is limited by the boundaries set by these entities.

Usual patterns

Project-specific questions

Primary concerns with grid projects

TSOs have duties defined by each Member State’s laws and regulations. These duties normally include the development of an economically efficient grid system.

Their main revenue stems from the grid transmission charges that they receive for transmitting electrical energy. Several considerations can drive the need for grid development projects, and are thus of interest to TSOs. These can include existing bottlenecks in the system, demand management and

- What is the leeway the specific TSO has in terms of increasing the profitability of a given grid project?
- Can the specific TSO pass through increased costs to the respective energy producers or consumers?
- Are their additional concerns of the specific TSO with regards to a given grid project?
- How strongly is the TSO business regulated in a given country,

integration of renewable energy production. Indeed, main producers of renewable energy are often located far away from main consumers, and grids increasingly have the role of balancing out production from different sources. For TSOs, tapping into the potential offered by renewables integration, resolution of bottlenecks and other drivers represents a strong opportunity for grid development. At the same time, the regulations they typically face impose strict restraints on them. Due to these restraints, TSOs usually cannot choose freely where and with which design to build grid lines and profit margins typically do not exceed a certain level. For example, the German TSOs receive a legally fixed profit margin on their investments in grid development projects. This makes TSOs heavily dependent on political decisions, given that any change of legislation can have strong effects on their business case.

In addition, with regards to concrete grid projects, different types of opposition can delay these projects, tie up resources and impose costs on the TSOs. Delays can also pose risks to project security and overall system stability. TSOs therefore have an interest in reducing and mitigating opposition and finding a solution that is acceptable for all stakeholders.

especially with regards to the profitability of their operations?

- Can the specific TSO build on a positive reputation and trust with other stakeholders?

Topography within stakeholder group

Typically, only one TSO is responsible for a grid project and hence forms part of the respective stakeholder group. However, some projects, especially Projects of Common Interest (PCIs), cross borders and are therefore planned, constructed and operated by more than one TSO. TSOs have also formed supranational associations, for example, ENTSO-E on the European level. These associations typically represent the TSO interests in political

- Is more than one TSO involved in the development of a specific grid project?
- Can the expertise of a supranational association such as ENTSO-E be tapped for a specific grid project?

forums.

Individuals within stakeholder organisation/entities

Two groups of individuals within TSOs are typically most important with regards to grid projects. First, the high-level management of the TSO is typically responsible for deciding on the main aspects of grid projects. Second, most TSOs have departments or at least teams working on communication activities of the TSO. The latter group is typically also the one that other stakeholders interact with during the process of grid development. Their task is not only to communicate the plans and decisions of the management to the other stakeholders but also to collect input (e.g. concerns, doubts and ideas) from other stakeholders, and convey them to the management.

- Who are the decision-making persons at a specific TSO for a given grid project?
- Who are the persons holding the primary responsibility for the communication of a specific TSO for a given grid project?

Project stages for engagement

All

As the main project developers, TSOs are involved in all stages of grid projects with a continuously important role.

Adequate channels for participation/cooperation

All

As main project developers, TSOs are also the most important communicators in grid projects. In their communication campaigns they can make use of all available communication measures.

- Which channels have been used by the specific TSO in previous projects?
- For which channels does the specific TSO have the resources for their deployment?

Adequate formats for participation/cooperation

All

As for the channels, TSOs can make use of all communication formats in their communication campaigns.

- Which formats have been used by the specific TSO in previous projects?

- For which formats does the specific TSO have the resources for their deployment?

Country-specific examples

Germany

In Germany, TSOs receive a fixed profit margin on their investments. Therefore, TSOs cannot benefit or lose from any changes in design or placement of grid projects, which gives them some flexibility to adjust to other stakeholders' demands within the narrow boundaries of the relevant regulations. At the same time, the power to really change placement and design of grid projects lies with Permitting and regulating authorities, including political decision-makers on a supra-regional level.

Stakeholder European institutions

Stakeholder role in grid projects

Power grids do not only connect different regions within a country. In fact, many high voltage grids in Europe cross borders and seas to connect national grid systems and guarantee a reliable supply of electricity across the entire continent. Therefore, the development of grids in Europe is not an exclusively national endeavour. Grid development plans are elaborated and coordinated on a European level through close cooperation of the national TSOs and national Regulators of neighbouring countries and through the cooperation with European institutions.

Various grid development projects are directly related to enhancing the trans-border energy network, aiming to implement a reliable grid connection between all countries in Europe (European market integration) and to achieve the goals of the European Energy Strategy. Various European institutions are involved in the coordination and planning of grid development or influence the process through policy making and implementation.

European institutions work on European network issues, energy regulation and policy issues in concert with relevant institutions and policy-makers in the Member States. Important Institutions are, for instance, the European Parliament, the Council and the Commission, the European Network of Transmission system operators for Electricity (ENTSO-E) and the European Agency for the Cooperation of Energy Regulators (ACER).

Usual patterns

Project-specific questions

Primary concerns with grid projects

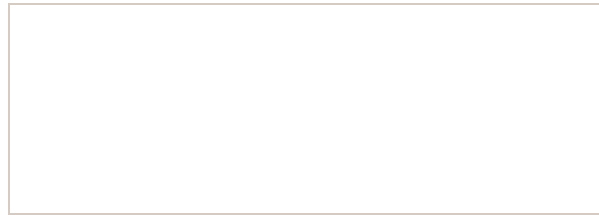
The European Parliament, the Commission and the Council are legislative and policymaking bodies working towards a common European energy policy and a common European market for electricity.

ENTSO-E is the European Network of Transmission System Operators for Electricity. It represents 41 national electricity TSOs from 34 countries across Europe and fulfils mandates under European Union Regulation (EC) 714/2009 on cross-border exchanges of electricity. Important Europe-wide planning and operations roles are assigned to ENTSO-E in new European legislation.

ACER, the European Agency for the Cooperation of Energy Regulators, coordinates the work of national

- Is a grid development project, which you are concerned with, a cross-border project? What is the benefit of the countries involved?
- Can relevant European institutions provide information that can be used for the stakeholder dialogue?

Regulators, has stakes in creating European network rules, gives energy related advice to other European institutions and monitors and reports developments regarding the European energy markets.



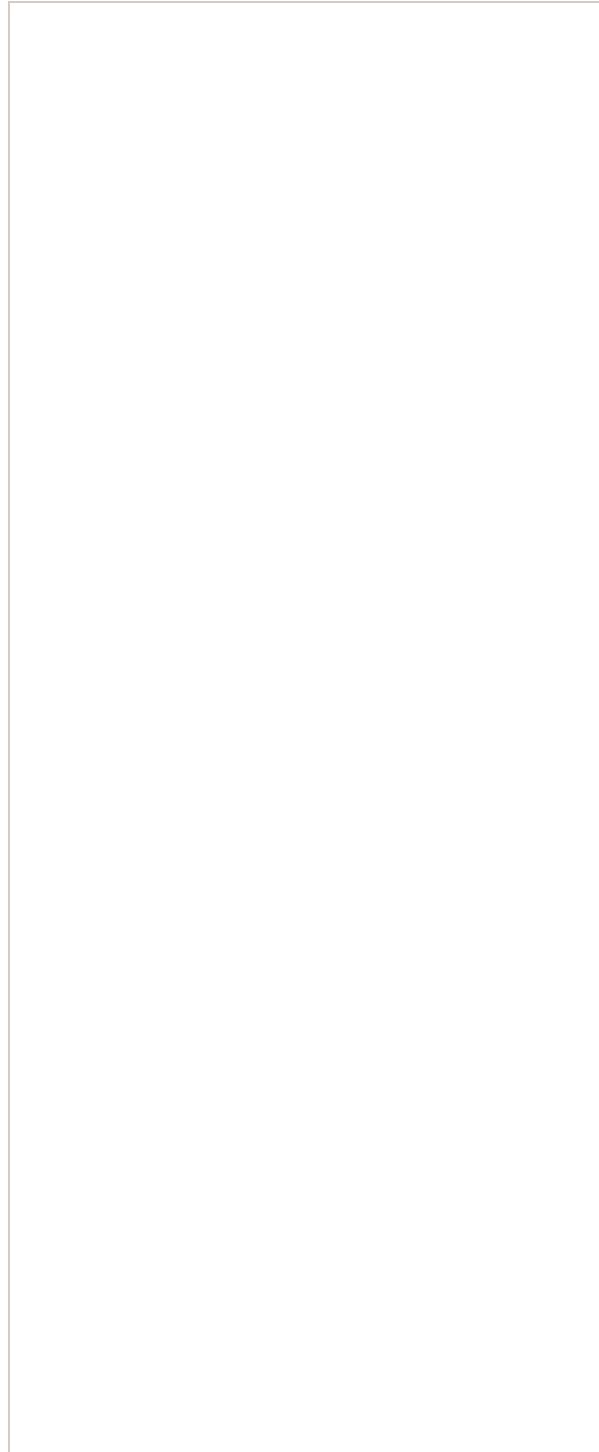
Topography within stakeholder group

The Directorate General for Energy of the European Commission, which is responsible for developing and implementing a European energy policy, aims at:

- Contributing to setting up an energy market providing citizens and business with affordable energy, competitive prices and technologically advanced energy services.
- Promoting sustainable energy production, transport and consumption in line with the EU 2020 targets and with a view to the 2050 decarbonisation objective.
- Enhancing the conditions for secure energy supply in a spirit of solidarity between Member States.

The European Commission, together with the Member States and involving relevant stakeholders, such as national Regulators, TSOs, project promoters etc., was a key driver in a long and comprehensive selection process to determine a list of urgent energy infrastructure projects referred to as Projects of Common Interest (PCI). These projects are defined as having significant benefits for at least two Member States.

The Projects of Common Interest are being identified in Regional Groups, based on 12 priority corridors and areas. Their implementation is regarded as an important intermediate step towards completing the EU internal energy market. The first Union list of Projects of Common Interest was adopted by the Commission on 14 October 2013 per delegated act. The list of all PCI can be found on the website of the European Commission (www.eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013R1391)



ENTSO-E's mission is to promote important aspects of EU energy policy in order to tackle the significant challenges that the European transmission system is facing. ENTSO-E's vision is to be the focal point for all technical, market and policy issues relating to TSOs and the European network, interfacing with power system users, EU institutions, Regulators and national governments.

ENTSO-E's main products include pan-European network codes, the development of an EU-wide Ten-Year Network Development Plan (TYNDP), recommendations for the coordination of technical cooperation between TSOs and summer and winter outlooks for electricity generation. More information on ENTSO-E's recent activities can be found online (<https://www.entsoe.eu/publications/general-publications/annual-reports/Pages/default.aspx>)

The TYNDP, which is developed every two years via a process managed by ENTSO-E, is non-binding and is based on national grid development plans. The TYNDP's objective is to identify cross-border grid investment gaps and to guarantee transparency regarding the European transmission network and its development. It covers models of the European network, scenario development, a European generation adequacy outlook and an assessment of the resilience of the integrated network. Regional Investment Plans (RIPs) complement the TYNDP.

ACER's main role in terms of grid development projects is to promote efficient energy infrastructure, which shall guarantee the free movement of energy across borders and the transportation of renewable energy. Furthermore, ACER coordinates regional and cross-regional initiatives which favour market integration and monitors the work of European TSOs and notably their EU-wide network development plans.

Project stages for engagement

Determination of need

One of the most important specific contributions of European institutions towards grid development projects is their stake in preparing the Ten Year Network Development Plan (TYNDP), a process owned by ENTSO-E. This plan constitutes the European element of each project's first stage, the determination of its need: All projects presented in this plan have been identified as necessary to ensure that the European grid infrastructure furthers the main goals of European energy policy. Therefore, a project presented in this plan has been determined to be necessary at the overall European level.

Because of its importance as a tool for coordinating grid development across Europe, the process behind the development of the TYNDP is complex and thorough. The plan is drafted mainly based on three information pillars: The first pillar is the input of the national TSOs in the form of their national development plans. Additionally, the ENTSO-E Regional groups assess the development projects of their region against several "Visions". These visions are the second pillar of the drafting process as they each describe different possible scenarios of future grid system developments, which are simulated and calculated by ENTSO-E based on pan-European and regional market data. The third pillar of the final TYNDP is the input of different kinds of stakeholders which are concerned by the power grid and/or by its enlargement or improvement. This is done through public stakeholder workshops at key process milestones. Information on how to get involved in these biannual processes can be found online on ENTSO-E's website.

Each project that is suggested as part of the TYNDP has also passed ENTSO-E's cost benefit analysis methodology, which calculates the investment costs and benefits derived from each project, under each of the different scenarios, at a future

- Does a certain project have a strong European dimension?
- What is the outcome of the cost benefit analysis of the specific project I am concerned with? What benefits for the region and for the European energy system are to be expected under certain scenarios?

point in time. The results of these assessments are made available online and are publicly accessible.

All other stages

As European institutions are mainly concerned with the coordination and common alignment of policies, they are not actively involved in the implementation of a certain grid development project.

Furthermore, not every grid development project in Europe has an obvious European dimension. Especially once national TSOs start to implement the projects that have been prescribed in network development plans, the role of European institutions in a project becomes smaller. However, there may be certain circumstances where European institutions may get involved in an active promotion of a development project – if desired by the national TSO and feasible for the respective institution. An involvement of European institutions may be beneficial, for example, where adjacent citizens and/or other stakeholders, who are involved in a project, have a particular interest in the European dimension of a project (e.g. a cross-border project between two Member States). In such a case, European institutions could provide information on the European dimension of a project and give reasons for its need – if possible "European" reasons/European drivers.

- Does a certain project have a strong European dimension?
- Is there a particular interest in the European dimension of a project among the stakeholders concerned?
- If so, how could European institutions provide valuable input to the project, i.e. in particular to project communication?
- If the project has a strong European dimension, how could cross-border communication and cooperation be improved? Could European institutions be involved for this purpose?

Stakeholder National/Regional policy makers

Stakeholder role in grid projects

National/Regional policy makers have a very distinct role in grid projects as these projects are often driven by policy decisions made by relevant officials. These policy decisions include creating incentives for building grid lines, e.g. through direct subsidies or by promoting the expansion of renewable energy production. Policy makers are often also directly involved in the final approval of multiannual energy or grid development plans, as well as of specific priority projects, based on assessment documents such as Strategic Environmental Assessments (SEA) or Environmental Impact Assessments (EIA).

Policy makers may therefore be held accountable for the policy decisions that result in the implementation of new grid projects, and may participate in justifying a project and explaining the reasons behind the decision to build new grids. Indeed, they should play an active role in raising acceptance for projects which they have supported via policy or grid plans.

On a general level, policy makers typically aim to represent the best interests of the general public and, in the case of elected public officials, their constituents. In order to reach an agreement between the public and the project developers, such as the TSOs, policy makers engage in a dialogue with the TSOs to ensure the greatest public benefit of the project on a national and/or regional level. They may also set up public consultations in order to allow for public feedback on a project.

Usual patterns

Project-specific questions

Primary concerns with grid projects

Policy makers are broadly concerned with implementing policy that best corresponds to their political vision; in driving growth, economic well-being and competitiveness in their country and, in the case of elected officials, of representing the interests of their constituents. Ultimately, elected officials are particularly concerned about their constituencies' positions and opinions on grid development projects in their region, as they have the clear mission to represent their electorate. Indeed, elected officials as well as election candidates may tend to liaise particularly with Local citizens' initiatives and other constituent groups.

Regarding grid projects specifically, policy makers have to reflect on the potential needs of a country or region for new grid infrastructure, while keeping in mind the

- Is there a specific benefit for the region/country in constructing new grid infrastructure?
- How can the negative aspects of the project be dealt with in a fair way?

wishes and concerns of the people who may be directly affected by a project.

Topography within stakeholder group

The organisation of policy makers varies in the different countries. However, most countries have Ministries or departments responsible for issues relevant to grid development, such as energy or the environment. National parliaments are also sometimes involved with approving grid plans or projects.

- Is the organisation transparent/effective enough for public concerns to be represented by policy makers?
- How can discrepancies between different public entities represented through policy makers be dealt with, within a governmental institution?

Individuals within stakeholder organisation/entities

Depending on the country, different people may be primarily relevant for grid infrastructure projects. These are likely to be officials in Ministries dealing with energy planning, environmental, infrastructure and economic issues.

Which specific Regional or National policy makers work on policy related to grid infrastructure development?

Project stages for engagement

Determination of need

Policy makers help determine overall need for infrastructure development in, for example, developing or approving multi-year energy plans in cooperation with other stakeholders.

With respect to a specific project, in some countries national authorities are responsible for the Determination of need (e.g. Germany), while in other countries the TSOs identify the need for grid infrastructure and then attain authorisation from national authorities (e.g. Italy).

Are national or regional policy makers directly involved in the Determination of need in the country of a specific grid project?

Project preparation

Spatial planning

Permitting

Policy makers are typically involved in the early stages of a project, though their specific role in approving projects or Project locations depends on the procedure in a particular country.

- What is the role of national or regional policy makers in the MS concerned by a particular grid project?
- Which assessment documents are

Policy makers may also participate in communicating about a given project and explaining how it fits into a country's overall energy plan. Indeed, given their responsibility for policy decisions which help drive grid development, policy makers have an important role to play in justifying and explaining these decisions to the public. In some countries, policy makers may organise public consultations with regards to specific projects.

mandatory before a decision is made?

Adequate channels for participation

Closed-door meetings Roundtables

National and regional policy makers are key participants in – or even organisers of – high-level meetings and Roundtables to discuss national energy and grid plans, to select priority projects and to collect various stakeholders' views. Meetings can deal with high-level plans or with approval of specific projects. These meetings allow for gathering of information, discussion of policy and exchange of views.

Do policy makers plan to organise Roundtables or meetings with multiple stakeholders?

Country-specific examples

Belgium

Grid development plans are determined on a federal level every 5 years, and include an SEA which needs to be approved by the Minister for Energy. However, the TSO decides whether a specific grid project is required, which is later reviewed by the regional government.

Italy

In Italy, the TSO drafts an annual Electricity Grid Development Plan, which is approved by the Ministry of Economic Development. Further, national authorities (the Ministry of Environment and the Ministry of Cultural Heritage) are responsible for the evaluation of SEAs undertaken on a regional level by a collaboration of the TSO and the regional SEA group. If these assessment procedures are validated, the information is distributed to regional authorities and other stakeholder groups.

France

During the Spatial planning and Permitting stages, a regional prefect plays a major role in

coordinating the dialogue between different stakeholders, and the final route corridor needs the approval of either the prefect or the Minister of Energy.

Germany

A prominent example of the government's role in shaping grid development via energy policy can be found in Germany's recent energy transition (Energiewende), which has strongly impacted the need for new power lines. The energy transition was accompanied by a review of the grid development and permitting process, which now increasingly occurs at a national rather than regional level.

Netherlands

The Dutch TSO TenneT drafts two-year national grid development plan, approved by the Regulator. Based on this plan, the Ministry of Economic Affairs develops a strategic "Framework Plan of Electricity Supply" (SEV) that highlights the spatial allocation of new projects, and the national parliament then makes a final decision on included projects and selected corridors.

The Ministry of Economic Affairs also plays a prominent role in approving projects not included in the SEV, organising meetings with regional and local authorities, holding public consultations, and helps makes decisions on Spatial planning and route corridors.

Norway

In Norway, historically the TSO Statnett has itself developed grid infrastructure plans every two years, without much engagement of other stakeholders except for grid owners. However, changes have been proposed for earlier involvement of other stakeholders, and NGO feedback, for example, was included in the last grid development plan. On a national level, the Ministry of Energy plays an important role in the process, signing off on the TSO's project evaluation and making a final permitting decision for a project.

United Kingdom

The Secretary of State for Energy and Climate Change decides whether to grant consent for a project after reviewing the route selection, EIA and other project details.

Stakeholder Environmental NGOs

Stakeholder role in grid projects

Environmental Non-Governmental Organisations (NGOs) are key stakeholders to consider and engage throughout various stages of a grid development project. These organisations are mainly concerned about minimising various negative environmental impacts, and usually have different specific areas of focus, as well as different scopes of activity (e.g. local versus national).

On a general level, Environmental NGOs may often be in favour of grid development insofar as it helps address climate change issues, for example by modernising grids and improving efficiency and by facilitating a transition towards greater use of renewable energy sources.

However, while they may support some aspects of grid development if it indeed serves to respond to climate change, they are also concerned with ensuring that this development follows a “green” vision and that it is minimally disruptive to natural habitats and biodiversity, both generally and on a project-specific local scale.

Environmental NGOs can play a prominent role in a grid infrastructure project, historically often in an opposition capacity but more recently in increased collaboration with TSOs and other stakeholders.

On a national level, Environmental NGOs are increasingly involved in discussions regarding energy and grid development plans, and collaborate with Transmission system operators (TSOs) and public officials to help promote green energy planning.

Environmental NGOs which oppose a local project due to its disruption of natural habitats or other environmental (or potentially health and social) considerations may become vocal opponents to the project. On the other hand, in certain regions, Environmental NGOs increasingly collaborate with TSOs, providing input on environmental issues relevant to a project. Nonetheless, challenges remain with regard to effective collaboration between TSOs and Environmental NGOs, particularly on a local level.

Environmental NGOs can also potentially help provide input into environmental scoping documents prepared in the course of a project, such as Strategic Environmental Assessments (SEAs) or Environmental Impact Assessments (EIAs). They can further help define key environmental issues to be considered during a project, and can highlight potential environmental problems arising from infrastructure, thus helping TSOs to develop an optimal corridor route.

Usual patterns

Project-specific questions

Primary concerns with grid projects

Environmental NGOs’ interests and motivations with regards to grid development can be distinguished between at least two levels: a higher (national or

- Are Environmental NGOs involved in the national-level energy or grid planning process? What is their opinion on grid development?

supra-national) level and a lower (local) level.

Relatively few national or European Environmental NGOs have a strongly negative attitude towards the concept. Indeed, at a higher level, Environmental NGOs tend to believe that some grid development is necessary in order to effectively integrate renewable energy sources and reduce the need for redispatch measures, though they encourage improved planning and maximised efficiency in order to ensure that only necessary lines are built.

In the view of most Environmental NGOs, grid development must be based on a coherent green vision, which includes large renewables integration, energy efficiency solutions and demand-side management. Environmental NGOs also tend to believe that flexible solutions such as storage and demand-side management will help limit the need for new transmission lines during the transformation of the grid.

At the same time, Environmental NGOs usually strongly believe that natural environments should be taken into consideration in grid development, and that protection of biodiversity and habitats should not be compromised in the name of climate change mitigation.

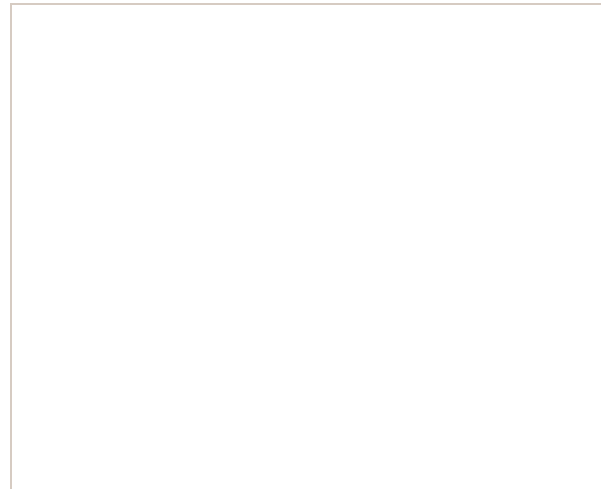
Despite overall higher-level support for grid development, on a local level Environmental NGOs may be concerned about the local environmental impacts of project-specific grid construction. Given the significant potential for grid infrastructure disruption to local environments (e.g. natural environments, habitats, biodiversity and animal populations), local Environmental NGOs may be more resistant to specific projects, and may raise opposition points based on specific local impacts.

Interests and motivations may thus vary between different levels of a large national

- Which Environmental NGOs are active in the region affected by the specific project? (either via local Environmental NGOs or local branches of national organisations) What are their primary concerns, both generally and with regards to the project?
- Do local chapters of national or international Environmental NGOs exist in the nearby area? Are they influenced by the high-level interests of the Environmental NGO at large? Do national-level Environmental NGOs make an effort to communicate with their branches?
- What are the key concerns of the Environmental NGOs most active in the local community and nearby areas?
- Which methods for transparent communication and engagement do relevant Environmental NGOs propose?

Environmental NGO. The national-level organisation may favour well-planned and designed grid development, while local branches may be opposed to particular projects, as they do not meet the expected levels of environmental protection.

When it comes to communication and participation in infrastructure projects, Environmental NGOs strongly value transparency in communication, and are interested in being consulted and given the chance to participate in the decision making process.



Topography within stakeholder group

“Environmental NGOs” is a relatively broad term, and can refer to groups with varying missions and areas of focus. At least three general types of Environmental NGOs can be distinguished with respect to grid infrastructure projects: Environmental NGOs focused on climate change, NGOs for landscape protection (defending the rural landscape) and those NGOs focused on environmental protection (e.g. habitats, biodiversity, birds etc.).

Climate NGOs are primarily interested in, for example, climate change mitigation and greenhouse gas emissions, and may therefore tend to have a generally positive view on grid development efforts and accompanying integration of renewable energy sources and improvements in energy efficiency.

Environment protection NGOs are primarily interested in biodiversity and habitat preservation, and may tend to be more opposed to grid development, due to the disruptive effects of infrastructure construction on the natural environment.

- Which types of Environmental NGOs exist in the local community or the surrounding area?
- Which types are already most active, and which are most likely to react to the announcement of a grid project?

Individuals within stakeholder organisation/entities

National- or headquarter-level Environmental NGO representatives are often the first to be contacted by TSOs, and then refer TSOs to relevant individuals

- Which individuals within the national branch of the Environmental NGO are appropriate contacts for TSOs and could be able to redirect them to the

within local-level branches near specific projects.

local branches?

Project stages for engagement

Determination of need

The Determination of need phase typically tends to involve national-level (rather than local) Environmental NGOs. Also, NGOs can play a role on the European level as there are opportunities to engage with the ENTSO-E Ten-Year Network Development Plan (TYNDP), with the selection of Projects of Common Interest (PCI), and with the shaping of national grid planning (e.g. scenarios used in determining need).

The process of planning EU-level or national-level network development requires the input of higher-level actors, and, as specific route corridors have often not yet been determined, it is often unclear which specific communities will be affected and which local organisations could get involved.

In this very early project stage, national Environmental NGOs could provide technical environmental input into the overall grid development planning, as well as expertise for environmental analyses conducted at this stage.

In order to give NGOs the opportunity to effectively participate in this stage, TSOs and NGOs should jointly agree on structured processes that are designed to make sure environmental considerations are factored into planning. Strategic Environmental Assessments, which are an important part of each grid project, provide such a framework. NGOs can play a useful role in the steering group for an SEA process.

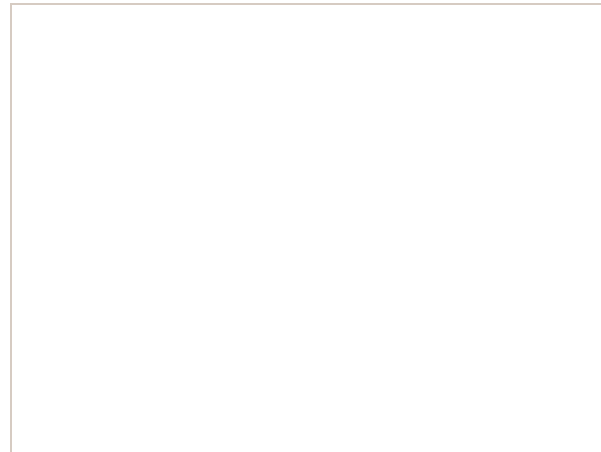
NGOs often have expertise on energy policy, and can therefore contribute to the development of grid development scenarios. In addition, Environmental NGOs can participate in the development of any

- Which national-level Environmental NGOs could get involved in this stage?
- On which issues would the feedback of Environmental NGOs be particularly helpful?
- Are any environmental scoping documents to be produced during this stage?
- How could Environmental NGOs be given the opportunity to participate effectively in this stage?

additional environmental scoping or assessment documents at this stage, if any.

If convinced of the need for certain grid development plans, Environmental NGOs can be effective allies to TSOs during the need determination phase.

Environmental NGOs can also act as important multipliers to the greater public, diffusing information about grid development and associated environmental issues.



Project preparation

At this stage Environmental NGOs and TSOs could start collaborating on a number of issues relevant to a specific project. As key preliminary project decisions may be made in this stage, early input from Environmental NGOs is essential to ensuring that potential environmental impacts and concerns are taken into account, and establish a collaborative rather than confrontational approach to further project development.

The role of Environmental NGOs in the later stages of the project can also be established during the preparation phase. NGOs can also participate in the development of any necessary environmental scoping or assessment documents at this stage (e.g. within the context of an SEA), and can propose preliminary ideas of environmental compensation or mitigation measures.

- On what issues could Environmental NGOs be consulted during this stage?
- Are any environmental scoping documents to be produced during this stage?
- How could Environmental NGOs be involved in the decision making and preparation process?

Spatial planning

TSO collaboration with Environmental NGOs can help identify essential environmental issues to consider in Spatial planning. Environmental NGOs can provide valuable input into studies to define corridor routes, and can pre-emptively identify potential environmental issues arising from poor route choices. NGOs can also participate in the development of any necessary environmental scoping or

- What information could Environmental NGOs bring to the table to best contribute to route and Spatial planning?
- Are any environmental scoping documents to be produced during this stage?
- To what extent can Environmental

assessment documents at this stage, such as for SEAs which accompany development plans for projects in certain countries, and which help determine project routing. Further, they can propose preliminary ideas of environmental compensation or mitigation measures.

NGOs be involved in planning meetings?

- What are potential issues that Environmental NGOs and TSOs can elaborate together or cooperate on?

Permitting

Environmental NGOs can participate in, intervene in or perhaps even co-host public consultations, meetings and other events relating to the project. If an EIA or other environmental assessment document is required at this stage, the Environmental NGOs can provide expert input. At the permitting stage, Environmental NGOs can also propose mitigation or environmental Compensation measures to help reduce the project's overall impact.

If environmental concerns have not been properly taken into account – or they were discussed but the final decision remained unacceptable from an environmental perspective – Environmental NGOs may take opposing action to the permitting process. Effective integration of Environmental NGO input in prior phases is therefore key to a successful permitting stage, and should improve reception of the decisions by NGOs.

- Is there an Environmental NGO willing to intervene at or take part in hosting a public event?
- What are potential issues that Environmental NGOs and TSOs can elaborate together or cooperate on?
- Are any environmental scoping or impact assessment documents to be produced during this stage?
- Is a discussion ongoing on possible Compensation measures and, if so, how can Environmental NGOs be encouraged to offer an opinion on environmental mitigation or compensation?
- Are one or more Environmental NGOs dissatisfied with the consideration of environmental issues? Which opposition actions, if any, are planned?

Construction

During this stage, Environmental NGOs can help monitor construction and warn the TSOs of any unanticipated negative environmental impacts which may arise. They may also propose mitigation measures for these issues.

For wildlife protection, the key issue is timing, i.e. disruptive work or vegetation management should be avoided during spring when birds are nesting. An ongoing dialogue with Environmental NGOs can ensure that particularities of the wildlife in the construction area are considered when

How can the TSO ensure an effective dialogue in order to address Environmental NGO's concerns throughout the Construction stage?

planning the construction procedure.

Operation

Environmental NGOs can help ensure that no unanticipated environmental impacts arise during the Operation stage. They can also make sure that the TSO is following through on proposed mitigation and Compensation measures, where relevant, for the local environment, habitats and biodiversity.

- How can continued input from Environmental NGOs during Operation be facilitated?
- What feedback loops can be established to ensure that feedback is continuously taken into account?

Adequate channels for participation/cooperation

Roundtable

Field visit

Closed-door meeting

Dedicated meetings and small-scale events with Environmental NGOs (and potentially other stakeholders) can be useful to discuss their involvement in the project, to address specific issues, to go over project planning and decisions, to solicit expertise on mitigation and Compensation measures as well as to gather input for environmental scoping documents. A smaller setting with a more expert participant group can facilitate input gathering from Environmental NGOs on particular issues.

- Which other stakeholders could participate at meetings or Roundtables with Environmental NGOs?
- Which topics should be discussed during private meetings rather than public events?

Roundtable

Permanent environmental expert group

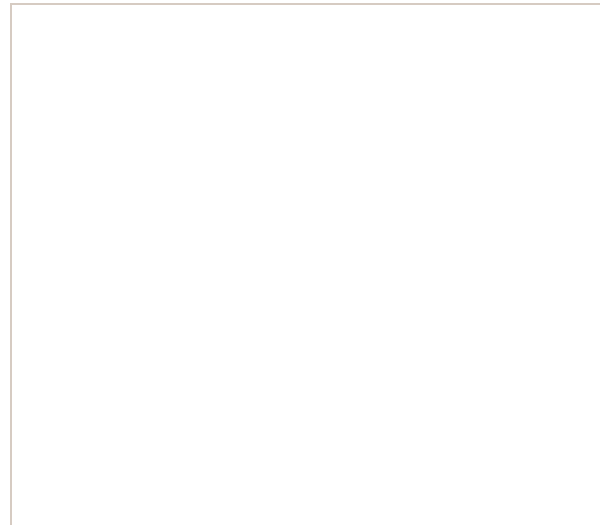
Certain environmental impacts are inherent to most grid development projects. It may therefore be useful to set up a general research scheme to investigate approaches for reducing and mitigating this impact fundamentally and not only for a certain grid development project. Cross-regional cooperation of this kind can also contribute to fostering all other kinds of cooperation between Environmental NGOs and TSOs, build trust, and raise mutual awareness of their respective concerns.

There are good examples (e.g. in Germany and the UK) for successful joint expert groups with members from both TSOs and

- Are there any manifest topics on which TSOs and Environmental NGOs can form a permanent expert group in order to mitigate certain environmental impacts? If so, what would be the respective conditions/requirements of such cooperation?
- Is there a possibility to foster international research cooperation on these issues?

Environmental NGOs who work together on reducing the environmental impact of grids in general. The subject of the research groups could cover different issues, such as, for example, the effect of different pylon or wire designs on birds, further research on the impact of underground cables or environment-sparing construction processes.

Such findings can be useful to different projects in various regions and countries. Conceivably, such expert groups could even work internationally and share their results.



Public space events

Town hall meetings

Environmental NGOs are often invited to participate in public project events in order to gather their input. This participation in public events may complement individual meetings, and may allow Environmental NGOs to present their views in front of a wider public, in order to inform the general debate and increase transparency.

- What role can NGOs play in a public event or meeting?
- How can opposition at public meetings be minimised by ensuring effective dialogue beforehand and anticipating concerns of Environmental NGOs?

Country-specific examples

Germany

In Germany, Environmental NGOs are generally well-integrated into the power grid development debate – both into the overall reflection on grid development at the policy level and into specific projects at a local level. Environmental NGOs and TSOs have – for example – established cross-cutting, permanent expert panels and discussion groups to investigate the mitigation of hazardous impact of power lines on the environment. Moreover, several German Environmental NGOs are represented in policy-level initiatives like BestGrid or the Renewables Grid Initiative (RGI).

Hungary

Successful cooperation of Environmental NGOs and TSO in Hungary occurs where MAVIR, the Hungarian TSO, showed interest in the concerns of NGOs and expressed this interest through volunteering for them, supporting their agenda financially and developing specific measurements to allow for compatibility between environmental needs and new power grids: e.g. the placement of artificial bird's nest platforms on power line pylons.

UK

National Grid, the British TSO, has been working with Environmental NGOs in the past to establish grid trajectories that would reduce the environmental impact of the project, by including the NGOs' expertise on local wildlife and habitats into the project planning. While some of these dialogues have broken down due to disagreements, others have led to successful collaboration.

Stakeholder Regulators

Stakeholder role in grid projects

In the electricity and gas market, Regulators (regulatory agencies) are responsible for ensuring non-discriminatory third-party access to networks and regulating the fees. They are obliged to ensure network security and supply.

Their primary duty is to protect the interests of consumers, where possible by promoting competition. Consumers' interests are understood in the broadest sense, taking into account the reduction of greenhouse gases and the security of the supply of electricity, and not only prices. The Regulator for electricity typically covers the gas market, too.

Each country in Europe has its own regulatory agency, e.g. Ofgem for Great Britain, BNetzA for Germany, CREG for Belgium, CER for Ireland etc. ACER is the European Agency for the Cooperation of Energy Regulators.

Regulators have an influence in the general planning of new grid lines. They identify investment gaps within their national power lines (and at a European level with respect to cross-border capacities). Usually, TSOs develop their investment plans on a regular basis and it is the duty of the Regulator to assess these plans and monitor their implementation. Because Regulators have to sign off on TSOs' investment plans, they play a role in determining the resources TSOs can allocate for choice of technology (e.g. cable types), stakeholder engagement and other aspects of the project.

In some countries, e.g. Germany under the grid development acceleration law NABEG, Regulators can also have the role of Permitting authorities on a national level.

Usual patterns

Project-specific questions

Primary concerns with grid projects

Regulators assist in the determination of the need for new grid lines and assess the progress of all national and international grid development projects. The precise responsibilities of the national Regulators differ from country to country.

Since Regulators seek to ensure network stability and the safe supply of energy, they have an interest in a fast and conflict free grid development once their need is determined.

Regulators are responsible for ensuring non-discriminatory third-party access to networks and to promote competition. For this reason, they may promote certain grid

- Is the grid development project a national or international one?
- Which Regulators are involved and what is their role?
- Does the Regulator have a particular interest in seeing the grid project in question succeeding? For example, is it aligned with the Regulator's broader goals of promoting competition and consumer interests?

development projects more actively.

Topography within stakeholder group

There is one national Regulator for each Member State which usually covers the electricity and gas markets. ACER is the European Agency for the Cooperation of Energy Regulators. In some countries, e.g. Germany, certain regulation activities can be executed by regional or federal regulatory authorities.

- Are Regulators from different levels (EU, national, regional) involved in a specific project?
- Which department, unit, or individual is responsible for engaging with the particular development project?

Project stages for engagement

Determination of need

Regulators play an important role at the stage of Determination of need. Depending on the country specific laws, their role is typically to support, to guide and to monitor the development of new grid development projects at this early stage. In certain countries, for example in Germany, Regulators' responsibility extends into later project stages as well.

Can the Regulator be engaged to communicate with a broader audience regarding the overall process which a grid development project has gone through and will go through, providing essential information to other stakeholders?

Adequate channels for participation/cooperation

- Public space events
- Town hall meeting
- Roundtable

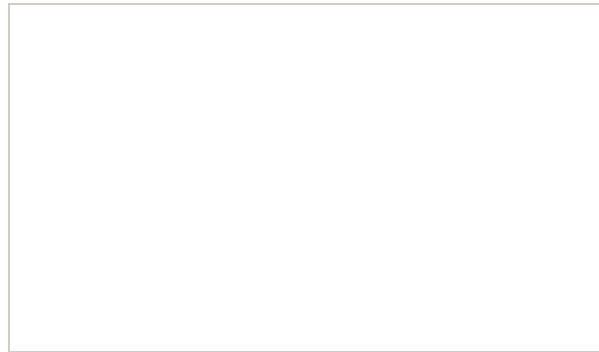
Regulators can host their own events or take part in events organised by TSOs.

Events organised by Regulators are typically about the work/role of the Regulator itself, the general need for grid development projects or the Presentation of network development plans. Regulators may also organise events as a means to foster public participation in grid development projects, an activity which also falls under their remit.

For TSOs, it can be a good idea to invite representatives from the Regulators to one of their events. This can serve two aims: First, Regulators can explain their efforts to

Who are the right representatives to invite for a public event? What can they contribute?

protect consumer interests and to promote competition. They can also answer questions from the audience regarding their agency and its work or explain the decisions related to their work. Second, taking part in these events helps the Regulators to understand the concerns of the public and to consider these concerns in their decisions where appropriate and possible.



Country-specific examples

Germany

In Germany, the national Regulator BNetzA plays a very important role in drafting the national grid development plan. They supervise the work of the four TSOs, ensure public consultation and participation at several early stages and approve the final plan to be presented to the federal government.

Stakeholder Permitting authorities

Stakeholder role in grid projects

In the process of grid development there are different public authorities involved in granting permissions to certain aspects of the project. In the narrow sense, Permitting authorities are the last instance to grant permission to the precisely defined grid line at the end of the permitting stage of the project. These authorities may operate on a regional or national level, depending on the permitting system of the country involved. On a broader level, Permitting authorities are also involved when the general decision for the project need is made and the project as such is granted permission. The authorities permitting this high-level long distance grid development commonly operate on a national level.

Permitting authorities in the narrow sense lead the plan approval procedure of each grid development project. They define the requirements of the plan application documents and the procedure in general. In case of a conflict between stakeholders, e.g. NGOs and TSOs or LCIs and TSOs, Permitting authorities intervene, they contribute to finding both rightful and pragmatic solutions and act as intermediary.

Permitting authorities are responsible for the consideration of all legal requirements related to the implementation of a grid development project. Important legal restrictions relate to emission law, building law and environmental law. At the end of the permitting stage, the responsible authority decides on a certain corridor, having considered all legal requirements and taken all concerns of affected stakeholders and responsible expert authorities into consideration. To be able to do so, they should meet precautions to guarantee a dialogue with all affected stakeholders of all levels at an early stage. Usually, public participation takes place at several stages of the grid development procedure. As Permitting authorities are the final decision-makers, it is part of their responsibility to ensure that the procedure follows the legal requirements for public participation and that all relevant stakeholders had sufficient time and chance to voice their concerns.

Usual patterns

Project-specific questions

Primary concerns with grid projects

The major concern of Permitting authorities is the rightful application of all laws and regulations relevant to the entire grid development process.

Important legal restrictions relate to emission law, building law and environmental law.

Permitting authorities, as most stakeholders, have an interest in a preferably quick and blockade-free grid development procedure, characterised by consent through broad (public) participation of all stakeholder groups. In case of planning conflicts, the Permitting authorities

- Which authority/authorities are the responsible Permitting authorities for a certain grid development project?
- How can stakeholders be and get involved in the public participation process?
- What are the binding laws and regulations of a grid development project?
- What procedures can ensure that all relevant laws and regulations are met

act as intermediaries.

without delaying the procedure?

- What are sources of potential conflicts? How can they be eliminated and what solution can satisfy all stakeholders best?

Topography within stakeholder group

Within one Member State, the competences of Permission Authorities are usually standardised and statutorily regulated. Differences between Member States occur regarding the distribution of competences and duties among authorities on the regional and national levels.

Which permitting authority is in charge of the project?

Individuals within stakeholder organisation/entities

There are different contacts for the different stakeholders and individuals. The relevant contacts for TSOs are mainly the committees in charge of the permission process of a grid development project. The relevant contacts for affected individuals, NGOs, LCIs etc. relate to the public participation part of a grid development project.

Who are the right people to be contacted for a specific need?

Project stages for engagement

Determination of need

Permitting authorities on a national level have to make sure that new grids are only developed if needed. In certain countries, they may be the last instance to check that the Determination of need followed all necessary guidelines, laws and they were thoroughly elaborated. This requires a close collaboration of TSOs, academia and experts, Power producers, national and regional authorities and a diligent harmonisation with the needs, developments and capacities of other Member States. Before granting permission and deciding on the need of a certain grid development project, Permitting authorities have to ensure that these consultations and procedures took place and that all other applying laws and regulations were

Are Permitting authorities involved in the development of the national Network Development Plans?

considered.

Spatial planning and Permitting

At the stages of Spatial planning and Permitting, once the Determination of need has taken place, Permitting authorities on the local level, TSOs (and Regulators) are obliged to find and approve the optimal corridor until the end of the plan approval procedure. This corridor should – whilst being economic – be the one with the lowest "resistance", meaning that which is least harmful to the environment and landscape, and which, to the extent possible, best responds to the public's other concerns (e.g. health, safety, visual impact, impact on property, etc.). It will be chosen from a selection of different corridors in broad consent with NGOs, LCIs, local and regional authorities, politicians and any other local groups that are relevant to the issue of potential grid development in the area. An involvement of all relevant (local) stakeholders, among them NGOs and local authorities, is very important.

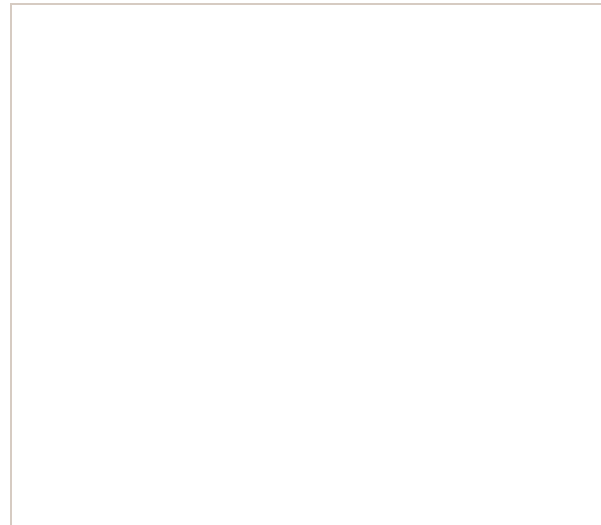
An early consultation of all stakeholders can be crucial for the success of the entire grid development project and prevent conflicts. It is the responsibility of the Permitting authorities together with the project developers to ensure and foster public participation at the stage of Spatial planning and permitting. The project developers should make every effort to consider and actively deal with corridor and project alternatives suggested by the public – wherever it falls under their responsibility (e.g. the grid technology used or the choice of overhead vs. underground lines might not fall into the responsibility of local authorities or the TSO). Not considering LCIs' and NGO's suggestions in a serious manner can quickly lead to blockade tactics, cause delay and reduce public acceptance for the project and grid development in general.

At the same time, asking all relevant stakeholders to assist in choosing the best

- Who and what locations are potentially affected by a grid development project?
- How can potentially concerned stakeholders be constructively involved by the project planners?
- How can potentially concerned stakeholders involve themselves and communicate their concerns and needs in a constructive way?

corridor option is an excellent opportunity for TSOs to call for constructive contributions from stakeholders who might know local peculiarities better than the project developers. It is crucial that the Permitting authorities, as a last instance, ensure that such public consultation takes place.

All stakeholders that are potentially concerned by a grid development project should make sure to get involved at this stage to make the planners of the project aware of all stakeholders' concerns and needs.



Adequate channels for participation/cooperation

Town hall meeting
Roundtable
Closed-door meeting
Field visit

It can be worth inviting or even officially involving representatives from Permitting authorities into different events related to stakeholder participation such as Roundtables, Closed-door meetings and Field visits.

On an active level, representatives from Permitting authorities can interact with other participants of the events and answer questions related to their role and the whole procedure.

On a more passive level, participation in relevant events can help the Permitting authorities to understand the current state of public acceptance; it can give indication to potential conflicts and thereby help the Permitting authorities to prepare their statements.

- How can Permitting authorities be involved in public participation events?
- What kind of contribution can be expected from Permitting authorities? Is active involvement needed?

Website

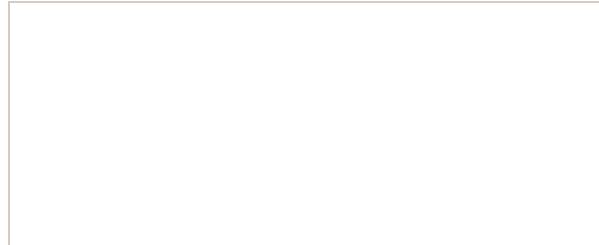
The Website of a Permitting Authority is a very important channel to inform the broad public about the authorities' role, pending planning approval procedures and relevant contacts for all stakeholders.

How can the content of the Permitting authorities' website contribute to the authorities' goals and role in the grid development project?

Adequate formats for participation/cooperation

Brochure/Flyer/Leaflet/Fact sheet

Brochures, Flyers, Leaflets or Fact sheets printed and distributed or included in the authorities' website can help to raise public awareness for the role of Permitting authorities which results in a deeper involvement and cooperation with other stakeholders and a smoother procedure.



Country-specific examples

Germany

Deciding for the “Energiewende” (energy turnaround) in 2011, the German government – partially and under certain circumstances – shifted permitting competences from the regional to the federal level through a new law. Additionally, all phases of grid development projects require increased stakeholder consultation which is to be ensured by the Permitting authorities. The new law also introduced a procedure for a national ten-year grid development plan which considers all important information to determine the future needs for grids. This plan is to be permitted on a national level. The grid development plan is drafted by all four TSOs and supervised by the German Regulator, Bundesnetzagentur (BNetzA). External stakeholders, including the public, can get involved at a very early stage of the procedure.

United Kingdom

Relevant Permitting authorities are the National Infrastructure Directorate and local authorities. The National Infrastructure Directorate holds meetings to discuss a project during Spatial planning and decides on the final permission three months after the application documents have been handed in. Local authorities are consulted on the communication strategy and are involved before the final application is handed into NID. The findings of Key Stakeholder Groups, Thematic Groups and Community Forums are considered in their consultation advice.

Stakeholder Power producers

Stakeholder role in grid projects

With regards to electrical power, Power producers are typically private sector companies that own and operate power plants for the production of electrical energy. They can be divided into two groups. First, those that have a high share of renewable energy production in their portfolio (for example from wind energy), and second those that primarily produce electric power with traditional energy sources such as coal, lignite and gas. The first group typically has a genuine interest in the extension of grid lines since this helps to connect their power plants to the consumers. Along with some big players, several smaller players owning few or sometimes even only one power plant exist in this group. The second group's interest in grid development projects is typically less strong if grid projects are not primarily targeted at the renewal of old grid lines or the connection of remote areas. In this group typically only larger players exist.

The first group can act as promoter of grid projects, especially when it comes to showing how grid development projects benefit the integration of renewable energy. In addition, both groups can contribute with the experience and expertise on communication activities they have gained while building new power plants since typically similar communication issues and patterns occur in those projects as in grid projects.

Usual patterns

Project-specific questions

Primary concerns with grid projects

Since Power producers are usually privately owned companies, their primary interest is that their power plants operate profitably. At the same time, especially large-scale renewable power plants, such as wind parks, highly depend on new high-voltage lines that connect them to the consumers and enable Power producers to operate their plants at a sufficient capacity utilisation rate. Hence, Power producers with a high share of renewables in their portfolio have a genuine, strong interest in the fast and smooth development of grid projects. Power producers with a high share of conventional energy production in their portfolio also have an interest in well-functioning grids. While they do usually not benefit directly from new grid lines targeted at the integration of renewables, they are typically in favour of grid projects that replace old lines, remove bottlenecks and connect remote areas.

- Do the Power producers potentially affected by a specific grid project have a high share of renewables in their portfolio?
- Does the specific grid project also benefit Power producers with a low share of renewables, e.g. by building new lines to formerly badly connected areas or renewing inefficient old lines?

Topography within stakeholder group

Typically, several Power producers are active within the domestic markets of EU countries. Usually the market is dominated by one to four main big players. In the renewable energy sector however, smaller players have entered the scene and have increasingly gained importance during the last years. This is due to the fact that the upfront capital costs of power plants for renewable energy production are small compared to traditional power plants.

In addition, Power producers sometimes form national or supra-national business associations to represent their interests, on a national or EU level.

- How many Power producers exist in the market affected by a specific grid project?
- Are Power producers in the market affected by a specific grid project organised in national/ supra-national associations?

Individuals within stakeholder organisation/entities

Similar to TSOs, two groups of individuals within Power producers are most important with regards to grid projects. On the one hand, the high-level management of Power producers typically decides on the energy portfolio of the Power producer. On the other hand, Power producers usually have staff focusing on communication activities. If a Power producer has a high share of renewable energy in its portfolio, the communication staff typically also focuses on raising acceptance for grid projects that enhance the integration of renewable energy. In addition, the construction of power plants, including those for renewable energy production, often faces similar concerns and doubts from local affected stakeholders as grid projects. Hence, the respective communication staff has often accumulated significant experience and expertise on raising acceptance among local affected stakeholders.

- Who are the most important members of the high-level management of Power producers affected by grid projects?
- Who are the most important members of the communication staff of Power producers affected by grid projects?

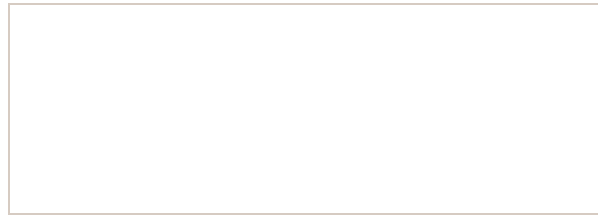
Project stages for engagement

Determination of need

Power producers are typically not involved in the actual development of grid projects per se. However, as Power producers are

- To which steps in the project-specific “Determination of need” stage can the Power producers contribute?

one of the main players in the energy value chain, they have significant insight into the potential development of the energy market and the needs of the supply side in this market. It is therefore crucial to involve them at the “Determination of need” stage.



Project preparation
Spatial planning
Permitting
Construction
Operation

In addition to their direct participation at the “Determination of need” stage, Power producers can contribute to communication activities at all further stages with the experience and expertise they have gained in their own projects.

- What is the concrete expertise of the Power producers affected by a grid project with regards to communication activities?
- In which way are the Power producers affected by a specific grid project willing to contribute throughout the process of a specific project?

General concerns

As private sector companies, the general concerns of Power producers surround the economic profitability of their operations. Especially in the field of renewable energy production, Power producers still depend on subsidies and hence on the political will for supporting these. Therefore, they have a major interest in shaping the political debate and the public opinion on energy production in general and renewable energies in particular.

Have Power producers affected by a specific grid project tried to shape the public debate regarding renewable energy?

Adequate channels for participation/cooperation

Project website

Power producers often have elaborate websites on which they explain relevant aspects of energy production and supply. If applicable, these websites often have detailed information on the integration of renewables. It therefore makes sense to put links to the relevant Power producers’ websites on the website of a specific grid project.

- Do the Power producers affected by a specific grid project have websites that can, for example, show the link between grid extension and integration of renewables?

Roundtable
Closed-door meeting

Power producers have specific expertise which is important for grid projects but typically do not directly participate in their execution. Tapping this expertise should ideally take place through channels that allow for direct interaction in order for the other stakeholders to receive as concrete information as possible. A Power producer can, for example, be invited to Roundtable in which other stakeholders such as TSOs, NGOs or local Adjacent communities participate. There the Power producer can explain from its perspective why a certain grid project helps to integrate renewables.

- Which channels have been used so far for interacting with the Power producers affected by a specific grid project?
- Through which channels are the Power producers affected by a specific grid project willing to contribute with their expertise?

Adequate formats for participation/cooperation

All

While Power producers typically do not take a driving role in grid projects, they can contribute to the activities undertaken with their expertise and experience. It might, for example, make sense to ask them for a contribution to a Presentation or a Brochure/Flyer/Leaflet/Fact sheet in which they explain the supply-side position on why grids are needed.

- With the help of which formats have the Power producers affected by a specific grid project contributed so far?
- With the help of which formats are the Power producers affected by a specific grid project willing to contribute?

Country-specific examples

EU

Some EU-wide associations for producers of renewable energy such as EWEA (European Wind Energy Association) take an active role in promoting grid extension by participating in EU-wide forums and presenting their position to political decision makers. Since they can credibly advocate that grid extension helps the integration of renewables, it also makes sense for project developers to involve them in their communication activities.

Stakeholder Industrial consumers

Stakeholder role in grid projects

Industry is a key electricity consumer in the EU. Indeed, in 2010, according to the EEA, the industrial sector was the single largest electricity consumer, accounting for 36.5% of total final consumption, with households and services following at about 30%.

Industrial consumers are therefore quite sensitive both to reliable supply of electricity and to fluctuations in electricity prices. The extension of grid lines can impact both aspects since they can make energy transmission more efficient and reliable. Grid extension projects are hence of great importance especially to Industrial consumers located far away from the main centres of power production since electrical power needs to be transmitted crossing a long distance to reach them.

While Industrial consumers are not likely to be one of the key stakeholders involved in a specific grid project at a community level, they may be involved in discussions on EU or national energy planning decisions, which will then impact implementation at the local level. Nonetheless, should an Industrial consumer be present in a region affected by a project, it may help drive public opinion for or against the project, depending on whether the project fits into an overall grid plan which the industry supports.

Usual patterns

Project-specific questions

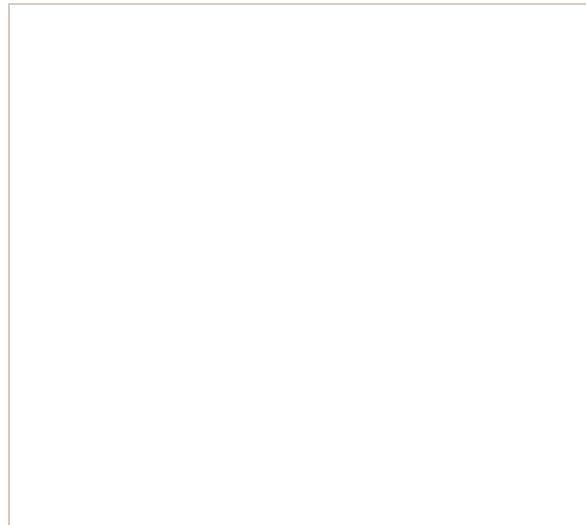
Primary concerns with grid projects

As private sector companies, Industrial consumers are primarily interested in the economic profitability of their business models. Hence, boosting productivity, as well as reducing operating costs while maintaining quality of production, is key concerns for them.

As energy prices represent a substantial proportion of production costs for many energy-intensive industries, they play a key role in determining industrial competitiveness. More specifically, the mix of energy sources (nuclear, renewable, conventional), the grid's technical functionality and energy-related fiscal policies (subsidies, taxes, etc.) all influence industrial electricity prices and impact competitiveness. Further, security of supply is significant to Industrial consumers, for whom transmission congestion, stresses during periods of peak demand and supply disturbances and

- Will the project itself have any impact on either the security of supply or prices of electricity for industry in the region?
- Which needs have the specific affected Industrial consumers identified with respect to grid development?

failures – even momentary ones – have tangible impacts on their productivity and their bottom line. Since, grid extension can help improve transmission efficiency, security of supply and reduce electricity prices; Industrial consumers are typically supportive of grid extension projects. However, they are also typically interested in limiting the part of the costs incurred by grid extension projects that has to be borne by the Industrial consumers. Further, while industry may be generally supportive of using green energy sources, it may oppose introduction of renewables if this translates into substantially higher prices.



Topography within stakeholder group

Industrial consumers can be mapped according, for example, to their specific industry, and the size and geographic scale of their operations. These factors can help determine their energy demand, and understand their specific needs with regards to electrical grids.

In addition, Industrial consumers often form associations on the regional/national or even supra-national level which can represent their interests to policy makers and other stakeholders.

- What are the key industrial actors in the country / region in which the project is to take place?
- How energy-intensive are the main industrial activities in the country / region?

Individuals within stakeholder organisation/entities

Especially the staff members of Industrial consumers responsible for PR and communications are of importance to grid projects. They are typically the ones involved in lobbying for the interests of Industrial consumers and take part political forums focusing on grid development.

Who are the specific staff members responsible for PR and communications at the Industrial consumers affected by a grid project?

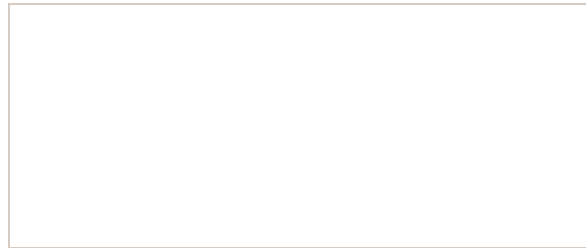
Project stages for engagement

Determination of need

Industry representatives are most likely to contribute to EU- or national-level discussion on grid planning at the earliest stages of need determination. As the largest electricity consumer, they may

Are industry associations or other representatives involved in the dialogue on grid planning? In what capacity? On what level (EU, national?)

provide a key consumer perspective on grid development and provide guidance on industry's needs and considerations, notably with respect to energy prices and security of supply including their macro-economic effects on country-level and EU-level industrial competitiveness.



Project preparation
Spatial planning
Permitting

If an Industrial consumer happens to be directly affected by a particular project, it may voice an opinion in the debate, for example to its employees or to local consumers of its products. However, Industrial consumers are generally not key actors at these stages of a project.

- Are any Industrial consumers directly affected by a local project?
- If so, how may they voice their opinion on the project and to whom?

Adequate channels for participation/cooperation

Roundtables
Closed-door meetings

TSOs, public authorities and other stakeholders may wish to consult and exchange with Industrial consumers during private meetings, in order to make decisions on grid planning and development including the consumers' perspective. Industry representatives may also be present at larger events and Roundtables in order to ensure that their position and input on grid development is taken into account.

At which EU- or national-level events (conferences, Roundtables, meetings, etc.) can industry representatives present their perspective and their needs with regards to a specific grid project?

Adequate formats for participation/cooperation

Brochure / Flyer / Leaflet / Fact sheet
Presentation

Text- or visual-based formats can be useful for informing Industrial consumers of relevant grid project information, and particularly of overall grid development policy. Such formats may be used to communicate preliminary information in order to establish a dialogue, or to summarise conclusions reached or decisions made during exchanges with

- In what context would Industrial consumers access print-based information about grid development projects?
- Which information would be useful to communicate via such formats, as opposed to more interactive formats?

Industrial consumers.

Country-specific examples

Germany

Germany is the showcase for a country where the centres of energy consumption, mostly situated in Germany's South and West, are located far away from the centres of energy production, mostly situated in Germany's North and East. This situation was even aggravated by the expansion of renewable energy production. Therefore, Germany's Industrial consumers have been a vocal advocate of grid extension throughout the last years. This also included strong lobbying efforts to keep the share of the costs incurred by grid extension projects that has to be borne by Industrial consumers to a low level.

Poland

In Poland, Industrial consumers were also largely supportive of grid projects. Different from Germany, Poland only has a very limited share of renewables in its energy portfolio but Industrial consumers suffer from relatively old and inefficient grid lines.

France

In France, RTE has established a "Grid Perspectives" Committee, which brings together representatives of RTE customers -- including Industrial consumers -- as well as NGOs and public institutions, to help the TSO develop an appropriate ten-year investment plan. This experience demonstrates that Industrial consumers can be actively involved in exchange with other stakeholders while high-level grid development decisions are being made.

Stakeholder Private consumers

Stakeholder role in grid projects

The residential sector represents the second most consuming sector in the EU after the industrial sector, with nearly 30% of the EU's final electricity consumption. Consumers are also an important source of revenue for electricity producers and, indirectly, the organisations that develop and maintain the grids.

Similar to Industrial consumers, Private consumers are interested in low electricity prices.² In many European countries, Private consumers have also shown a preference for electrical power stemming from renewable sources. Grid extension projects typically help to integrate renewables and can also contribute to enhancing energy trade markets, potentially reducing energy prices for consumers. At the same time, grid projects incur costs which typically have to be at least partly borne by Private consumers. Private consumers may also be sensitive to the issue of security of supply, particularly in countries or regions which have experienced blackouts or disruptions in supply.

Since Private consumers involve the largest number of individuals of any of the stakeholder groups, they are highly important due to their combined purchasing as well as electoral power. While Private consumers – if they do not form part of other affected stakeholder groups – usually do not have a strong interest in specific grid projects, their representatives may be involved in discussions on EU or national energy planning decisions, which will then impact implementation at the local level. At the same time, energy prices are a highly contentious issue in national politics which can even change electoral outcomes. The interests and positions of Private consumers hence cannot be ignored by other stakeholders, such as elected officials, thus influencing their actions and positions.

In addition, even Private consumers who are not directly affected by grid development projects may be influenced by information on the subject presented in the Media. Media representations of the general discussion on grid development, as well as of specific projects, may have an impact on the way they are perceived by Private consumers and may lead to particular opinions on the issue amongst consumers.

Usual patterns

Project-specific questions

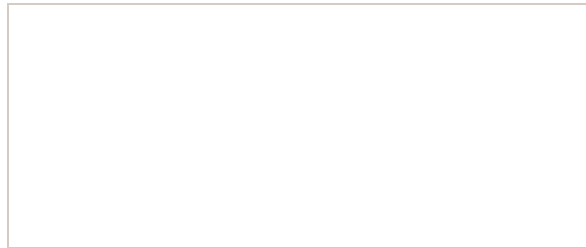
Primary concerns with grid projects

Private consumers have a variety of concerns. Typically, their most important concerns centre on the affordability of electricity prices. Private consumers usually wish to avoid significant increases in private electricity bills stemming from incurred during grid extension projects. At the same time, in a number of EU Member

- Will the project itself have any impact on either the security of supply or prices of electricity for Private consumers?
- Are the needs of Private consumers identified with respect to the specific grid project?

² For the purpose of this profile, only the private consumers that do not overlap with other stakeholders, e.g. local adjacent communities, shall be looked at

States, Private consumers favour the increased integration of renewable energies. In Member States where power blackouts have happened in recent times Private consumers are also typically sensitive to the issue of security of power supply.



Topography within stakeholder group

Private consumers can be categorised based on which concerns prevail for them. Typically, less wealthy Private consumers are most interested in keeping electricity bills at affordable rates. In contrast, for wealthier consumers electricity bills may be somewhat less important whereas aspects such as the integration of renewables gain importance.

In addition to individual consumers, in some countries, associations have been founded to represent the consumers' interests at a national or supra-national level.

- What are the key consumer associations in the country / region in which the project is to take place?
- How will energy demand from Private consumers develop in the country/region affected by a specific grid project?
- How important is the potential impact on electricity bills for the Private consumers potentially affected by a specific grid project?

Individuals within stakeholder organisation/entities

Private consumers are a very heterogeneous group in which specific individuals typically cannot be identified as more important for communications than others. However, where consumer associations exist, communications staff may exist and could be responsible for communications relating to grid development among other topics. Consumer associations likely deal with a variety of subjects of interest to consumers, among them energy and electricity.

- Who are the main contact persons at consumer associations dealing with grid projects?
- How engaged/active are those associations in grid projects?

Project stages for engagement

Determination of need

At this stage of the project, Private consumers as well as consumer associations should be invited to participate in the discussion and to provide inputs for determining the need for new

Are consumers associations or other representatives involved in the dialogue on grid planning? In what capacity? On what level (e.g. regional, national, EU?)

grids. Involving Private consumers at this early stage helps establish a climate of transparency and trust and ensures that the interests of this sizable stakeholder group are included adequately.

Operation

The input of consumer associations is essential at this stage of the project to effectively detect possible disruptions to service or to monitor whether consumers can really benefit from the grid extension in a fair and appropriate manner. Consumers can also signal the effects of grid extension on household electricity bills.

- Are Private consumers directly affected by a local project?
- If so, how may they voice their opinion on the project and to whom?

Adequate channels for participation/cooperation

Roundtables

Closed-door-meetings

Consumer associations can be engaged at closed-door-meetings and Roundtables, especially those surrounding the “Determination of need” stage, in order to ensure that their position and input on grid development is taken into account.

At which national- or regional-level events (conferences, Roundtables, meetings, etc.) can consumer associations present their perspective and their needs?

Media

Project website

Since Private consumers are a large, heterogeneous group they are best addressed by supra-regional traditional mass Media (including newspapers, television, and radio). Through this channel they can be informed about all relevant news on plans for grid extension and the potential relevance for Private consumers’ interests. The way in which such information is presented in the Media can also influence consumers’ general attitude towards grid development or specific projects, even if they are not directly affected. In addition, Project websites can include sections of general interest to Private consumers, e.g. the impacts of grid projects on electricity prices and supply.

Which Media outlets (television, radio, newspaper, etc.) provide the best access to the desired Private consumers?

Adequate formats for participation/cooperation

Presentation

Infographics

As most Private consumers are non-experts, information that combines both text and visual elements can be particularly useful to communicate information about the grid project.

Which information on a specific grid project requires visualisation in order to be easier understandable for Private consumers?

Country-specific examples

Germany

In Germany, both the integration of renewables and electricity prices play a strong role for Private consumers. Following Germany's decision to strongly foster the expansion of renewable energy production, Private consumers have shouldered much of the resulting costs, as larger Industrial consumers have been largely exempted from surcharges. While German citizens largely support the transition to green energy, many are struggling with electricity prices that are amongst the highest in Europe, and are calling for costs to be distributed fairly amongst different consumers.³

Poland Bulgaria

Integration of renewable energy sources often tends to be less of an issue for consumers in Central and Eastern European Member States such as Poland, while a modern, functional grid and interconnection may be more important issues for these consumers. In addition, a large share of the population of Central and Eastern European EU Member States is rather sensitive to rising electricity bills, as for example protests against increases in energy prices in Bulgaria have shown.⁴

Spain

In Spain, 18% of the electricity generation is produced using wind power. Several grid extension projects have been carried out during the last ten years, most of them controversial, in order to introduce those renewable sources to the system and to improve its resilience over the intermittency of the renewables electricity production. In order to better explain to the citizens the importance of carrying out grid extension projects, an itinerant Exhibition was organised in 2010 in which the Grid operating was explained, as well as the importance of adopting more sustainable behaviours of energy consumption. The Practice Example "Itinerant Exhibition by REE", which is part of this toolkit, explains REE's successful approach in detail.

³ See, for example, <http://www.dw.de/survey-finds-germans-want-shift-to-renewables/a-17167037>.

⁴ See, for example, <http://www.economist.com/blogs/easternapproaches/2013/02/bulgarias-electricity-prices>

Stakeholder Adjacent communities

Stakeholder role in grid projects

In the context of grid development projects, Adjacent communities comprise the citizens *at large* who live in the municipalities that are directly adjacent to the power grid project under development. Owners of project land do count towards the Adjacent communities as well; however there is a separate part in this toolkit for Land owners.

Citizens of Adjacent communities are immediately affected by the project in their daily lives and environment. In many cases of power transmission projects, they tend to bear much of the immediate costs and little of the ultimate benefits that are associated with a grid link. The benefits (e.g. a higher share of renewables in a country's power mix) tend to be rather abstract and global – while the costs (e.g. visual impact of overhead lines) tend to be very concrete and local. Given this evident imbalance between costs and benefits at the local level, the concerns of Adjacent communities need to be especially considered by other stakeholders, particularly by project developers like TSOs. Moreover, all stakeholders have to pay special attention towards informing local communities over the project cycle, offering opportunities for dialogue and maximising room to manoeuvre for joint decision making at the local level where individual people are affected. This starts with recurring explanations of the process steps themselves against the backdrop of national legislation that governs the planning and permitting process.

In turn, the role of Adjacent communities can be to participate in the local implementation of a power grid project – e.g. in terms of local conditions impacting the choice of technology and routing. Their part in a successful multi-stakeholder dialogue is to contribute to the project's implementation with high public acceptance by becoming constructively involved in the local configuration of a grid project. In this regard, local citizens are a significant source of knowledge and expertise for TSOs and other project developers – that should be tapped early on in the process as soon as route alternatives within the project corridor are discussed so that micro-planning of power lines – especially the definition of routes and the positioning of pylons for overhead lines – are jointly identified with members of the local communities.

Usual patterns

Project-specific questions to be asked

Primary concerns with grid projects

The primary concerns of Adjacent communities typically circle around four topics: (1) health concerns for families in the vicinity of high-voltage power lines due to assumed health impacts of Electromagnetic Fields (EMFs), (2) environmental and social concerns including their fear of the countryside's disfigurement and the negative visual impact of overhead transmission lines, (3) resulting commercial concerns regarding

- What are the top concerns that are being voiced by Adjacent communities in the context of an existing grid project? How can it be addressed in a well-structured way?
- Is a negative effect on real estate prices expectable for Adjacent communities? How significant is it likely to be?

decreasing real-estate prices in neighbourhoods and a loss of touristic value in the community and (4) occasional opposition to power lines due to local opposition to the connection of a new power generation source, e.g. wind farms, coal power stations or nuclear power plants. Opposing the power line in these cases can be seen as a strategy to oppose the new power plant.

Regarding the different concerns of Adjacent communities specifically, the following should be done – chiefly by TSOs – in order to individually address local concerns:

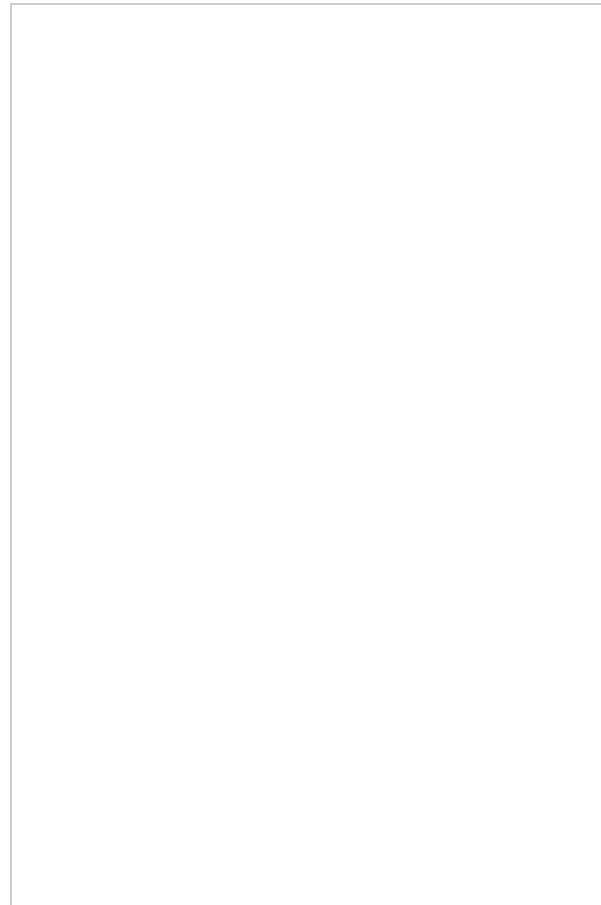
- Health concerns regarding EMF:
 - Paying for analyses by external experts on the specific EMF impact in communities with scenarios for grid extension. Experts should be freely chosen by members of local communities or – upon request – from a set of experts proposed by other stakeholders (e.g. TSOs).
 - Using “Infomobiles” to take citizens from local communities on field trips to a high-voltage power line (e.g. in cooperation with a local university/college) to let them measure the actual EMF below the line once it has been built or below another comparable power line in the surroundings.
- Environmental protection and landscape preservation: making maximum use of legal Compensation measures, i.e. environmental recreation measures, compensation for Land owners and general community-based reparations.
- If the opposition against the grid line occurs jointly with a campaign against the connection of a new generation source, the TSO should work closely together with the respective Power producers in order to jointly approach

- What are the legal options for direct compensation of Adjacent communities (not Land owners) that are available? How can they be employed best to address the specific concerns of local communities?
- Are there any alternative proposals put forward by local communities that can be included in the (spatial and technical) planning in order to systematically consider and address them?
- How can members of Adjacent communities be actively called upon to contribute constructive ideas on how to raise public acceptance? Who has to be addressed? What should local affected citizens be asked to provide as proposals?

the Adjacent communities, engage in a constructive dialogue and seek out compromises.

In general, Adjacent communities sometimes voice their frustration in terms of a broad feeling of “not-being-listened-to” boiling down to a perceived overall lack of opportunities to voice opinions. Sometimes there is also opposition when people feel ‘their’ local environment is being used/ spoiled for the benefit of others, without clear benefits for the region. TSOs should hence take concerns seriously and proactively address them.

To address these concerns, members of local communities often present alternative solutions that should be considered in the planning processes on the side of the TSO wherever possible and practically reasonable. Also Compensation measurements and mitigation measures can play an important role in finding compromises and lessen the feeling that the region is “used” for the benefit of others.



Important individuals within stakeholder group

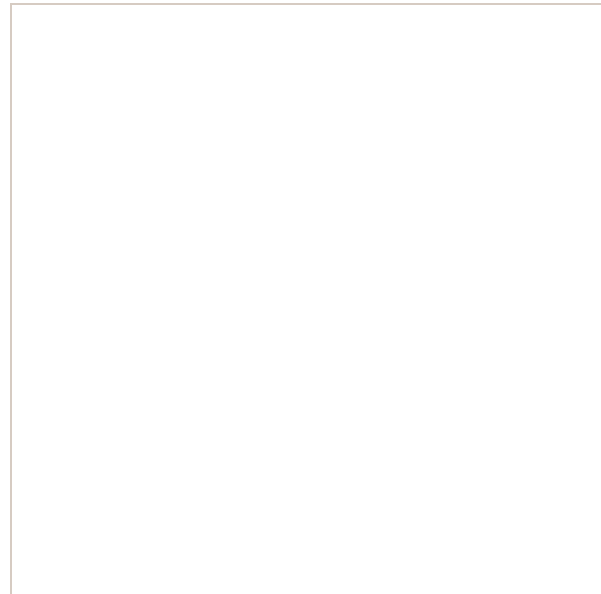
In principle, any citizen from local communities has a vested interest in the implementation of a power transmission project. Especially during early stakeholder integration activities when the route of a power grid project is insufficiently concrete, Adjacent communities should be involved via opinion leaders and spokespersons who can deliver information on the planning processes to larger audiences. This should chiefly be Local elected officials (e.g. mayors), but could also be local representatives of business associations, churches or other civil society organisations. One-to-one communication activities (e.g. mailings, phone calls or Closed-door meetings) that aim to start an intensive dialogue with local communities about their project-related concerns should be directed towards local opinion leaders

It is important to recognise that local

- Who are important opinion leaders within local communities, e.g. coming from local associations, churches or other civil society institutions?
- When and how could they become involved in the stakeholder dialogue as representatives of larger parts of Adjacent communities?

initiatives or action groups that have been created to challenge the current state of planning or even the entire idea of a specific grid project rarely speak for the entire community that they come from. The process of their formation is often not democratically representative and the opinion of action groups should not be confused or set equal to the opinion of entire communities.

TSOs can make an effort to engage individuals on a one-on-one basis (e.g. through phone calls or visits) in order to get a better picture of individual opinions and concerns, some of which may be more moderate than those of action groups.



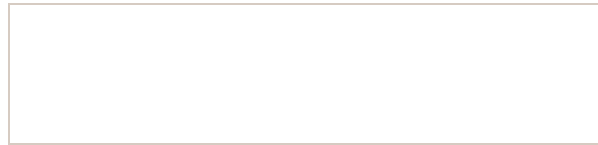
Project stages for engagement

Project preparation

In many cases, Adjacent communities learn for the first time during the Project preparation phase, and via official documentation, that they might fall in a corridor that the TSO is investigating as a route option. Typically, citizens begin to share concerns that their communities will be affected at this stage. Early, pro-active engagement by TSOs, public authorities and policy makers alike becomes more important and also easier once the project starts to concretise; now it is increasingly clear what corridor and route alternatives will be debated and hence which communities might be affected. The Project preparation phase (i.e. the selection of generally possible corridor options for “lines on the map”) tends to be the crucial stage for involving all stakeholders: It is the timing when “true participation” (in the sense of joint decision making) is essential for project success because routing decisions can be jointly prepared with local stakeholders in the ellipse, to avoid presenting them a *fait accompli*. Moreover, TSOs and Permitting authorities need to increase their efforts to explain the upcoming Spatial planning and permitting process. Above all, TSOs need to

- What are the different routings debated at this stage?
- Does debate in local Media already take place?
- Can potential predecessors to LCIs be observed anywhere along potential routings?

communicate to local communities what will be discussed and decided when and where and by whom – in order to create realistic expectations.



Spatial planning

The final route corridor with a limited width (e.g. 500—1000 metres in Germany) is identified during this stage. For communities it becomes more or less definite if they are going to be adjacent to the power line or not. Now it is only a question of the actual distance. It is clear that this typically leads to a peak in intensity of public awareness, concerns and potentially opposition among the determined Adjacent community. Having established a reliable and constructive stakeholder dialogue with relevant multipliers (e.g. Local elected officials, representatives from associations etc.) at an earlier stage will pay-off now as it can help to keep debates constructive.

TSOs should concentrate their communication efforts on the late stage of Spatial planning and early permitting as the concerns of Adjacent communities are growing and should be directly addressed. Organising events, helplines and transparent communication and informing through Media and project homepage are important components to a comprehensive stakeholder involvement plan.

In many cases new Local citizens' initiatives (LCIs) are established at this point. Before establishing, joining or supporting a LCI, citizens of Adjacent communities should inform themselves about the LCI's goals and decide if they feel represented by them or not. LCIs that are not representing the majority of a community can be harmful to the goals of all other citizens as well as the project as such.

TSOs and all citizens who cannot identify with the LCI would be well-advised to keep a constructive dialogue about relevant issues ongoing.

- When, how and where are potential tracks/routings for the grid project in question being announced?
- Which LCIs have been created in the immediate aftermath? Are they cooperative and constructive?
- Are potential LCIs supported by a broad majority of citizens? If not, how can a dialogue between TSO and all other members of the community be initiated?

Permitting

During the Permitting stage, Permitting authorities usually organise consultation procedures that allow the general public to view essential project documentation and submit project-related opinions/feedback. These mandatory procedures provide great potential to learn about local communities' views. At the permitting stage, intensive dialogue with Adjacent communities is crucial and usually clearly limited to the communities affected by the route that has been submitted for permit approval.

The implementation of events by the project developers to foster direct communication processes are to be continued during the permitting stage. Citizens of Adjacent communities should take this chance of getting first-hand information and asking personal questions.

What consultation measures are mandatory under regional or national law and how can they be used to involve representative members of local communities along the corridor?

Construction

Local communities have to be engaged by the TSO during the construction of the grid. Specifically, they should communicate as early as possible the precise construction schedule and activities that are to take place in the community – as well as the repercussions that construction will have on public life. Where possible, activities and schedules should be elaborated together with the communities, taking into account local events etc. that could interfere with the construction.

- What is the best medium to reach Adjacent communities in order to inform them about upcoming construction activities?
- How can construction impact on public life (e.g. regarding traffic) be minimised?
- Are there any local events in the scheduled construction time that should be taken into account?

Adequate channels for engagement

Town hall meeting

Town hall meetings, public information events or open days are often the channels of choice for TSOs to inform affected local communities about a grid project under development. They bear the advantage of being able to address the entire audience of the people affected by the project. It is thus important to invite all citizens of the

- Given the local culture and habits, what is the best timing during the week for organising such Public space events in order to reach the largest audience possible?
- Where and how should the event be advertised in local Media, e.g. via

Adjacent communities (i.e. entire towns/villages) to such events for example via ads in local newspapers, making clear that every member of the Adjacent community is welcome. It is furthermore paramount to present comprehensive and new information which makes it worthwhile for already informed people to make the effort of participating.

Organisers of the event should ideally include small-group workshops and break-out sessions into such meetings or any kind of interruption of large-audience formats, in order to give people the chance to speak out and voice their opinions in smaller groups.

It is moreover important to have procedures in place to collect opinions/feedback from participants in written form with “receipts” given in return. Finally, it is crucial to schedule such events in the evening (after close of business) or on the weekend.

local newspapers or radio stations?

Field visit

Joint field trips of TSOs, local communities and regional universities to a high-voltage power line have, in some European countries, been successfully organised in order to address specific concerns that local stakeholders commonly have: (1) health concerns for families in the vicinity of high-voltage power lines due to anxiety about hazardous impacts of EMF and (2) environmental and social concerns including the countryside’s disfigurement and negative visual impact of overhead transmission lines.

The invitation to the field visit should be kept open to the general public in the affected communities.

- Given the local culture and habits, what is the best timing during the week for organising such Public space events in order to reach the largest audience possible?
- Where and how should the event be advertised in local Media, e.g. via local newspapers or radio stations?

Citizens' helpline

A hotline for citizens of municipalities in the vicinity of a grid project can be an efficient way for project developers to offer a permanent point of contact that is ready to

How many experts should be available during business hours of the hotline given the size of the affected communities?

answer questions about the current state of planning and grid development as such.

Project information office

A Project information office has the potential to reach entire communities that are affected by a power line. It is – however – by definition merely an offer supplied and an opportunity provided by TSOs or other sponsors that local stakeholder have to actively use. It should be located in a town or village that can be reached easily by car and, if possible, by public transportation. Opening hours should be past close-of-business at least one day per week.

- Where would a suitable place for a Project information office be?
- What are appropriate opening hours?

Project website

Many “digital native” citizens of local communities that are affected will instantly turn to the TSO’s website or even a Project website to look for information. The website needs to be designed and provide content so as to specifically cater to the information requests of local communities. This concerns especially detailed information about the project background, procedural steps in the planning and permitting process, project schedules as well as up-to-date information on the routing as it is currently foreseen. Moreover contact details (e.g. the Citizens helpline) are crucial in case the website is unable to answer all of a visitor’s questions.

What information about the project will different communities be most concerned about – given the local project environment?

Public space events

Information events in the local community can take place in the public space e.g. with stands in the centre of a town or village where any passer-by can stop and obtain information about a project. A TSO should hold such event for example at a rather advanced stage of the project, once the routing is sufficiently concrete and it is clear if and how the community will be affected.

- What are the best locations for Public space events in the affected communities, e.g. market squares, shopping malls, church yards or in front of the city hall?
- Given the local culture and habits, what is the best timing during the week for organising such Public space events in order to reach the largest audience possible?
- Where and how should the event be

advertised in local Media, e.g. newspapers, local radio stations?

World Café

An interactive format like a World Café can be a more suitable – because low-threshold format – to interact with large audiences from local communities. The small-table and small-group event will make it easier for more people to speak out and participate in discussions about the project, instead of having large-audience Q&A-sessions where large-group discussions are quickly monopolised by a few individuals.

Where could a World Café be held in a local community?

Mailings

Doorstep visits

In order to engage with Adjacent communities, TSOs can also rely on one-on-one channels that address households in the vicinity of a project individually, e.g. via mailings and Doorstep visits.

Topics of such communication could be the current state and next steps in the planning and permitting process as well as any local issues in the community that is being addressed, such as the exact micro-routing of the project, e.g. in terms of the positions of pylons or even substations. Such direct interactions are usually only feasible at an advanced stage of the project, e.g. during the Spatial planning phase, when the corridor under consideration is sufficiently narrow to keep the number of households that have to be addressed in check.

Members of local communities will in any circumstance appreciate genuine, proactive and even individualised forms of contact from the TSOs and will almost certainly prefer it to mere reaction towards any of their activities, e.g. protests staged via action groups.

Adequate formats for engagement

Exhibition

In the context of a Public space event, a town hall or a World Café, an Exhibition can help to visualise important project information for members of local communities, e.g. via posters on movable walls. The Exhibition can focus on different concerns that Adjacent communities typically have about a project, e.g. the micro-planning for routing and pylon positions, health impact of EMFs, environmental degradation, and decreasing property values.

- How can Exhibitions be designed in order to be able to travel around different municipalities and still present sufficiently specific local information about the grid project?
- What parts of an Exhibition can be prepared in general, which need to be customised?

Brochure/Flyer/Leaflet/Fact sheet

The TSO should prepare a format (e.g. a brochure) with basic information about the project, on no more than 10 pages and without going into too much detail about the project.

The most important aspect is for information to be complete, timely and accurate – ideally presented in a graphically appealing way that reduces complexity of the subject matter. The format should be regularly updated so as to always feature the current state of planning. Moreover, contact details, e.g. for citizen's helpline or for Project information office need to be provided.

The prepared format is suitable to be distributed at any of the public events and visits and could also be offered for download as a PDF on the Project website.

- How can a Brochure/Flyer/Leaflet/Fact sheet be drafted so that it presents necessary project information across different municipalities?
- What are essential contact details that need to be provided?
- Where can such brochures be placed as hard copies to be picked up by citizens?
- Is it possible to offer the brochure digitally online?

Stakeholder Local elected officials

Stakeholder role in grid projects

Local elected officials comprise politicians in office at the municipal level, such as mayors, county commissioners or heads of district authorities. In the context of power grid projects they are important stakeholders because they democratically represent their constituencies, i.e. local communities that are affected by a transmission line, and because they head municipal administrations that play a key part in permitting and licensing processes.

In the grid debate, Local elected officials typically do not make large-scale policy decisions that merit grid development – such as an accelerated expansion of power production from renewable energy sources. Instead, much like local communities in general, mayors and county heads are usually presented initiatives to build power lines by national or regional policy makers, by Regulators or by TSOs. Subsequently, the role of Local elected officials is to find a principled stance on the project by joining the stakeholder dialogue at an early stage based on an objective evaluation of the costs and benefits (if any – this may include Compensation measures) for their constituencies – and beyond. Subsequently, the main task of local politicians is to fulfil their role as multipliers and as messengers to the local public – because of their democratically representative role – for example in terms of passing on and publishing project documentation during the planning and permitting process. Not only Regulators, Permitting authorities and TSOs, but also Adjacent communities (especially Local citizens' initiatives and Land owners) should be able to count on municipal administrations to fulfil their role as messengers between regional and local stakeholders.

Usual patterns

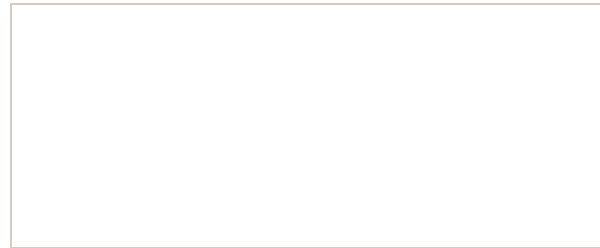
Project-specific questions

Primary concerns with grid projects

The concerns of Local elected officials vary from project to project and even among different municipalities. In some cases, Local elected officials may strongly support a power transmission line on economic grounds, i.e. that high-voltage power boosts energy-intensive industries in urban areas and thus fosters the creation of jobs and economic growth. In other circumstances where the affected municipality is a pure transit area and the project promises fewer immediate economic benefits, mayors and county heads may strongly voice the concerns of local citizens in terms of visual impact of overhead lines, risks to public health by EMF and downside risk of property values. In any case, local public officeholders will rightfully represent the will of their constituencies. However, politicians

- What are the local economic conditions in the municipalities affected? Can they directly benefit from the supply of high-voltage power?
- What other infrastructure projects have municipalities in the project corridor seen in recent years?

should nevertheless live up to their responsibility to explain to their constituents the need for a project in a wider context than the immediate particular interests of any one municipality – for example with respect to the sustainability and stability of the national power grid.



Individuals within stakeholder organisation/entities

Among Local elected officials, several specific positions are particularly important to be reached out to in the context of communication and stakeholder integration efforts. These officials include mayors or the elected heads of the municipal administration as the main representatives, but also the elected heads of committees in city parliaments or county assemblies in charge of infrastructure, environment, energy and economic policy.

- Who are the mayors of major cities in the pipeline corridors?
- Who are other key elected officials in the municipal parliaments?

Project stages for engagement

Determination of need

At the very inception of a grid project when the need for a connection between a starting and an end point is established, Local elected officials can be important multipliers of information. At this stage, large scale involvement of local communities is difficult and hardly feasible due to the lack of concreteness of the project – especially in terms of location. Consequently, it is crucial to identify and address key individuals in potentially affected municipalities that can be messengers to wider audiences. As elected representatives of these communities, mayors and county heads with their administrations are the first multipliers in this regard that come to mind. For example, mayors should be invited to participate in early consultation procedures when national grid scenarios are developed by Regulators and policy makers.

- Who are the mayors of major cities in the pipeline corridors that can reach large audiences with early project information?
- What publication outlets of municipal administrations can be used to disseminate early project information?

Project preparation

The involvement of Local elected officials

- Who are the mayors of major cities in

as democratically elected representatives and spokespersons of their municipalities becomes even more important as the project progresses. As different route alternatives and possible corridors are specified, it becomes ever more central to involve municipalities – even though there is still insufficient concreteness as regards the location for large-scale stakeholder integration activities to take place at the local level.

the pipeline corridors that can reach large audiences with early project information?

- What publication outlets of municipal administrations can be used to disseminate early project information?

Spatial planning Permitting

During the Spatial planning and Permitting stages, the multiplying role of Local elected officials function is extended to a formal role as provider and *distributor of information*. Municipalities often receive information coming from Permitting authorities at national or regional level that they are required to pass on and make available to local communities. This role is particularly crucial because members of local communities have to be able to count on their representatives to pass on project-related information like planning documentation (e.g. maps of line corridors, technical specifications etc.). In addition, Local elected officials can take a leading role in the negotiations for Compensation measures as representatives of the Adjacent communities. In their capacity as broker between project developers and Adjacent communities they might also be involved in the organisation of local events for information, dialogue and participation with regards to the project.

- What are important documents in the legally mandated Spatial planning and permitting procedures that can be made available to local stakeholders via municipal administration?
- What can TSOs do to ensure that municipal administrations indeed pass on information and make it available to larger local audiences?

Adequate channels for participation/cooperation

Closed-door meetings

In advanced phases of the project, mayors and county heads should be engaged by project sponsors in Closed-door meetings where they are individually briefed on the potential implications of a grid project on their municipality.

Who are the mayors of major cities in the pipeline corridors or other important individuals in municipal administrations that should be briefed in a meeting?

Roundtables

Local elected officials are an integral participant of multi-stakeholder Roundtables during the Spatial planning or Permitting stage of the project. In order to foster a constructive, collaborative working atmosphere and share the resource expenditure for stakeholder integration activities, Local elected officials should contemplate their own or at least a joint organisation of Roundtables. Especially in more conflict-intense project environments mayors can play the role of mediators and moderators that bring everyone to the table – TSOs, Adjacent communities and their Local citizens' initiatives, Permitting authorities and policy makers.

- Can Roundtables be jointly organised by the TSOs, Permitting authorities and municipalities?
- To what extent can the working atmosphere of the Roundtables contribute finding compromises with local affected stakeholders?

Country-specific examples

Germany
Austria
Spain

The involvement of municipalities in the stakeholder integration process for power grid projects is especially important in federalist countries where comparatively more decision making power is concentrated at the municipal level. Here mayors are often more than mere implementers of decisions made at the national level and – by procedure – have to be part of the process.

Stakeholder Land owners

Stakeholder role in grid projects

Land owners are stakeholders of power grid projects whose physical property is crossed by the overhead power line or underground cable. Unlike Adjacent communities which are indirectly affected by the project e.g. by its visual impact on the surrounding countryside, Land owners directly deal with pylons constructed on their premises or cable corridors passing over their property. By varying means of national legislation or lack thereof, Land owners are typically compensated financially for the use of their land – in one way or another, depending on their cooperation and agreement to the use of land by TSOs to construct the grid connection. In case of failure to reach an agreement, land usage issues are normally settled in court where expropriation of Land owners may be the final means of dispute settlement.

Given the means of compensation for Land owners available by law and in practice, Land owners usually become constructively engaged with other stakeholders of the project. Moreover, Land owners can play a crucial role in defining the precise routing of a grid section. This is especially true for the positioning of pylons for overhead power lines because they possess the best knowledge of local premises and because they can determine where a pylon may be least detrimental to ongoing economic activities, such as farming. For TSOs, it is hence more than worthwhile to engage Land owners and consider their input and opinion on the construction of the power line.

Usual patterns

Project-specific questions

Primary concerns with grid projects

Land owners' primary concern with grid projects are the effects that the physical infrastructure (underground cables, pylons for overhead lines etc.) will have on their property and its economic usability.

- What kinds of pylons are used by the project at which section?
- How do the chosen pylons affect the property and land on the ground, e.g. in terms of their baseplates?

Topography within stakeholder group

Land owners can be private individuals such as farmers or households with large landholdings, but also include municipalities and other statutory bodies such as churches or dioceses. While Land owners are generally equal from a stakeholder perspective, farmers associations are important organisations that channel the interests of multiple Land owning farmers affected in order to participate in the stakeholder dialogue – most importantly

- What does the topography of Land owners in the specific corridor of interest look like?
- Who are the large-scale Land owners to which large parts of the affected area belong?
- Are individual Land owners like farmers organised in associations or other institutional forms at a local or

with the TSO. At stakeholder meetings (e.g. Roundtables) farmers associations may thus be indispensable participants, particularly when dialogue occurs at a higher level and at an earlier project stage.

regional level?

Individuals within stakeholder organisation/entities

It is generally important for TSOs to engage with Land owners at some point during the Spatial planning phase on a one-to-one basis, in order to discuss and verify the best possible positioning of pylons for overhead power lines or the corridor for underground cables. Before that, the national heads and regional representatives of farmers association are the most important stakeholders within the group of Land owners; they have to be an integral part of any stakeholder involvement during the early project stages.

- Who are the local representatives of farmers' associations?
- Who are the specific representatives of large-scale Land owners?

Project stages for engagement

Project preparation

During early project stages it is both absolutely recommendable and practically most feasible to engage the important stakeholder group of Land owners via representative associations – e.g. the national and regional farmers' associations. Such associations should be part of information, consultation and participation events during the preparation of the Spatial planning when different corridor alternatives are identified and put on the short list.

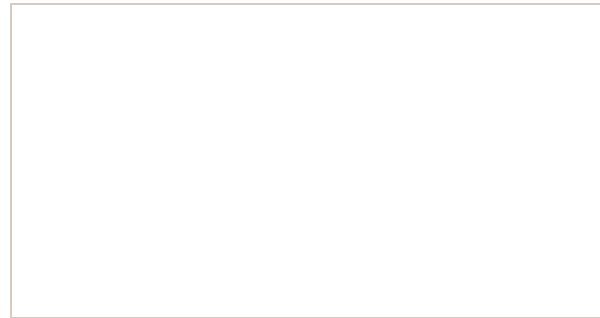
Who are regional representatives of farmers' associations that would be best suited to participate in stakeholder involvement events at a very early stage of the project?

Spatial planning

During the Spatial planning, specific corridors are analysed and benchmarked with each other in order to arrive at a preferred route for the power grid, which will be submitted to the relevant authorities for permitting. During this phase, the knowledge of the Land owners about their own property as well as their preferences for micro-routing (esp. regarding the positions of pylons) should be tapped and well considered by the TSO. In the end, the

- How can individual Land owners be addressed individually to discuss the micro routing?
- How can the TSO obtain an overview of cadastral information on the Land owners that are affected by the preferred route?

route submitted for permitting should have included a maximum of individual input from the different property holders. Moreover, the legal procedure for financial compensation has to be clearly communicated to Land owners individually, so that roles, responsibilities, timelines and documentation needs are transparent from the start.



Permitting

During the Permitting stage, it is important to keep Land owners informed about the ongoing process and potential changes to the routing as they arise from mandatory consultation procedures and input given by the Permitting authorities. Finally, compensation mechanisms have to be activated so that Land owners receive financial compensation before their land is first being accessed by the TSO and its contractors.

- What essential steps of the legal permitting process are most important for Land owners?
- How can they be kept informed throughout the ongoing permitting procedure?

Construction

Similarly, Land owners have to be engaged by the TSO during the construction of the grid project. Specifically, they should communicate as early as possible the precise construction schedule and activities that are to take place on the Land owners' ground and property – as well as the repercussions that the construction activities will have on the economic use of the affected land.

- What is the best medium to reach all affected Land owners to inform them about upcoming construction activities?
- How can the impact on the economic use of the land be minimised during the Construction stage?

Adequate channels for participation/cooperation

Doorstep visits and other direct contact

Several TSOs across Europe have made the experience that any form of direct contact with Land owners via mail, telephone and/or even personal Doorstep visits is the best way to ensure that every one is involved in the dialogue between TSOs, Permitting authorities and Land owners. On an ever growing number of power grid projects across Europe, TSOs undertake the effort to speak with each and

- What are the terms and conditions of jointly deciding the micro-routing of the power line, e.g. in terms of positioning the pylons of an overhead line?
- How much room to manoeuvre does the TSO have in a specific section of the project? Why is that the case?

every Land owner along the grid route individually, in order to assess whether and how the micro-routing of the line can be solved best.

Roundtable

Moreover, Land owners should be participating in multi-stakeholder Roundtables that occur at the level of sections of power lines during the Project preparation, Spatial planning and permitting stage. In order to have a balanced discussion among stakeholder interests (especially regarding routing and technology), Land owners need to be represented.

- Where can a Roundtable for Land owners take place so that all affected individuals can reach the location comfortably?
- Can the Land owners' Roundtable be hosted at the premises of a regional farmers association?

Adequate formats for participation/cooperation

Brochure/Flyer/Leaflet/Fact sheet

Brochures and Fact sheets from TSOs and Permitting authorities can help to inform Land owners at large about legal requirements and practical procedures of financial compensation for the use of their property.

- What are the legal requirements for compensation according to national legislation?
- In what way can it be presented in the least complex way?

Country-specific examples

All

In general, the possibilities and constraints for financially compensating individual Land owners are largely dependent on specific national legislation. Such legislation stipulates the means of calculating the amount of compensation as well as the procedure to disburse the funds. Moreover, in absence of such legislation, TSOs will likely have established their own rules and procedures for the financial compensation of Land owners.

Stakeholder Local citizens' initiatives

Stakeholder role in grid projects

In general, Local citizens' initiatives (LCIs) or local action groups are special interest groups emerging from civil society because of a concrete issue in their immediate political, social or ecological environment that causes the group to organise for self-help. They typically aim to exert influence on public opinion, political decision-makers and other societal groups. In the context of grid development projects, LCIs are usually formed among citizens of Adjacent communities – be it at the level of individual villages or at a more regional or county-level across various affected communities that are affected by a grid project in their immediate life and environment. The formation of LCIs among locally affected citizens usually reflects a motivation to engage with other stakeholders (most importantly the project sponsors, i.e. TSOs) – often because there is a lack of information about a grid project or because the current planning is opposed.

The role of LCIs is to participate in the local implementation of a power grid project by voicing the concerns of local communities. Their part in a successful multi-stakeholder dialogue is to contribute to the project's implementation with high public acceptance by becoming constructively involved in the local configuration of a grid project. In this regard, LCIs are a significant source of knowledge and expertise for TSOs and other project drivers that should be tapped early on in the process, as soon as route alternatives are discussed so that local details of power lines – for example the definition of routes – are jointly identified with local communities.

Usual patterns

Project-specific questions to be asked

Primary concerns with grid projects

Arising in the context of one grid project or a set of specific grid projects, LCIs' foremost *raison d'être* tends to be the expression of their concerns regarding the implementation of the project(s). Such concerns of LCIs typically circle around three topics: (1) health concerns for families in the vicinity of high-voltage power lines due to perceived impacts of electromagnetic fields (EMF), (2) environmental and social concerns including their fear of the countryside's disfigurement and the negative visual impact of overhead transmission lines, (3) and resulting commercial concerns regarding decreasing real-estate prices in adjacent neighbourhoods and a loss of touristic value in the community. Regarding the different concerns of LCIs specifically, the following steps can be

- What are the top concerns that are being voiced by LCIs in the context of an existing grid project?
- Can a negative effect on real estate prices be expected for Adjacent communities? How significant is it likely to be?
- What are the legal options for direct compensation of Adjacent communities (not Land owners) that are available? How can they be employed best to address the specific concerns of LCIs?
- Are there any alternative proposals put forward by LCIs that can be included in the (spatial and technical) planning in order to systematically

taking— chiefly by TSOs – in order to individually address LCIs’ concerns:

- Health concerns regarding EMF:
 - Paying for analysis by external experts on specific EMF impact in communities with scenarios for grid extension. The provided Experts should, whenever possible, represent an internationally or nationally accepted scientific institution. Both, communities/ LCIs and TSOs can jointly choose the Expert they would like to invite. Upon request, the TSO can propose a set of scientific Experts to choose from
 - Using “Infomobiles” to take affected citizens on field trips to a high-voltage power line (e.g. in cooperation with a local university/ college) to let them measure the actual EMF below the line themselves
- Environmental protection and landscape preservation: making maximum use of legal Compensation measures, i.e. environmental recreation measures, compensation for Land owners and general community-based reparations. This might also include opting for an aesthetic design of the pylons.

In addition, LCIs frequently voice their frustration in terms of a broad feeling of “not being listened to,” boiling down to a perceived overall lack of opportunities to voice opinions. TSOs should hence take concerns seriously and proactively address them.

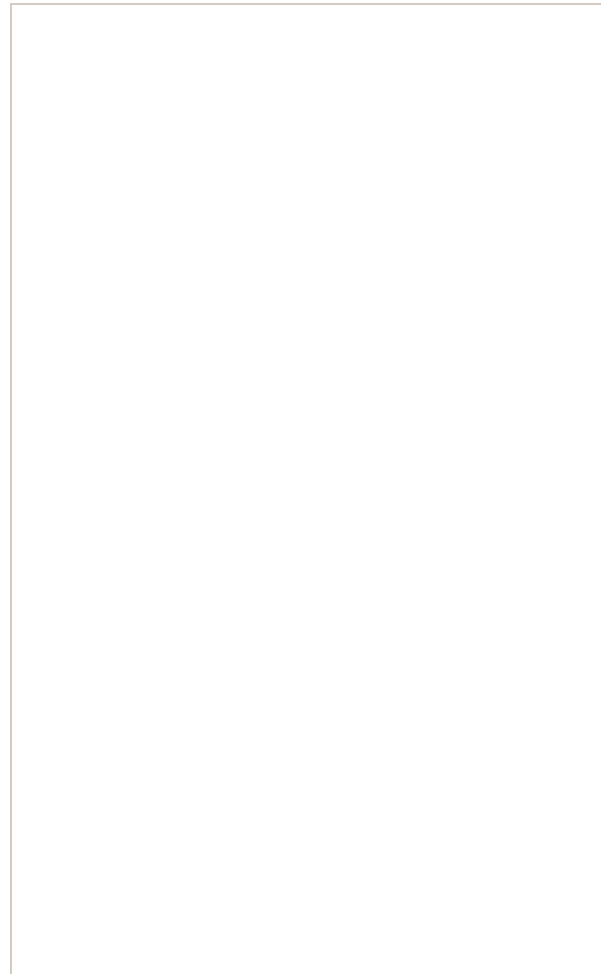
To address these concerns, LCIs often present alternative solutions that should be included in planning processes on the side of the TSO wherever possible and practically reasonable. TSOs as well as regulating and Permitting authorities should make every effort to consider and actively

consider and address them?

- How can LCIs be actively called upon to contribute constructive ideas on how to raise public acceptance? Who has to be addressed? What should LCIs be asked to provide as proposals?

deal with such project alternatives (e.g. in terms of the grid technology used or the choice of overhead vs. underground lines) that are proposed by LCIs. Very often LCIs complain about the fact that their alternatives are not being taken seriously by project sponsors. At the same time, this is an excellent opportunity for TSOs to call for constructive contributions from LCIs and take them up on any stated promises to be constructive and engage in joint solution finding.

Moreover and more generally, TSOs should take all necessary precautions to consider the sensitivities of LCIs which are already reflected by the fact that Adjacent communities saw the need to organise themselves. For instance, LCIs tend to be very sensitive towards non-professional treatment and any lack of transparency by TSOs – for example: “biased” protocols after Roundtables or Closed-door meetings, refusal to (co-)sign crucial paperwork (e.g. opinions/comments/feedback submitted during public consultation), and non-disclosure of up-to-date project documents such as maps of route alternatives.



Topography within stakeholder group

The landscape of LCIs is usually quite scattered as they are a very local type of stakeholders. Increasingly, LCIs actively try to connect with each other across multiple projects to exchange lessons learned about engaging with project sponsors, alternatives to routing and technology – and in some cases best practices in organising their activities. Specifically, LCIs use their websites to reference each other’s URLs in order to cross-mobilise among different grid development projects.

- Who are the most important LCIs in the grid corridor?
- Are there any regional associations and networks of LCIs?

Important individuals within stakeholder group

One-to-one communication activities (e.g. mailings, phone calls or Closed-door meetings) that aim to start an intensive dialogue with LCIs about their project-related concerns should be directed

- Who are leaders, founders and spokespersons of LCIs?
- When and how are they appointed or elected?

towards their leaders as the individuals occupying formal leadership positions. Additionally, LCIs' founders can also be important multipliers because of their capacity to shape the initiative's identity.



Project stages for engagement

Determination of need

At this stage of the project, LCIs typically have not yet come into existence for the purpose of getting involved in a specific project that is so far insufficiently defined to determine which communities will be affected. However, LCIs may already pre-exist within the ellipse of a potential starting and end point for a new power line, because local communities have already mobilised because of other infrastructure projects. Proactive and preventive communication efforts can hence prevent the emergence of mobilised opposition in the first place, because public acceptance of the project is enhanced from the earliest stage possible onwards. Consultation procedures in very early stages of grid development projects (i.e. during the scenario planning of regulating authorities when no lines whatsoever are yet on the map) bear high potential to build up an atmosphere of trust among stakeholders – and hence LCI representatives should be invited to participate as (possible) local stakeholders. LCIs themselves sometimes give the feedback that it is difficult to involve them meaningfully at such early stages. This is based on the fact that they only represent the affected Adjacent communities and do not feel in a position to give input on a rather abstract concept such as a general grid scenario that only specifies a starting and an end point. Nevertheless, consultation and participation at the level of regulatory agencies can build consensus among citizens and project sponsors about the general need of a project to be built. If multi-stakeholder involvement facilitates consensus finding at this point, then the “why” of a project is agreed upon early – and the subsequent

- When determining the need for a grid development project, what is the earliest possible time at which affected communities have sufficiently crystallised so that effective engagement can begin?
- How can representatives of existing LCIs (e.g. as they have emerged in the context of other infrastructure projects) be incentivised to participate in early stakeholder involvement activities?

stakeholder dialogue can focus on the “how” of the project.

Project preparation

In the Project preparation phase, chances grow that citizens begin to share concerns that their communities will be affected. Early, proactive engagement by TSOs, Regulators and policy makers alike becomes more important and also easier once the project starts to concretise – as it is increasingly clear what route alternatives will be debated and hence which communities might be affected. The Project preparation phase – i.e. the selection of generally possible options for “lines on the map” – tends to be the crucial stage for involving all stakeholders: it is the timing when true participation – in the sense of joint decision making – is essential for project success because routing decisions can be jointly prepared with local stakeholders in the process, e.g. existing LCIs, to avoid presenting them a *fait accompli*. Moreover, TSOs and Permitting authorities need to increase their efforts to explain the upcoming Spatial planning and permitting process thus clearly communicating to local communities and especially LCIs what will be discussed and decided when and where and by whom – in order to create realistic expectations.

- What are the different routings debated at this stage?
- Does debate in local Media already take place?
- Can potential predecessors to LCIs be observed anywhere along potential routings?

Spatial planning

In many cases, LCIs are founded during the Spatial planning stage as soon as the track for a power line is up for debate in the form of different route alternatives, i.e. as soon as Adjacent communities know that they could be affected. Often, LCIs are formed very quickly after the announcement of a grid development location. For the first time, communities see official documentation that mentions them as being potentially affected if the track on which they live turns out to be chosen. Hence, engagement of newly created LCIs from the first days of their existence is crucial to hear their concerns with regards to the routing and technology

- When, how and where are potential tracks/routings for the grid project in question being announced?
- Which LCIs have been created in the immediate aftermath?
- Who are the founding persons and the leaders and how can they be reached out to?
- What specific, route-related concerns do the LCIs bring to the table?

in question as this will allow for local concerns to be taken into consideration as fully and efficiently as possible.

Permitting

During the Permitting stage, Permitting authorities usually organise consultation procedures that allow the general public to view essential project documentation and submit project-related opinions/feedback. These mandatory procedures provide great potential to learn about the views of the LCIs and the views of the broader audiences that they represent. At the permitting stage, intensive dialogue with LCIs is crucial as they typically remain opinion leaders for Adjacent communities with the potential to mount strong opposition, but also to arrive at a common understanding.

- What consultation measures are mandatory under regional or national law and how can they be used to involve the different LCIs that have established themselves up to this point?

Adequate channels for engagement

Closed-door meeting

Doorstep visits

In order to engage LCIs, one-on-one channels that address their leadership individually such as Closed-door meetings and Doorstep visits tend to be more constructive in terms of discussing specific local concerns of the community – than channels for large audiences. In such encounters, representatives of TSOs, government and Permitting authorities can directly explain the project and the LCI leaders can in turn communicate as messengers within their LCI assemblies and ultimately with the larger Adjacent communities. LCIs appreciate genuine, proactive contact from the TSOs or from authorities and prefer it to mere reaction towards any of their activities.

- Who are the leaders of LCIs that would be susceptible to direct talks and other one-on-one communication with representatives of other stakeholders?

Roundtable

LCIs are an indispensable participant in any multi-stakeholder Roundtable discussions that seeks to involve a variety of stakeholders – because the fact that they

- Who are the leaders of LCIs that would be willing to participate in a Roundtable?

represent an organised group of local stakeholders. The hosting stakeholders should ensure that all LCIs (e.g. from all Adjacent communities) are invited. Very practical considerations can help to make a Roundtable more appreciated and more successful, e.g. assuring that such events are scheduled in the evening (after close of business) or on the week-end. Moreover independent note-takers are crucial to create an atmosphere of trust where every contribution to the debate is duly noted and that the various positions are accurately and objectively captured. Ideally this note-taker should be approved by all parties before the event.

- Who could serve as an independent note-taker during the Roundtable?

Town hall meeting

LCIs can participate effectively and constructively in Town hall meetings, but the events must be carefully planned and should not be used in cases where there is not yet an atmosphere of relative trust and understanding between, primarily, the TSOs and the LCIs. Town halls tend to become more challenging when opposition is strong and principled, as LCIs often use these venues as platforms to stage protests or other forms of less constructive engagement. Generally however, it is important to invite all of the Adjacent communities (i.e. entire towns/villages) to such events. This can be done, for example, via ads in local newspapers making clear that every member of the Adjacent community is welcome. It is furthermore paramount to present comprehensive and new information which makes it worthwhile for already informed people to make the effort to participate. It is moreover important to have procedures in place to collect opinions/feedback from participants in written form with “receipts” given in return so that transparency on who received what is ensured. Finally, it is crucial to schedule such events in the evening (after close of business) or on the week-end.

- Is the atmosphere surrounding the project sufficiently productive to warrant a Town hall meeting with LCIs?
- How can LCIs be engaged with before the meeting to ensure that their concerns and perspectives are taken into account in a productive manner?

Adequate formats for engagement

Newsletter/E-mail text
Presentation

LCIs represent members of Adjacent communities who deliberately spent time and other resources on dealings with a grid development project. They can be expected to have built up rather extensive knowledge on the project independently and thus expect engagement via content-rich formats. Consequently, any formats that are suitable to carry a significant amount of project content at a relatively high level of detail are suitable for communication with LCIs, e.g. extended project Presentation (e.g. in MS PowerPoint) or individually drafted text distributed via e-mail or mail that address specific concerns of LCIs, for example the effect of a power line development on real estate prices in adjacent neighbourhoods.

- Can standardised communication formats be sent out to multiple LCIs at the same time?
- How must general project Presentations (e.g. in MS PowerPoint) be adapted to properly cover and address the concerns of LCIs?

Stakeholder Experts/Academia

Stakeholder role in grid projects

Experts, especially scholars at research institutions such as universities or independent research units, should play an important role in grid projects as they can bring in a substantiated, independent position on several aspects of grid projects. They are often seen as a trustworthy source of information, which makes them particularly helpful in providing an expert view on some of the most debated issues surrounding grid projects (e.g. the health impacts of power line construction, the ecological impact of a project or the economic effects of grid development).

Experts and academics can also provide expertise to TSOs, for example by providing input on key environmental and biodiversity issues, providing technical expertise with regards to project construction, evaluating ways to best meet energy demands or assessing health risks.

As with NGOs, different experts, depending on their field of specialisation (e.g. energy, environmental issues / biodiversity, economics, health, etc.), may be differently predisposed towards a project. However, experts may tend to take a more academic, rather than activist, approach to arguing their vision. Experts and academics will usually base their arguments on research and scientific or other facts.

In the context of a grid project, it is important to distinguish between independent researchers and expert consultants hired by TSOs during a project. While the two types of experts may have comparable knowledge on the subject, consultants compensated by TSOs are likely to not be perceived as independent sources by the general public.

Even in the case of experts not associated with a TSO, those who provide views in support of grid projects may run the risk of raising questions about their independence. It may therefore be advisable to clearly establish an expert's or academic's independence – if this is indeed the case – in order to boost credibility.

Usual patterns

Project-specific questions

Primary concerns with grid projects

Experts, especially experts from academia, are usually concerned with maintaining their reputation as independent, reliable knowledge-bearers. This applies even if they are acting as consultants to TSOs or other stakeholder groups, as they are still expected to provide unbiased information based on scientific and other evidence.

What are the focus areas of the experts that can be contacted with regards to a specific grid project?

Topography within stakeholder group

Experts may be found in a variety of institutions, such as universities, research centres, think tanks, consultancies and inter-governmental organisations (e.g. IEA, OECD, UNEP, etc.).

To determine their potential role in grid projects, they should also be distinguished based on their fields of study and expertise, e.g. health issues or economic impact related to grid projects.

- Which the institutions have proven to be able to provide credible expertise?
- Which expertise is needed for the specific grid project?

Individuals within stakeholder organisation/entities

Individuals of relevance to grid projects would be key recognised experts working and publishing on particular subjects of relevance, and experts who have provided input on similar projects in the past. Especially for universities it is helpful to distinguish between professors and other scholars. Whereas professors usually have the most widely acknowledged reputation, other scholars might have more expertise in the specific field for which their input is needed.

- Who are the key local, national or international experts on particular subjects of interest?
- Is the input of a widely acknowledged professor or the input of another expert with a specific expertise best suited for a given project?

Project stages for engagement

Determination of need

In this project stage experts should provide input during the drafting of grid development plans and participate in the debate between the different stakeholders. Depending on their expertise they can, for example, provide input on how to best address energy needs, how to reduce health impacts or how to best involve local stakeholders.

- Which experts should be contacted in this phase of the project?
- In which issues would the experts' recommendations be most useful?
- How should they be contacted and how could they be involved in the project?

Project preparation

Experts could potentially provide input regarding specific issues at the Project preparation stage.

Some of the key project decisions must be prepared in this stage, so the input of experts on different technical, health and environmental issues can be rewarding

- Which reports should be produced to better identify potential future difficulties?
- Are any environmental assessment documents to be produced during this stage and could they benefit from expert inputs?

and can lay the foundations for better performance along the following phases.

Spatial planning

Permitting

At these typically highly contested stages, experts' inputs can, for example, be helpful for defining optimal corridor routes by assessing potential environmental issues and contributing to environmental assessment documents. Furthermore, experts could propose ideas of environmental compensation or mitigation measures.

Experts can also be solicited by the TSO to provide an independent opinion on technical project details or health impacts of power lines, and to present their opinion to the general public during consultations or other public meetings, or simply in written form.

- What information could experts bring to the table to best contribute to route and Spatial planning?
- Could regional experts be identified in order to bring inputs about specific stretches of the route?
- Could the project benefit from an expert opinion on a particular topic of public concern?

Construction

During this stage experts can provide advice on technical issues appearing during construction. They can, for example, take the role of an independent observer of whether the entity responsible for executing the construction adheres to all previously fixed agreements and standards.

Can an independent expert committee to monitor the grid line's construction?

Operation

Once a project starts operation, experts can provide an independent opinion on whether the grid functions according to the previously fixed agreements and standards, for example with regards to the size of the electromagnetic field of the specific grid line.

Can an independent expert commission be created to monitor the grid's Operation?

Adequate channels for participation/cooperation

Project website

Experts can be asked to publish articles on

Would it be better to ask an expert to draft

the project's website.

It should be noted, however, that the public may be sceptical of articles published directly on a Project website, and may question the independence of the author. Alternatively, a TSO may ask permission to reprint or link to an expert's existing external publication, perhaps reassuring the public as to the source's independence.

In either case, a website allows for the articles and the reports to be made available to a large audience.

a dedicated article or to link to an external article?

Media

Experts can often be invited to offer their views in traditional Media, for example in TV or radio debates, or in newspaper articles or opinion columns. Depending on the Media entity, these could potentially reach a large local, regional or national audience.

Which radio or TV programmes or newspaper columns would be appropriate for including an expert's view on an aspect of a project?

Public space events

Project information office

Town hall meetings

Experts may participate in meetings or consultations with the public, whether independently or by invitation from the project developers. They are often available to answer questions from the public and to provide an independent view on critical and controversial issues.

At which public events or meetings could experts intervene? Which expertise should they bring and which issues should they address?

Adequate formats for participation/cooperation

All

References to expert opinions can be used in all formats. For example, the credibility of a Presentation or a brochure can be strongly enhanced by citing expert views. As for the Project website, expert views should be used in a way that does not undermine the independence of an expert.

Are formats planned to be developed for a specific grid project that can benefit from including expert views?

Stakeholder Media

Stakeholder role in grid projects

The Media is a key multiplier of information to the public and can play an important role in shaping public opinion on grid development at large, as well as on specific projects. The Media can have a wide reach, ranging from the local level to the national or international. While certain Media outlets may present information in a neutral manner, others are, by definition, meant to provide an opinion (e.g. newspaper editorials, radio or TV talk shows, opinion blogs, etc.). Certain types of Media are also specialised in particular topics, such as scientific magazines, or are primarily geared to particular audiences, such as local newspapers. The Media may therefore weigh in on discussions about grid development and grid projects, with the potential to sway public opinion.

Project developers of grid projects may involve the Media in order to effectively diffuse key information and increase transparency and knowledge. The information which is available to the public on behalf of various stakeholders will further help steer opinions and reactions to projects. TSOs may ensure that the Media receive accurate and timely information through a dedicated Public Relations department or other Media liaisons.

In addition, the Media can give a voice to other stakeholders – whether directly via interviews, talk show appearances, op-eds, guest columns, etc. – or indirectly, by providing their perspective. Collaboration between the Media and other stakeholders can therefore give farther reach to different perspectives.

At the same time, it is generally the role of the Media to try to present comprehensive and accurate information to the public, whether that information is presented neutrally or to support an opinion. The Media may therefore also take on an active role in seeking out information on projects, and may diffuse information on which other stakeholders had not communicated. The Media thus plays a key role in ensuring that the public is fully informed in grid projects and in driving the debate. Of course, in some cases, Media may also present information that is not fully accurate or that is highly opinionated, thus fuelling additional controversy. However, Media outlets that are generally considered trustworthy and reliable work to ensure that their information is accurate, even if they may take a position on the issue.

Usual patterns

Project-specific questions

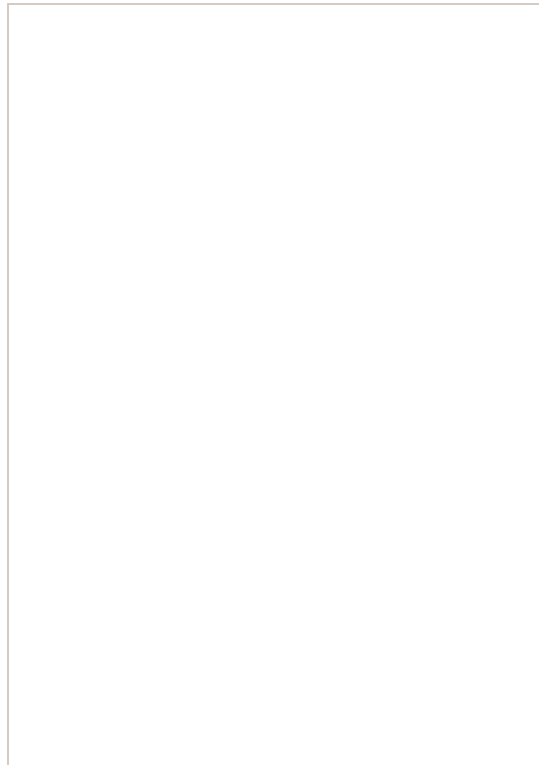
Primary concerns with grid projects

The Media is concerned with providing the most up-to-date, accurate, comprehensive and interesting information to the public. With substantial competition, particularly for national-level outlets, the Media needs to be able to maintain audience interest and loyalty by providing quality content and/or new or

Do specific Media outlets (particularly specialised, opinion Media or politically-leaning Media) have an existing opinion on grid projects in general and/or on a specific project?

exclusive information. The Media is therefore likely to be interested in key project information, any controversies or successes and any new developments. Media representatives as such generally do not have a direct stake in grid projects (rather, certain individuals may be personally impacted by a local project, but this is independent of their position in the Media). There is therefore no set position that could be ascribed to the Media as a whole.

In the case of “opinion” Media, its interest in and position on grid development and particular projects may depend, for example, on a given outlet’s political leaning (if any), or a local outlet’s support of local concerns. In the case of “neutral” Media, it rather presents the information available about a grid project in an objective manner.



Topography within stakeholder group

The Media landscape can be mapped out from several different perspectives.

It makes sense to first distinguish between different types of Media, such as television, radio, print Media, online Media and others. Different Media types may have different geographical coverage (national/international or local) or audience types (experts or greater public).

Across Media types, local-level Media may be distinguished from national or international Media. In the context of grid projects, national Media is likely to be primarily interested in the overall context (e.g. national energy plans, national grid development, etc.), with perhaps limited reporting on specific local-level projects. Local Media in an affected region, on the other hand, is likely to report with more frequency and in greater detail on a specific project. For example, radio channels or local newspapers are typically strong local Media entities that

- Which types of Media are likely to report on the grid project?
- What differences are likely in the reporting done by national vs. local Media?
- Which audience types are likely to rely on particular Media outlets for information? Which tend to be influenced by particular Media outlets?

are also likely to be more familiar with and knowledgeable about specific local concerns.

Media may also be divided by its target groups and content focus. News dailies or general television news shows, for example, cover all general news and target a fairly broad audience, while other Media outlets such as specialised magazines or shows, or online-based Media organisations, may be focused on specific topics or audiences (e.g. young people, technical experts, people interested in environmental issues etc.). Their coverage of grid projects may therefore vary. Further, they may recognise as experts on particular issues of relevance to grid projects, and/or may have particular influence on certain population groups.

Individuals within stakeholder organisation/entities

Key individuals within the Media are individual reporters, journalists, radio or TV show hosts, columnists etc. – particularly those with name recognition or a strong public following.

Which reporters or journalists are taking a particular interest in the project or could best help to spread project information?

Project stages for engagement

Determination of need
Project preparation

The Media can be engaged by other stakeholders, especially the project developers, during early project stages since Media entities can help diffuse project information (as well as information on grid development plans or energy plans in general) during a period in which the general public, not yet directly affected by a route corridor, may not be particularly interested in seeking out such information. Project developers, such as TSOs, should therefore seize the opportunity to engage the Media in the earliest project stages.

Which Media channels are likely to be most effective to diffuse information to the public in a specific country/ region affected by grid projects before concrete placements for the grid lines have been proposed?

Spatial planning

Permitting
Construction
Operation

Throughout subsequent project stages, the Media can play a key role in informing the public and driving opinion. The Media can also give a voice to other stakeholders. TSOs should maintain proper communication with the Media in order to ensure that accurate and timely information is presented to the public.

Can specific Media entities be identified that can accompany the grid development process as a neutral observer?

Adequate channels for participation/cooperation

Project website

Project developers can share project information with the Media via Project websites, ideally by publishing press releases. Project developers can also provide contact information for designated press contacts or public relations departments for the project.

- How often should press releases be published on a Project website?
- Does the project have a designated press contact person?

Closed-door meetings

Meetings can be scheduled with the Media to provide journalists with information and conduct interviews.

How regularly should the stakeholders meet with the Media to discuss new information? Who should initiate such meetings?

Public space events
Project information office
Town hall meeting
Roundtable
Field visit

Media representatives may be present at any of a number of events involving other stakeholders and/or the general public. Media presence allows for coverage of the event and dissemination of key issues, information and debates to the broader public. This process boosts transparency and informs those who were unable to participate directly.

How many different Media representatives are invited to public or stakeholder meetings?

Adequate formats for participation/cooperation

All

In general, Media entities can benefit from and should be provided with any formats conveying content on grid projects. This helps the Media to publish information and opinions on an informed basis.

Hence, if for example brochures / flyers / leaflets / Fact sheets or Infographics have been developed for the grid project, they should also be made available to the Media.

Have formats conveying content on a specific grid project already been developed and can be provided to the Media?

Country-specific examples

Germany

The energy transition has been widely covered in the German Media in recent years. The Media has drawn attention to both the recent trends in the energy mix which impact grid development needs (e.g. the rising importance of renewable energy sources and the phasing out of nuclear energy), and, especially more recently, the impact of these trends on electricity prices, particularly for Private consumers.

Ireland

The Irish Media provides substantial coverage of the debate about grid development and particularly of the public's concerns over perceived poor communication or "done deals" made in the context of projects of strategic national importance. Media attention also focuses on the question of overhead lines vs. underground cables, and concerns that integration of renewable energy sources is being done to benefit other countries (e.g. the UK or France), not for Irish energy needs.

2. Project stages

“Project stages” as presented in this toolkit structure a grid project along six main, overall phases of the project cycle: Determination of need, Project preparation, Spatial planning, Permitting, Construction and Operation.

Usually, different grid project developers and also the different national legislations have their own way to structure the different stages of a grid development project. This toolkit abstracts from different national procedures and finds a common denominator.



The stages described in this section are defined as follows:

- Determination of need covers the national and European processes for determining the need for grid development projects.
- Project preparation summarises all procedures the project developer undertakes to prepare for the official application procedure of the project; typically first corridor options are drafted.
- At the project stage of Spatial planning the project developers present their corridor options at the first application conference, where a broad favourite corridor is identified, following different assessments and consultations.
- At the Permitting stage, the plan approval procedure takes place, in order to identify and approve a precise route plan for where the newly developed grid line should be built.
- Construction comprises the stage where all construction activities of the grid project takes place.
- The Operation stage begins as soon as the new line is connected with the power network.

Project Stage Determination of need



Project stage description

This project stage covers the development of the Europe-wide determination of the need for grids by the (non-binding) Ten Year Network Development Plan (TYNDP) as well as the respective national processes for need determination. While the TYNDP and most national plans in the EU are updated on a biannual basis, the national processes of some countries (e.g. Germany) foresee an annual update of the respective national network development plan. ENTSO-E, the European level business association of TSOs, is obliged to consult several stakeholders apart from the TSOs throughout the creation of the TYNDP. The national legislative frameworks differ significantly in terms of the stakeholder consultations they make obligatory but usually different public authorities as well as external stakeholders such as energy producers and NGOs are broadly included in the draft of

network development scenarios and development plans.

A major learning from previous grid projects is the widespread tendency that the earlier stakeholders are included in a grid project the more successful are the communication measures targeted at them. Hence, project developers should reach out to as many stakeholders as possible at the “Determination of need” stage. At the same time, it is typically the case, that at this stage of the project not all Adjacent communities of the grid projects can yet be identified and hence a meaningful dialogue is only possible with parts of them. Similarly, the affected stakeholders typically do not show strong interest at this stage which makes it difficult to engage them. This dilemma should be addressed by the project proponents, e.g. TSOs, Permitting authorities and National/Regional policy makers, by transparently disclosing relevant project-related information to the public and thereby creating trust and a sense of accountability that can later be used as basis for dialogue with the other stakeholders.

Usual Patterns

Project-Specific Questions

Stakeholders involved in this stage

TSOs

As main responsible entities for the implementation of grid development, TSOs have a major interest in the determination of the need for grids. This also involves the business association ENTSO-E as a crucial network, multiplier and knowledge bearer.

- Which TSOs need to implement projects and which are affected as adjacent TSOs to planned projects?
- In which way can the ENTSO-E expertise and network also be applied at the national need determination process in a given country?

Power producers

DSOs and Power producers have insights into the needs for energy and grids as well as into the energy production. They can hence contribute with essential knowledge to the assessment of the need for grids.

- Which are the DSOs most affected by potential grid projects?
- Which are the Power producers most affected by potential grid projects?

National/Regional policy makers

National policy makers are typically involved in the creation of country-specific grid development plans and are in the focus of the mass Media. It is hence crucial to include them in the communication measures at this stage of the project. Since they are responsible for the most important parts of the legislative framework of grid development projects they should take an active role in promoting grid development projects.

- Which national officials are most important for grid development projects? (Ministry of the Environment, Ministry of the Economy, Ministry of Energy etc.)
- How active have national politicians been in the grid development process to date?

Permitting authorities
Regulators

Regulators are typically involved in the creation of country-specific grid development plans and have in-depth expertise in the field of energy supply. This expertise should be included from early on. In addition, Regulators and Permitting authorities have important responsibilities in terms of providing the framework in which the TSO operates. When it comes to these responsibilities they should proactively communicate their decisions to the affected stakeholders.

How openly has the Regulator shared its expertise in the past?

Environmental NGOs

Environmental NGOs are typically important multipliers and bear expertise as well with regards to the technicalities of grid projects as with regards to communication. Also, many NGOs have an expertise in energy and electricity systems. They should therefore take an active role in the determination of the need. NGOs will be much more supporting certain grid development projects if they regard them necessary. Including their knowledge and concerns regarding the bottlenecks of the energy and electricity systems when drafting the development scenarios can significantly prevent NGOs from opposing the projects at a later stage. If they act together with the TSOs and other project proponents from early on, they can help to raise acceptance significantly, especially since some stakeholders, such as Environmental NGOs or local Adjacent communities, see their positions as more legitimate than the positions of the TSOs.

- Which Environmental NGOs are most important for the grid development projects?
- Do the Environmental NGOs have a default position that could be in opposition to the position of the project developers, as well as other NGOs?

Industrial consumers
Private consumers

Industrial and Private consumers have a major interest in a secure supply of energy. In some countries, the majority of industrial and Private consumers are located far from renewable energy production and hence

- Which are the most important Industrial consumers potentially affected by grid projects?
- Which are the most important private

strongly support a well-designed and rapid grid development. In addition, they have insight into the need for electricity supply and can credibly promote the need for grid development. They should hence actively contribute to the Determination of need.

consumers (and their organisations) potentially affected by grid projects?

Media

Journalists from supra-regional Media entities should take an active role in grid projects from the earliest stage on. They can act as powerful multipliers to the broader public and can significantly shape public opinion and debate at a stage when the audience typically has not formed strong opinions yet. Also, they can explain the procedure to the public and make people aware how the need is determined.

- Which are the most influential supra-regional Media entities and journalists focusing on grid projects?
- Which Media entities and journalists have already focused on grid projects?

Experts/Academia

Experts can similarly serve as multipliers and opinion leaders who can reach out to the academic community as well as to the broader public if they are supported by Media entities. At the same time, they typically bear useful knowledge for the Determination of need. Both make it necessary for them to be actively involved in the first stage.

- Which are the specific country's/region's most influential experts in the field of grid development projects?
- Which are the most important currents of thought within the expert community?

Typical channels used in communication

Website/Blog

To ensure the highest level of transparency, the project developers should set up a website or a blog that regularly informs users on the latest developments regarding the grid projects. This helps to convey a transparent image, build trust and make sure all stakeholders can easily access all necessary information to constructively participate in a grid project. These aspects also form a strong basis for constructive dialogue at stages which are typically more contentious.

- Does a website, e.g. from the TSO, already exist that explains all relevant information to stakeholders?
- Where can links to the website/blog be placed?

Media

Especially supra-regional newspapers bear the potential to reach a broader public and thereby shape public opinion and debate. This is particularly powerful at an early project stage since stakeholders typically have not formed strong opinions yet.

- Which are the most influential supra-regional Media entities and the journalists focusing on grid projects?
- Which Media entities and journalists have already focused on grid development projects?

Roundtable
Closed-door meeting

It is advisable to proactively reach out to and bring together high-ranking staff and/or key players of several of the relevant stakeholders groups in a meeting or Roundtable format. These direct interaction methods are a strong tool to exchange insights and positions. The participants can subsequently carry the results into their respective organisations and act as multipliers.

- Which are the specific stakeholders that should be met face-to-face?
- Which stakeholders should be brought together to enter into dialogue?

E-mails

In order to organise personal meetings and Roundtables as well as to inform stakeholders in a fast and comprehensive way on the project's progress, personalised emails are an appropriate communication channel.

- Which stakeholders should be contacted directly via e-mail?

Essential content communicated

Project context
Project benefits to stakeholders

The project context is one of the most important content parts at the first stage of grid projects. If communicated from the beginning, it helps to establish a clear story on why grid development is needed. Similarly, the project benefits are important from the first stage of grid projects. If the broader public agrees with the overall benefits of grid projects from early on, project communication and project advancement are likely to be more efficient at later stages.

- Can a legitimate connection between the need for grid projects in the respective countries and benefits such as the extension of renewable energy production or security of supply be established?
- Can a legitimate connection between the extension of renewable energy production and concrete benefits for stakeholders be established?

Project timetable/events

Information on project developers

The project developers should develop a schedule for regular information events from an early stage on to show their commitment to transparency. This schedule should be communicated openly to the above-mentioned stakeholders. Transparency is further enhanced by always naming a contact person that stakeholders can refer to.

- Which events for stakeholders have already been scheduled?
- Who is in charge of dealing with stakeholder questions/input?

Country-specific examples

Germany

In Germany, TSOs are legally obliged to develop an annual grid development plan for which they need to enter into discussion with all stakeholders or at least ask them for consultation. Any stakeholder, whether they form part of an organisation or not, have the right to comment on the grid development plan. The Regulator who is in charge of approving the grid development plan checks whether the comments have sufficiently been considered in the final draft of the plan.

Some German TSOs already use extensive active communication during the "Determination of need" stage. They attempt to address the affected stakeholders as early as possible, already including local and regional elected politicians as well as regional administration.

EU

Under the leadership of ENTSO-E, the biannual Ten Year Network Development Plan (TYNDP) is developed. In recent years, ENTSO-E has significantly increased opportunities for different stakeholders to participate in the process of drafting this document, e.g. by organising workshops for information, dialogue and participation for third parties.

Project Stage Project preparation



Project stage description

During the Project preparation stage the project developers typically elaborate the first corridor options to prepare for the application procedure. This includes the consideration and assessments of a lot of rather roughly defined route alternatives for the further development of the project. Typically, two to four broad corridor alternatives are elaborated in cooperation of planning offices and external stakeholders. It is therefore the stage during which certain local interests and particularities (such as natural reserves, historical sites, communities, infrastructures, etc.) can be directly integrated into the further project.

Stakeholders should be actively asked to contribute their suggestions, to inform the project developers about local details that should be considered in planning the Project location and to share their concerns about the grid development project in general. An early dialogue on these issues has proven to be of considerable help in avoiding conflicts and resistance at a later stage.

Apart from involving different stakeholders into the project planning, it is also important to give sufficient and transparent information about the context of the project. This will also outline the reasons behind the project and the effect it may have on the region or country (e.g. power needs to be transported from north to south, energy transition might benefit national industry). Early information about the long term benefits of the project, both to the community and to society as a whole (e.g. security of power supply, decreasing energy prices) can promote early acceptance. However, macro-level project benefits may appeal to stakeholders before they are directly affected by the project, and local-level impacts may reverse stakeholders' opinions once they find themselves in an affected region.

A multitude of options exists for informing and engaging stakeholders during this stage, and TSOs should – in their own interest – make a real communication effort at this point. Considering the risk that stakeholder involvement and interest among certain groups can remain low during this stage, typically until the corridor or line routes are finalised and certain communities feel specifically affected. It is recommended to involve established representatives (e.g. politicians and associations) to get involved on behalf of the communities that they represent before local communities and individuals feel affected enough to organise and involve themselves.

Usual Patterns

Project-Specific Questions

Stakeholders involved in this stage

TSOs
Permitting authorities

In the first project stage "Determination of need", the decision for certain grid development project has been made on a high national or international policy level. It is now to be implemented by the responsible TSOs who begin to plan all aspects of the project at this stage. The Regulator or Permitting authorities can act as advisor and supervisor.

If not yet drafted, this stage includes elaborating and finalising the Communication strategy considering all other stakeholders that will be involved and/or affected during the project. This entails identifying the main multipliers (e.g. Local/Regional authorities and Environmental NGOs) and starting the dialogue at an early stage. All other stakeholders should be addressed early on as well, in order for the project planning to be able to take into account their main objections. However, exchanges that are initiated too early, before any concrete information is available, may not be particularly productive, as local stakeholders do not feel particularly affected by the project yet. However, exchanges should certainly occur when different options still exist and all final choices have not yet been made. This makes the engagement of local politicians, NGOs etc. at this stage even more important because they can represent the interests of local individuals and communities before they engage in the dialogue themselves. It is important that representatives communicate their engagement on behalf of their constituents and pass on their findings of the dialogue with the project developers.

With regards to stakeholder engagement in general, the TSO at the Project preparation stage must try to analyse what issues might arise during the implementation of the project. This means taking into account which actors would be most likely object to the project, what their main objections would be (e.g. visual pollution, declining house values, environmental issues and

- What groups may be opposed to the project?
- What are the main arguments against the project?
- How can other stakeholders be best informed via formal and informal means of communication?
- How can the TSOs act to involve key stakeholders early on?

health effects), how these objections can be addressed and what compromises could be offered.

Local elected officials

National/Regional policy makers

Local and regional officials can provide information on the general perception of the project and can provide specific information on local particularities to be considered in project planning. In addition they may be able to provide information about possible concerns and opposing views.

They are important representatives for all individual stakeholders that will be affected by the project and have not yet become engaged in the dialogue.

Local and regional authorities could also act as important multipliers. Authorities involved in the dialogue as representatives of the local public should inform their citizens about the project progress and the extent to which their interests are considered by the project developers.

- Which local or other officials could provide useful input into the planning process?
- How can they be best involved? How can they be encouraged to provide input and become engaged in the project planning?
- How can elected officials be generally included to act as intermediates between the citizens (who elected them) and the project developers in case of conflicts?
- Have regional or national officials been involved in the decision-making processes for the grid development project? If so, how can they be included in the project communication strategy to explain their decisions?

Environmental NGOs

Opinion leaders

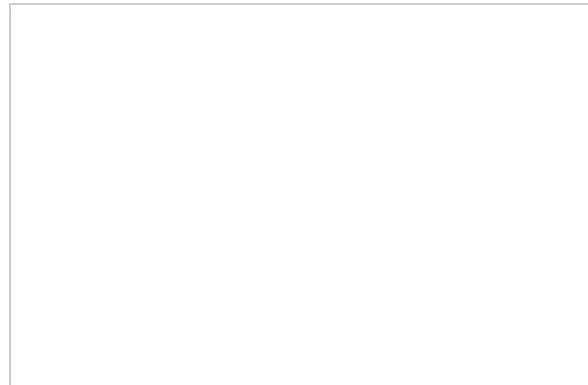
Various multipliers groups, especially NGOs and local associations (e.g. farmers' or forestry association), have valuable insight into specific issues useful for the early route planning (e.g. environmental issues, local values, other local issues, etc.) which should be taken account in the preparation phase. They may also provide input into any project documents (e.g. environmental assessments, planning application, etc.) which – depending on the applicable national law – must be completed at this stage or a later project stage.

It is advisable to give important multipliers the ability to shape the direction of the project planning as cooperation avoids

- How can NGOs and local associations be involved in the Project preparation stage? How can they be encouraged to provide input and become engaged in the project planning?
- Which NGOs/associations are potential stakeholders of the grid development project? Which NGOs, associations, etc. are able to provide useful input?
- What insight or expertise could these different stakeholders provide that could be useful to Project preparation in general or to project documents required at this stage?

opposition and mistrust. Therefore early communication is an advantage, as during the Project preparation phase the inputs of other stakeholders can be taken into account easily.

Another reason to involve NGOs and associations early is that they are commonly trusted intermediaries channelling information to the larger public in addition of being useful multipliers.



Land owners
Adjacent communities
Local citizens' initiatives

Project developers and other stakeholders, such as local politicians or NGOs, should discuss possible trajectories or distribute other project information to the broad public as the project is being prepared.

Information can be distributed to the public through a multitude of channels, such as the Media, citizen helplines, Project websites, information offices, newsletter mailings, etc.

The project developers may also choose to actively consult the general public during this stage, for example via a public debate, information or consultation events. In some cases, such a public consultation prior to the permitting stage is regulated by law (e.g. in France, where, for sizable projects, the National Commission on Public Debate decides whether a public debate is necessary).

Early engagement of the general public is important to raise awareness of the possible effects the project may or may not have on the community or individuals.

LCIs regarding this specific project usually have not been established at this project stage yet. However, "old" LCIs related to other infrastructure projects in the region are likely to engage with new grid development projects at early stages. It is important to take them on board in order to

- Is a public consultation in this stage required by law?
- How can the public be involved at this stage? How can awareness for the project be raised in order to avoid conflicts at a later stage?
- Are there any LCIs in the project region that have lately been engaged in comparable infrastructure projects? If so, are they likely to get involved early and what are their goals? How can a constructive dialogue be established? Have there been conflicts with LCIs and project developers in the region in the past? If so, what are the lessons learned for both sides?

establish a good relationship, a constructive dialogue and understand their concerns and needs. This is especially true if conflicts have been encountered in other infrastructure projects in the region.



Typical channels used in communication

Project website

Brochure/Flyer/Fact sheet

It is strongly advised that the project developers create project-specific websites at this stage or include useful project information in their main homepage. This allows any member of the public to access the information directly from the TSO, therefore increasing transparency. Possible contents are the explanation of the need for the specific grid development project, the project schedule and next steps, information on the project developers and possibilities to get involved and provide input from an early stage on.

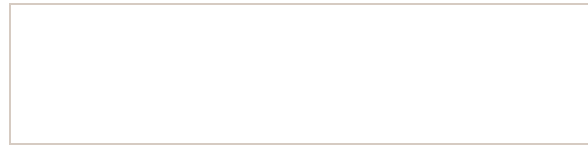
The Project website could also include surveys or questionnaires to solicit public opinion and input in a less formal manner than an official consultation or debate. This helps to demonstrate the project developer's interest in taking public concerns into account and establishing a dialogue with different stakeholders at an early stage of the project. It also provides the TSOs with information about the issues that might arise during the further development of the project.

Websites can also be useful to NGOs, the Media, political authorities or any other stakeholders involved to publish their point of view and potential input and involvement with the project.

Direct mailings or e-mailings to various stakeholders can ensure that they receive key information and can allow for distribution of targeted text-based or visual material, such as flyers, brochures and Fact sheets.

- What relevant project information already exists that could be published and does it need to be adapted for online publication?
- How can viewers be encouraged to visit the Project website to learn about the project?
- Can informal consultation formats be embedded into a Project website?
- Is establishing a newsletter regarded as helpful at this stage? Who could be interested?

The Project website is a good channel to provide stakeholders with dedicated contact information for any kind of requests or questions that may arise.



Public space events
Town hall meetings
Closed-door meetings

Interactive formats, such as events, visits or meetings of various sizes can help not only spread information about the project, but also solicit stakeholder input.

Interactive formats can give stakeholders a chance to be involved, rather than simply informed, and may demonstrate the project developers' willingness to actively engage other actors.

Communication on events is essential, in order to give stakeholders all possible opportunities to participate in Project preparation.

- Which stakeholders' inputs are important at this stage? Given the resources needed for interactive formats, on which stakeholders should resources be focused at this stage?
- What are the best forms of events and at what time should they be implemented?

Print media
Radio/TV

More traditional media has proven to be a good source of advertisement and announcement for grid projects in early project stages in certain countries, such as Spain. In this case the media acts as a multiplier for the information to be distributed to the public.

In other locations (e.g. Ireland), however, even positive engagement of traditional media in early project stages can be negated if public opinion changes during later project stages.

Either way, traditional media, announcements and advertising can help raise awareness and spread information while the project is being prepared, in order to potentially boost public participation at the early project stages and keep the public informed and ensure that the project process is transparent.

Guiding principles of the reporting should

- Which media sources could be most effective at raising awareness for the project?
- How often and when are press conferences appropriate and useful?
- How can the media be supplied with the facts and information that are needed to produce objectively and well-researched reports?

be informative, objective and well-researched articles. Reader's comments as well as declarations of TSOs are common and should clearly be identifiable as such.

Essential content communicated

Project location/map

Even though the final location of the project is not defined at this stage, it is of public interest to communicate the possible alternatives to the involved stakeholders.

Indeed, when communicated to stakeholders at this stage, Project location information should be concrete enough to be tangible, and yet should leave room for decisions by providing multiple options.

- What are the different alternatives for the Project location?
- How can stakeholders be involved in the decision process concerning the final location of the project?

Project timetable/events

The timing of the different steps entailed in the project should be communicated early on to give a clear sense of the project development to all parties involved.

If exact time plans of the project are not yet known, estimations can be provided when different stages are likely to start and when certain deadlines may be due. The description of the upcoming project stages should point out any kind of public participation involved at each specific stage.

- Is any decision or action by external stakeholders required by a certain time to ensure the timely development of the project?
- What is the typical timetable of such project and at what stages is stakeholder involvement required and expected?

Technical details of project

Certain Technical details may be communicated at this stage, if known. However, the most relevant details are likely to be developed in further project stages.

Are there any Technical details that are worth communicating at this stage?

Information on project developers

There is a need to inform the other stakeholders about the nature and

What is the information already possessed by other stakeholders about

intention of the project developers.

the project developers?

Compensation measures

Compensation measures that are necessary or possible may not yet be specified at this stage of the project. It might be of interest to still inform the stakeholders that compensation could be given in certain cases.

- Are there any legal constraints to Compensation measure?
- Can Compensation measures be addressed in such early stages of the project?

Country-specific examples

France

For large projects, determined by the length and voltage of the project, the RTE has to inform the National Commission on Public debate (CNDP), which then evaluates whether a public debate is required for the discussion of the project. The CNDP has been established by the French government and consists of 24 member organisations (NGOs, mayors, politicians). If a public debate is agreed upon by the CNDP, a public consultation takes place during the Project preparation and includes between five to seven meetings on the different topics relating to the project.

Germany

Since the introduction of new legislation in 2011, the need determination process in Germany includes public consultations and the Project preparation therefore is based on the results of the first consultation. Furthermore, TSOs are required to take the outcomes of a second consultation into account when preparing the further developments of the project.

UK

National Grid is required to issue a Statement of Community Consultation in which key stakeholder groups are drawn into discussion for the determination of the routing and siting of the new grid. Additionally when more details on the possible routes are available the broader public is also consulted through a voluntary public consultation.

Norway

After considerable difficulties with the Hardanger project, the process for new grid developments has changed considerably to include more involvement of stakeholders. Therefore, Stanett establishes different corridor options and informs all municipalities, local NGOs and authorities, who are located in proximity of possible corridors. In addition, the scoping documents for an EIA are also sent out to those stakeholders and the national Regulator, who is then responsible for holding a public consultation.

Project Stage Spatial planning



Project stage description

At the project stage of Spatial planning the project developers identify an appropriate corridor for the newly developed grid line. The procedure can differ by Member States. Commonly, the project developers will have elaborated different corridor alternatives for the new grid line and present their application to the Public Authorities (e.g. in an application conference).

This is followed by a public consultation process which starts with the announcement of the project, the publication of a communication strategy in local newspapers and an invitation of relevant stakeholders to take part in the public consultation process. The aim is to discuss the corridor options and all matters around corridors in terms of environment (Strategic environmental assessment (SEA)), landscapes, land use and views and other relevant factors that can influence a decision on a certain corridor.

All events, procedures and public consultations should be announced on the internet as well as in public newspapers. At the end of this project stage, a final route corridor with a limited width (e.g. 500—1000 metres in Germany) will be identified which completes the application documents for the final Permitting stage.

As the corridor is narrowed down which helps to get an idea of which Land owners and communities are likely to be affected by the grid development project, public awareness is rising all along the potential project corridors at this stage. For TSOs, it is important to meet the public need for information and start a dialogue with all relevant stakeholders through appropriate channels.

A rise in public awareness will usually lead to a rise in public opposition. To avoid conflicts, all stakeholders should be aware of what to expect from each other and play their "role". For example, politicians and other decision makers are responsible for the general decisions of the grid line – the TSOs usually does not decide on the general Need or the technology used.

Potentially affected citizens and communities should be aware that the TSO is unable to supply detailed information of the Project location at this point. Even though the corridor is narrowed down at this stage, it is not precise enough to tell about the exact location of the transmission towers.

Usual Patterns

Project-Specific Questions

Stakeholders involved in this stage

TSO

In terms of stakeholder dialogue, the stage of Spatial planning is the first crucial project stage as public awareness starts to rise.

A dialogue with all relevant stakeholders should be started as early as possible as this has been proven to help in reducing conflicts at all the following stages.

TSOs should have developed a precise communication plan to meet the needs of public participation, information and dialogue of all relevant stakeholders. It is crucial to have an ongoing dialogue with decision makers, media and citizens.

Relevant contents are to be elaborated, events to be planned and stakeholders to be invited early.

A critical point is the public request for detailed corridor information which is not yet available at this stage as the location is still quite broadly defined. Also, as stakeholders might fear to be affected, general discussions about the need for renewable energies, new gridlines and the technology used might start at this point.

- What is needed to implement the communication plan at this stage?
- How can a dialogue with all relevant stakeholders be developed and maintained?

National/Regional policy makers

National/Regional policy makers have usually been involved in the debate for longer than individual citizens; some of them might even have taken part in the decision-making of (a specific) grid development project.

For public authorities that played a role in the decision-making of grid development, it is important to support the project developers in their communication strategy and take responsibility. This means to be available for questions that might be coming from the public and explain the decisions made.

For policy makers that did not play a role in the decision-making, their main task is now to act as an intermediate between citizens,

- Have regional or national policy makers been involved in the decision-making processes for the grid development project? If so, how can they be included in the project communication strategy to explain their decisions?
- For all other officials: How can they share their knowledge acquired at recent project stages with affected citizens that are not familiar with the project in order to support a constructive dialogue?
- How can policy makers be generally included to act as intermediates between the citizens (who in some cases elected them) and the project

LCIs and the project developers. As these officials have usually been part of the former stages of the grid development project, they have more knowledge about the process and they have been supervising the decisions made so far, commonly representing their voters interests. It is their task now to share their experience and knowledge with the affected and/or interested population and find a way to uphold a constructive dialogue between all stakeholders.

developers in case of conflicts?

Land owners
Adjacent communities
Local citizens' initiatives

For communities it becomes more or less definite at this stage if they are going to be adjacent to the power line or not. Now it is only a question of the actual distance.

Land owners should be aware that the corridor is usually not narrow enough yet to tell if their land is going to be used as project land.

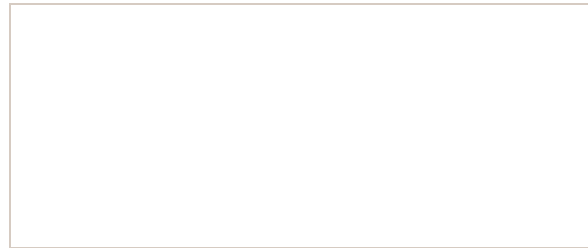
Public awareness and opposition is typically growing at this stage, peaking at the next stage (Permitting) when precise decisions on the power line location are made.

Having established a transparent dialogue with local stakeholders from an early stage on with important multipliers involved (Local elected officials, representatives of local associations etc.) pays off now as it will help to keep a constructive dialogue upright. Events and communication tools reaching the broad local communities are now very important.

In many cases, new Local citizens' initiatives (LCIs) are being established at this point. Before establishing, joining or supporting a LCI, citizens of Adjacent communities should inform themselves about the LCI's goals in order to decide if they feel represented by them or not. Blocking and uncooperative LCIs that are

- Which communities can be identified as adjacent at this project stage?
- Can the future dialogue be based on recent contacts with local multipliers?
- Which LCIs have been created in the immediate aftermath? What are their aims? Are they cooperative and constructive?
- Are potential LCIs supported by a broad majority of citizens? If not, how can a dialogue between TSO and all other members of the community be initiated?

not representing the majority of a community can be harm to the goals of all other citizens as well as the project as such. TSOs and all citizens who cannot identify with the LCI would be well-advised to keep a constructive dialogue about relevant issues ongoing.



Environmental NGOs

For Environmental NGOs, Spatial planning is a very important stage. They play a crucial role in the SEA procedure and are important advisers and potentially partners with the TSO when deciding on a specific narrow corridor.

- Which NGOs can be involved in the SEA and how?

Media

As the dialogue between the stakeholders intensifies, the role of the media rises at this stage. For all parties they are both source of information and communication tool.

Certain types of media are meant to be objective and independent, while others are more opinionated. During this "hot" stage of the grid development process, biased reporting – coloured by any of the potentially conflicting stakeholders – can sometimes increase the conflict and hamper a constructive solution-orientated dialogue.

Regardless of whether information is presented neutrally or to support an opinion, the reporting should be informative, accurate and well-researched. Comments and opinions from other stakeholders should clearly be identifiable as such.

- How can the media be supplied with facts and information needed to report objectively and well-researched?

Typical channels used in communication

Project website

Social media

Websites of NGOs, LCIs etc.

The Project website and Social media play an important role in supporting other

- What is the relevant information and how can it be presented online?

stakeholders with the newest relevant information. This demonstrates transparency and creates trust as the public wants to be informed as soon as possible if decisions have been made that could affect them.

Transparency and a good approach to informing the public are crucial at this stage of growing public awareness and dialogue.

The Project website could also include surveys or questionnaires to solicit public opinion in a less formal manner than an official consultation or debate. This shows the TSOs' interest in establishing a dialogue with different stakeholders at all stages of the project. It also provides the TSOs with information about the issues that are relevant to other stakeholders.

It could also be a good communication channel for NGOs, the media, political authorities or any other stakeholders involved to publish their point of view and potential input and involvement with the project.

- How can viewers be encouraged to visit the Project website to learn about the project?
- Can informal consultation formats be embedded into a Project website?

Doorstep visits

Public space events

Town hall meeting

Roundtable

Closed-door meeting

There is a huge need for good communication, acquiring intense dialogue platforms involving all important stakeholders at this project stage.

Depending on the intensity and the "direction" of a potential opposition, the TSO might choose appropriate meetings, dialogues, (information) events to meet the needs of different stakeholders.

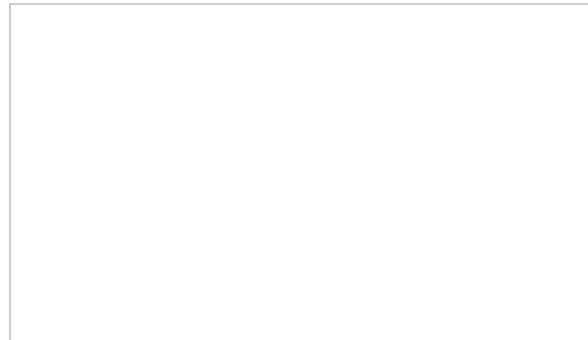
Interactive formats, such as calls, visits or meetings of various sizes can help not only spread information about the project, but also solicit stakeholder input.

Interactive formats can give stakeholders a

- Which stakeholders' inputs are key at this stage?
- Given the resources needed for interactive formats, on which stakeholders should resources be focused at this stage?

chance to be involved, rather than simply informed, and may demonstrate the stakeholders' willingness to actively engage other actors.

Having started the communication process early, involving all relevant stakeholders and understanding their concerns early will help at the later project stages as conflicts become much less likely.



Essential content communicated

Project location/map

As soon as the Spatial planning becomes more concrete in determining potential corridors, it can be helpful to publish Project location maps at this early stage. This will start a dialogue with the local stakeholders, which then helps to assess the potential corridors and find out about local sensitivities.

Publishing mapping material early can – as all information material – help to improve public acceptance of the project as it demonstrates transparency.

- How can the Project location be visualised best?
- How can it be made possible to involve other stakeholders in the decision process concerning the final location of the project?

Project timetable/events

The timing of the different steps entailed in the project should be communicated early and be updated as soon as the project developers realise any changes - in order to give a clear sense of the project development to all parties involved.

Is any decision or action by external stakeholders required by a certain time to allow the timely development of the project?

Technical details of project

There is a need to inform the other stakeholders about the nature and intention of the project developers.

How can the Technical details be communicated in a comprehensive manner?

Information on project developers

There is a need to inform the other stakeholders about the nature and intention of the project developers.

What is the information already possessed by other stakeholders about the project developers?

Compensation measures

As the corridor is still too broad to define the finally affected Land owners and communities, Compensation measures cannot be conclusively discussed.

The possibility as well as the potential scope of Compensation measures can be communicated at this stage.

- Are there any legal constraints to Compensation measure?
- What concepts can be developed to compensate affected individuals or communities?

Project Stage Permitting



Project stage description

At the Permitting stage, the plan approval procedure takes place. The goal of this process is to approve a precise route plan for where the newly developed grid line should be built.

The final route corridor having been identified in the Spatial planning stage, the application/proposal documents are ready to be handed in by the TSO. Depending on regulations specific to each Member State, Permitting authorities or Regulators will start a consultation or a public application conference before or after the application is handed in. All issues not yet covered in the SEA are now being dealt with in a following EIA.

Application documents and EIA are now being revised; a consultation of all relevant public authorities, associations and the population directly affected by the project is carried out.

This project stage ends with the plan approval granted by the respective Permitting Authority.

Public awareness is typically highest at this stage, as the corridor is narrowed down to a point where communities and Land owners find out they are directly affected by the grid development project. Therefore, there is a significant need for good communication, making use of dialogue platforms involving all important stakeholders, cooperation of the media and a strong management of public requests and concerns on the side of the TSO.

The peak of public awareness might also lead to a peak in public opposition. To avoid conflicts, all stakeholders should be aware of what to expect from each other and the roles of different stakeholders (as well as their own). For example, it should be made clear that politicians and other decision makers, rather than TSOs, are largely responsible for the general decisions made on the grid line.

Usual Patterns

Project-Specific Questions

Stakeholders involved in this stage

TSO

TSOs should manage communication and stakeholder dialogue responsibly during the Permitting stage. This stage is a very crucial project stage as public awareness peaks due to the precise definition of the Project location – Land owners and communities finally find out if they are directly affected.

- What is needed to implement the communication plan at this stage?
- How can a dialogue with all relevant stakeholders be developed and maintained?
- Will it help to solve potential conflicts

A dialogue with all relevant stakeholders should have been started as early as possible and should be intensified at this stage. This strategy has proven to help in reducing conflicts.

The TSO should develop relevant contents, plan necessary events and make sure to invite stakeholders in advance. TSOs should also adapt communicated contents to communities who are now certain to be affected by the project. The TSO may also wish to launch a discussion of Compensation measures.

It is important to find a process for involvement that encourages all relevant stakeholders to contribute their concerns and suggestions. Workshops with local stakeholders (such as Land owners and members of LCIs – if there are any) can be a good tool but the host should bear in mind that most local stakeholders have a job or other obligations during the day so that all events are probably best to be held at a reasonable time after closing hour. Also, other possibilities to provide input and get in touch with the project developers (e.g. via e-mail, Citizens helpline etc.) should be publicly advertised. Moreover, local stakeholders should be informed (e.g. through media) what kind of input the project developers need at this stage.

During Permitting, TSOs should continue to follow their existing communication plan or make adjustments if there are lessons learnt.

to ask affected stakeholders for input in order to make minor adjustments to transmission tower locations?

National/Regional policy makers

Regional/national policy makers have usually been involved in the debate for longer than individual citizens; some of them might even have taken part in the decision-making of a specific grid development project or projects.

For policy makers that played a role in

- Have regional or national policy makers been involved in the decision-making processes for the grid development project? If so, how can they be included in the project communication strategy to explain their decisions?

high-level decisions on grid development, it is important to support the project developers in their communication strategy and take responsibility for decisions made. They or their representatives should be available for questions from the public and should be able to explain grid development decisions.

For policy makers that did not play a role in the decision-making, their main task is now to act as an intermediary between citizens, LCIs and the project developers. As policy makers have usually taken part in the former stages of the grid development project, they have more knowledge about the process and have been supervising the decisions made so far, representing their voters' interests in the case of elected officials. It is their task now to share their experience and knowledge with the affected and/or interested population and to find a way to uphold a constructive dialogue between all stakeholders.

- For all other policy makers: How can they share their knowledge acquired at recent project stages with affected citizens that are not familiar with the project in order to support a constructive dialogue?
- How can policy makers be generally included to act as intermediates between the citizens (who elected them) and the project developers in case of conflicts?

Environmental NGOs

The role of Environmental NGOs remains important at the Permitting stage. Their (early) assessment is needed for landmarks and peculiarities of specific parts of the corridor. Also, NGOs can play an important role as multipliers and mediators between local stakeholders and TSO.

NGOs can also help frame the environmental obligations for the construction and implementation of the project (e.g. certain bird protection procedures), as well as environmental Compensation measures which may be appropriate in the context of the project.

- How can NGOs be involved and get involved in the most effective manner?
- What are the environmental obligations of a certain power line?

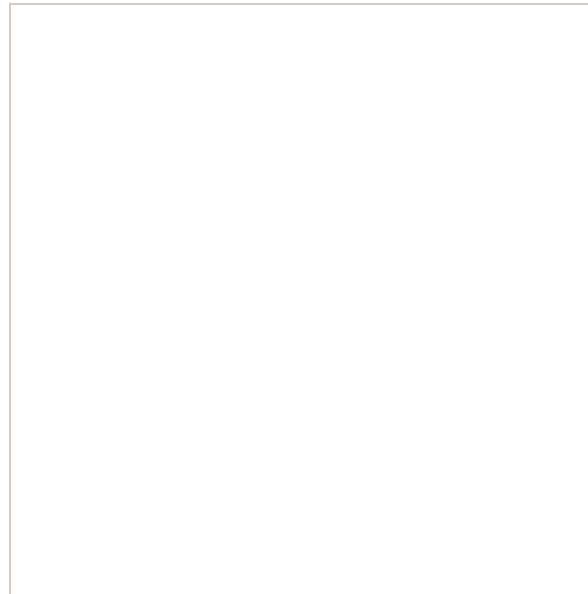
Media

As the dialogue between the stakeholders intensifies, the role of the media rises at this stage. For all parties they can act as both a source of information and a channel for communication.

- How can the media be supplied with the facts and information needed to allow for objective and well-researched reporting?

It goes without saying that journalism should ideally be objective and independent. Even more so, this holds true for journalism during this "hot" stage of the grid development process. A biased reporting – coloured by any of the potentially conflicting stakeholders – can increase the conflict and hamper a constructive solution-orientated dialogue.

Guiding principles of the reporting should be informative, objective and well-researched articles. Reader's comments as well as declarations of TSOs are common and should clearly be identifiable as such.



Land owners
Adjacent communities
Local citizens' initiatives

In this project stage, it is finally decided which communities are going to be adjacent to the new grid line and who the owners of the project land are.

The interest of local stakeholders is therefore typically peaking now, as the impacts the project will have on their communities and lands is becoming real.

Local stakeholders may reasonably expect the TSO to provide clear and detailed project information, including an explanation and discussion of specific impacts on the community, and to set up platforms for dialogue and exchange.

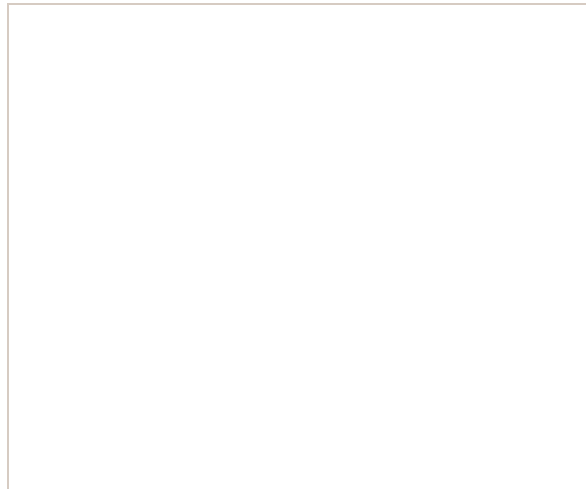
Land owners can expect to be approached by the project developers to ensure a fast and easy compensation process.

Even though key decisions of the project have already been made at this stage, affected stakeholders can, for example, contribute input for minor adjustments e.g. for precise transmission tower locations if they can provide good reasons for their request – in many cases this can help to solve conflicts and reassure stakeholders

- Which communities can be finally identified as adjacent at this project stage?
- Who are the owners of the project land and how can they be approached directly?
- Which LCIs have been created in the immediate aftermath? What are their aims? Are they cooperative and constructive?

that their voices and opinions are taken into account. Local residents may also provide other requests and may negotiate individual or community-wide compensation or mitigation measures.

The implementation of events for local stakeholders, initiated by the project developers to foster direct communication processes are to be continued during the Permitting stage. Citizens of Adjacent communities should take this chance of getting first-hand information and making use of direct communication.



Typical channels used in communication

Project website Social media

The Project website and Social media play an important role in supporting other stakeholders with the newest relevant information. This demonstrates transparency and creates trust as the public wants to be informed as soon as possible if decisions have been made that could affect them.

Transparency and a good approach to informing the public are crucial at this stage of growing public awareness and dialogue.

The Project website could also include surveys or questionnaires to solicit public opinion in a less formal manner than an official consultation or debate. This shows the TSO's interest in establishing a dialogue with different stakeholders at all stages of the project. It also provides the TSO with information about the issues that are relevant to other stakeholders.

It could also be a good communication channel for NGOs, the media, political authorities or any other stakeholders involved to publish their point of view and potential input and involvement with the project.

- What is the relevant information and how can it be presented online?
- How can viewers be encouraged to visit the Project website to learn about the project?
- Can informal consultation formats be embedded into a Project website?

Doorstep visits
Public space events
Town hall meeting
Roundtable
Closed-door meeting

There is a strong need for establishing good communication and exchange through dialogue platforms involving all important stakeholders at this project stage.

Depending on the intensity of opposition and their objectives, the TSO might choose appropriate meetings, dialogues and (information) events to meet the needs of different stakeholders. Interactive formats, such as calls, workshops, visits or meetings of various sizes can help not only to spread information about the project, but also solicit stakeholder input.

Interactive formats can give stakeholders a chance to be involved, rather than simply informed, and may demonstrate the stakeholders' willingness to actively engage other actors.

Organisers of the events should bear in mind that local stakeholders have restricted time to take part in events and usually work during the day. Therefore, the TSO might think about organising several small local events instead of a bigger "centralised" one. Inviting people after closing hours or on the weekends will commonly lead to more participants. Just as crucial is an early and broad announcement of the events in newspapers, official community journals, public advertisements etc. The invitations should also point out why the input of local stakeholders is important and what kind of input the TSO is interested in.

Starting the communication process, involving all relevant stakeholders and understanding their concerns early on in the project will facilitate smoother exchange at the later project stages.

- How developed has the stakeholder dialogue been in the latest project stages? Does it need to be intensified?
- What are the appropriate channels and events best adapted to the needs of the stakeholders opposing the project at this stage?

Project location/map

When the TSO is applying for permission for certain corridors, these corridors should be discussed and evaluated publicly with all relevant stakeholders. Maps are an important tool to visualise the evaluation and discussion of different locations. Afterwards, publishing the resulting Project location maps increases transparency in the process and keeps the stakeholders updated.

- How can the Project location be visualised best?
- How can other stakeholders be involved in the decision process concerning the final location of the project?

Project timetable/events

The timing of the different steps entailed in the project (e.g. legal milestones of the Permitting process) should be communicated early and be updated as soon as the project developers make any changes, in order to give a clear sense of the project's development to all parties involved.

Is any decision or action by external stakeholders required by a certain time to allow the timely development of the project?

Technical details of project

Technical details should be communicated to the other stakeholders in a clear and understandable way. This often means that highly technical language or contents should be summarised and simplified, or presented in a visual way, in order to facilitate comprehension by all stakeholders. Nonetheless, the TSO may choose to make comprehensive Technical details publicly available for those who would like to read them.

How can the Technical details be communicated in a comprehensive manner?

Compensation measures

The Permitting stage is the most relevant project stage for communicating and discussing Compensation measures, as the affected Land owners and communities are being defined at this stage. Various stakeholders may be involved in the negotiation of Compensation measures, including measures to benefit the community at large and those which serve

- Are there any legal constraints to Compensation measure?
- What concepts can be developed to compensate affected individuals or communities?

to compensate specific affected Land owners.

Country-specific examples

Spain

In Spain, the permitting procedure encompasses three different processes, one for the Environmental Impact Assessment, one for the Construction Permit and one for the Operation Permit.

Hungary

In Hungary, the Permitting procedure consists of six different processes: one each for obtaining the Agricultural Field Permit, the Environmental Permit, the Theoretical Permit, the Preparatory Work Permit, the Construction Permit and the Operation Permit.

France

In France, CNDP (Commission Nationale du Débat Public - National Commission for Public Debate) is a public authority responsible for ensuring public consultation and participation in infrastructure projects of national interest and consists of 24 members (NGOs, mayors, politicians) especially but not only in the Permitting stage but also at earlier stages of the project.

Project Stage Construction



Project stage description

The Construction stage is the penultimate stage of the project, during which the actual construction activities take place.

In terms of good communication processes between project developers and Adjacent Communities, this stage is relatively important since it is the first “visible” one. There is therefore a need to adapt communication to the particularities of this project stage.

Depending on the project’s size and complexity, the Construction stage can last between six months and three years, or even longer.

A key feature of the Construction stage is that it has strong, direct impact on local stakeholders like Land owners or Adjacent communities. Content-wise, messages related to project benefits, timetable and Compensation measures are amongst the most important to communicate.

Typical channels of communication include both global communications means like a Project website or Social media, and local communication means such as Field visits, local media or a Citizens helpline.

Usual Patterns

Project-Specific Questions

Stakeholders involved in this stage

TSOs

The TSO is typically the head of public works’ operations for a grid project, and oversees all aspects of construction and of communication surrounding construction. As in any public works Construction stage, adverse effects like noise pollution can occur as well as delays due to unforeseen events. It is the responsibility of the TSO during this stage to address adverse effects and delays and carry out appropriate communication during the most critical moments.

- How long does the project last precisely?
- Which are the adverse effects that are likely to occur during the construction of the project?

Environmental NGOs

NGOs may continue to be involved in this

How can communication with NGOs be

project stage, and to monitor the environmental impacts of construction. NGOs may be helpful in alerting TSOs to unforeseen environmental impacts.

maintained during this phase regarding the specific project?

Media

The media has significant power to influence all other stakeholders. Project developers should be transparent with the media and should continuously be available to explain any delays or other problems during construction, in order to ensure that the correct information is passed on to the public.

It is also expected that more and more media entities start investigating and publishing news on the project precisely during this Construction stage. The TSOs can anticipate this need for information and secure information material to give an update to newly interested media entities.

- Does the TSO have a Public Relations department which could manage the relationship with the media?
- Which media entities are likely to show most interest in the project at this project stage?

Local elected officials

Land owners

Adjacent communities

Local citizens' initiatives

In communicating with the directly affected local stakeholders during the Construction stage, an emphasis should be put on local impacts and considerations – hence the project developers, especially the TSO, has to pay special attention to:

- Local nuisances resulting from construction works. These should be reduced to a minimum and accompanied keeping the affected stakeholders informed about duration and likely degree of local nuisances.
- Security at work. This has certainly become one major requirement of any project of public works today. Any negligence in security at work during the Construction stage may turn the public opinion against the whole project.

Are Land owners and members of the Adjacent communities likely to be most affected during the Construction stage?

National/Regional policy makers

Private consumers

Industrial consumers
Experts/Academia

These stakeholders typically have a more important role at earlier stages of the project. Although less directly impacted by construction, they may still wish to be informed of project progress. The TSO should therefore continue to ensure transparent communication with these stakeholders, providing regular updates on the construction works. In addition to this, the TSO should listen to any stakeholder group which may take an active interest in the project during this phase and may have something to contribute.

Which non-local stakeholders are likely to be most interested in information on the Construction stage of the specific project?

Typical channels used in communication

Project website

During this most visible phase of the project, the TSO may wish to use large-scale communication means like a Project website that is regularly updated with news on the project's progress. Even if the Project website can be used throughout the whole duration of the project, it is especially useful after Permitting stage, as the project gets even more public recognition.

Do the project developers have the resources to regularly provide updated news on the construction progress via their website?

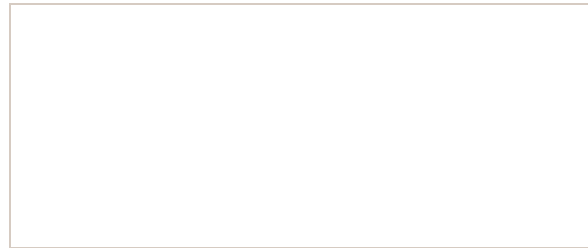
Field visit
(local) newspapers
(local) Radio/TV
Citizens helpline

Due to the strong local impact during the Construction stage, local means of communication are highly important. Organising Field visits for a group of local citizens, providing interviews of TSO representatives to local newspapers or establishing a helpline dedicated to citizens' concerns related to construction helps to foster trust. The helpline for instance should be kept open during the whole Construction stage.

Local and national communication strategies have to be designed

- Do the project developers have a mailing list of important local stakeholders?
- Does a Citizens helpline already exist? Are its operators briefed to deal with problems relating to construction?

consistently. For example, on-site advertisement boards could bear mentions of further means for the information of stakeholders, such as the Project website or the Citizens helpline. This can eliminate frustration due to any feeling that information might be too scarce.



Essential content communicated

Project benefits

Project benefits should come as a reminder in this stage of the project, with long-term project benefits helping to balance all short-term impacts of construction works (local nuisances).

In case of a bigger project, any study demonstrating the public interest of enhancing grid infrastructure could be useful. In any case, the use of direct, “facts & figures” content should be favoured.

- Have any benefits of the project been challenged at the earlier stages?
- Which short-term, local impacts can be included in the communicated messages?

Project timetable

One key piece of information to deliver to local citizens and other stakeholders is how long the Construction stage will last.

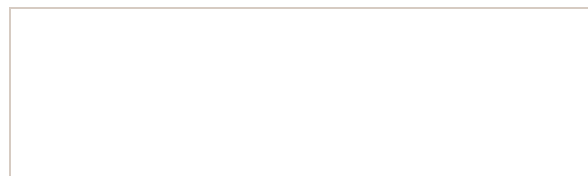
The Project timetable would also allow the TSO to remind the public of the work done in the previous stages, including consultations, assessments, etc.

Above all, the use of a very clear timetable is an opportunity to underline that the Construction stage will not last forever and manage expectation from the affected stakeholders.

- How can timetables be amended and re-communicated in case of delays?

Information on project developers

The construction sites should always bear a clear indication of who is responsible for the construction and who needs to be addressed in case of questions, doubts or concerns.



Compensation measures

If there are any, the TSO can highlight social and ecological efforts it is or will be doing in the course of this specific project.

If any negative impact is being caused to the local environment during the Construction stage, the TSO should explain which compensation or mitigation measures have been taken. In this regard, biodiversity is certainly one major concern (above all for Environmental NGOs).

Finally, the TSO should make it clear when financial compensations will be transferred to stakeholders entitled to them (above all Land owners). Even if the money can be transferred to owners as soon as the Permitting stage, the Construction stage is generally considered as particularly appropriate for doing so.

- Does the TSO own a foundation, which could contribute to social progress or Compensation measures? Can the TSO contribute in another way?
- Have specific Compensation measures been negotiated earlier in the project?

Project Stage Operation



Project stage description

During this stage, the newly developed grid infrastructure is now operational. The focus of the TSO's activity at this point is to ensure that the Operation is running smoothly, and that no unexpected technical or environmental issues arise. Further, during the Operation stage, the TSO may still be involved in implementing Compensation measures negotiated in earlier project stages and mending potential structural damages.

A Presentation of the new grid line at the starting point of Operation or even a launch party for all affected stakeholders and the media are commonly regarded as good gesture and mark the last detail of a transparent dialogue shaped by mutual appreciation.

Usual Patterns

Project-Specific Questions

Stakeholders involved in this stage

TSO

At this point the TSO has to ensure that the new power lines are functioning correctly, and that any negotiated Compensation measures are being put in place. Potential structural damages should be mended in a timely manner and if appropriate an opening event should be organised.

- What promises have been made in previous project stages?
- Is there any structural damage due to construction? How can it be mended quickly?
- How should the opening be announced? (Rather formal public Presentation for stakeholders and media or rather informal launch event?)
- Are there any positive lessons that have been learned during the duration of this project that can be communicated for use in future projects?

Media

The media should report about the opening and summarise the grid development process as a whole.

- What are reportable facts about the whole grid development process?

It can keep the general public informed about the effects of the new grid infrastructure on the region or country.

- Can a press conference be held at the opening ceremony? What media are to be invited?
- How significant are the changes/benefits created through the new grid?

Typical channels used in communication

Traditional Media

This channel can provide follow up information about opening, Operation and effects of the new grid infrastructure or of any Compensation measures.

- What benefits/ changes have been created for the region/country through the existence of the new grid?

Project website

TSOs can use their website to provide updates, such as performance data or data on changing electricity prices, as well as other effects the project may have had.

They could also communicate on Compensation measures and on any lessons learned, either about the technical aspects of the project, or the experience of stakeholder engagement and interaction.

- Are there any positive impacts which could be traced to the specific project or to the national grid plan in general?
- Are there any lessons learned which could be useful to communicate?

Essential content communicated

Compensation measures

Compensation measures need to be implemented as previously agreed and stakeholders entitled to those measures should be kept informed as to implementation progress.

The TSO may wish to showcase particularly successful or self-received Compensation measures to a wider audience.

Structural damages to individuals or the environment are to be mitigated or mended as soon as possible.

- Which Compensation measures have or are being implemented? How long will implementation take?

Technical details

TSOs can publish the technical benefits of the new grid, for example on the Project website. They may also choose to publish certain technical information on Operations in dedicated technical documents or annual reports.

Which Technical details would be interesting to a wider public? Which should be published in more technical reports?

3. Channels

The “Channels” presented in this toolkit list and describe a selection of different channels that are suitable to foster the exchange of information between stakeholders and can help to establish a sustainable stakeholder dialogue. It presents various opportunities for information, dialogue and participative decision making at various stages of the project cycle and intended for different groups of Stakeholders.

Channel Public space events

Channel description

A Public space event could refer to a wide range of face-to-face Presentations taking place in public open spaces. It could range from the installation of a stand in a public space to an informative meeting before or during a public event (e.g. a cultural or sporting event).

In the context of grid development projects, Public space events can be a powerful communication tool, particularly in rural areas, where web-based channels may be less effective. The relative advantage of such events over, for example, media or web channels, lies not in the number of stakeholders reached but in the quality of the face-to-face contact which is important in order to foster public participation in grid development projects. Usually Public space events are most effective and constructive if they allow for direct face-to-face interaction between a project developer and a small number of other stakeholders. Big groups can more easily lead to a less constructive discussion atmosphere or even trigger conflict.

Usual Patterns

Project-Specific Questions

Audiences

Adjacent communities
Local citizens’ initiatives
Land owners

Adjacent communities and Land owners are typically directly affected by a grid project. They wish to be informed early on, regularly and comprehensively. Experience from past projects shows that these stakeholders often feel that their concerns/doubts/ideas were not fully taken into account in a grid project because communication started too late and/or was not taken seriously enough.

Public space events can facilitate an exchange of ideas, as they give individual citizens the opportunity to voice their opinions, and offer project developers the

- Who are the most affected members of the Adjacent communities?
- How much information has already been conveyed to the Adjacent communities?
- What exactly are the concerns/demands of the Local citizens’ initiatives? What formats can be used to start or foster a dialogue on these issues?
- Have there already been attempts to address the concerns/demands?

chance to discuss with the public and respond directly to any questions or concerns. To build a link between the affected stakeholders and the project developers, the organisers of the event should consider the target audience in order to best adapt the information presented to attendees' concerns and interests.

How can this be improved?

- Where do people tend to gather in the community? When could the event take place? Are there any public events with which this one could be combined?
- Which would be the potential public of the event? (Retirees, young people, etc.)

Media

Local media may be invited to or may choose to cover a Public space event.

Publicising an event beforehand is important to ensure that the public is aware of the opportunity to participate, and reporting on event outcomes can help draw attention to important issues brought up by various stakeholders.

- Would media representatives be interested in the event?
- How can the media be involved in the event? How can a balanced, objective and fair reporting be ensured?

Potential audience size

In the context of a grid development project, Public space events are especially useful to reach the inhabitants of Adjacent communities. A single event in a local community may have a relatively low number of potential addressees (compared to, for example, a media or online channel). However, the interest of these events lies not in the number of stakeholders reached but in the quality of the face-to-face contact.

- How many people are among the affected stakeholders in the region of the grid project?
- Where should the event be held in order to meet the potential audience size?
- When should be done this event (e.g. Saturday morning in the market, during the week at the high school entry in the evening etc.)

Cost/required resources

The costs of organising a Public space event can vary depending on what the organiser wishes to include. Costs are incurred for an advertising campaign to make people aware of the event, the impression of the flyers, the equipment needed for the meeting including the stand, the rental of audio or video equipment (if necessary). Also, costs for HR are incurred, mostly related to the event

- How much will the rental of the equipment cost be?
- How many events should be prepared?
- Which kind of event could be most effective?
- How much time and money will the

organisation and preparation activities. This mostly involves HR from the project developer's side, although involving an external communications agency should be considered as well.

organisation and preparation of the event cost?

- What stakeholders are willing to support the hosting of an event?

Type of communication

Information, dialogue, participation

Public space events are useful for project developers to inform the public about the project and also to start a dialogue with public stakeholders to note and react to their concerns and questions.

Content to be communicated

Project location

Project context

Project benefits to stakeholders

Technical details

Information on project developers

At the Public space events, the message and the key ideas must be clear and understandable. A good management of attendees' expectations is crucial: people need to know what to expect from an event and its hosts.

Usually, people want to get involved on the decision taking and they want their opinions considered so concerns/doubts/questions from the addressee should be voiced and reacted to.

It is important to design the event in an interesting way to attract the public and create value to the debate and the future dialogue. In doing so, one has to consider the different backgrounds of the attendees: Some might be completely new to the subject, others might be experienced professionals – and the event should create value to them all.

- How much information does exist so far regarding the planned project location?
- What information matters to the attendees of the event? Is it possible to ask for suggestions to the content in advance?
- Who are the attendees of the event and what is their prior knowledge of the project and grid development in general?
- Which pieces of technical information are most relevant to the grid project?
- Which pieces of information on the project developers are most important for the stakeholders and the grid project?

Events related to grid projects

Contacts

In order to keep transparency and provide the possibility of an ongoing, constructive

- Are further events already scheduled?

dialogue on the grid project, further events related to the project as well as contacts for further information and exchange should be provided.

- Who is in charge of dealing with stakeholder questions/input?

Project stage at which best employed

Project preparation

Since concrete information cannot be conveyed yet, the potentially affected stakeholders have typically not yet formed a strong opinion and their concerns/doubts/ideas can still be included in the project plan, a Public space event can be an appropriate channel for the Project preparation phase.

- What kind of information do stakeholders need at this point?
- What issues are likely to become a subject of a dialogue/discussion? Can this be prepared by the host?

Spatial planning

At this stage, Public space events could be an interesting channel to invite local citizens to get involved on the Spatial planning definition, to express their feelings and to propose other alternative routes. It can especially be useful to get a full picture of the concerns/doubts/ideas of affected communities.

- How can citizens' concerns/doubts/ideas be integrated into the project (this should be made clear before asking for input)?
- What are the local mentalities? Is there a strong opposition? If yes, what is the opposition's major concern?

Channel Town hall meeting

Channel description

A Town hall meeting is a single public event at which participants meet in a public space, typically indoors, such as a town hall or a community centre to learn about and discuss a given topic such as a grid project. It can take different formats, ranging from expert panel discussions with a Q&A session, to “fish bowl discussions” with representatives from the participants’ side, to the division of the participants into working groups.

In the context of grid development projects, Town hall meetings can be a powerful communication tool for constructive interaction between the project developers and the affected local stakeholders. This is particularly the case if strong, uncompromising views on the grid project have not arisen yet and if the local affected stakeholders’ input can still be integrated into the project plan. These conditions make Town hall meetings especially appropriate for early project stages. If the Town hall meeting is held before the beginning of the Spatial planning process when several corridor options are still on the table, workshops held as parts of a Town hall meeting are a good tool to collect local input and potential concerns at a very early stage of the project.

Town hall meetings require an early preparation in terms of relationship building and preliminary meetings with key multipliers. To avoid confrontations during meetings that could hamper a constructive outcome, TSOs should invest time in building and maintaining relations with important national stakeholders. Also, briefing important (local) multipliers in advance (Local elected officials, local NGOs etc.) encourages locally known people without a particular background in grid development to actively take part in the Town hall meetings, as they know what to expect from the TSO and the event as such.

Strong relationship building tends to be particularly important between the TSO and the Regulator, Permitting authorities, energy producers as well as national politicians and NGOs. This relationship building is crucial for the TSO to know to understand at all times the concerns of other stakeholders. One of the main ideas behind this toolkit is that all stakeholders should actively live up to their responsibilities in the context of grid projects. They should assume their roles in the stakeholder dialogue process. For example, policy makers should explain the directions of energy policy that ultimately lead to a specific grid development project. It can make an important difference for the overall acceptance of a project if relevant stakeholders represent their roles in the stakeholder dialogue and assume responsibility for specific communication topics. Good relationship management can help in encouraging everyone to actively participate in the stakeholder dialogue overall and in important events like Town hall meetings in particular.

The meeting should be designed in a way to give participants enough space and opportunity to voice their opinion and start a dialogue with the project developers. Organisers of the event should ideally integrate small-group workshops and break-out sessions into such meetings or any kind of interruption of large-audience formats, in order to give people the chance to speak out and voice their opinions in smaller groups.

Usual Patterns

Project-Specific Questions

Audiences

Adjacent communities

Land owners

Local elected officials

Adjacent communities, their Local elected officials and Land owners are typically directly affected by a grid project. They wish to be informed early and comprehensively on the project.

Experience from past projects shows that these stakeholders often feel that their concerns and ideas were not fully respected and considered in a grid project. A Town hall meeting – with its participatory elements such as small group workshops – can typically help to address these concerns or doubts appropriately and it can be the early starting point of a sustainable and long-lasting dialogue. Also, the Town hall meeting – with its big audience presentations – is a good way to transparently inform Local stakeholders of the overall process of grid development and the upcoming procedure. It is a good opportunity to show that there are several ways for local stakeholders to also take an active part in the overall process.

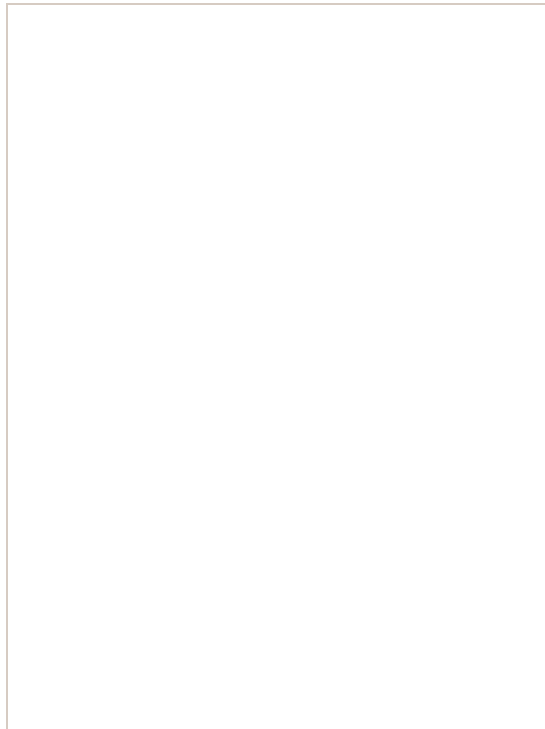
Local stakeholders should therefore be encouraged to take the opportunity to enter into a constructive dialogue with the project proponents.

Town hall meetings bear the advantage of enabling the organisers to address the entire audience of people affected by a grid project under development. It is thus important to invite all citizens of the Adjacent communities (i.e. entire towns/villages) to such events for example via several ads in local newspapers, making clear that every member of the Adjacent community is welcome. The advertisements should also inform about the main agenda of the event, about the ways the

- Who are the most affected members of the Adjacent communities?
- How much information has already been conveyed to the Adjacent communities?
- Have the Adjacent communities already voiced opposition to the grid project?
- Have there already been attempts to address the concerns/demands?
- To what extent can compromises be reached regarding the demands of the Adjacent communities and the TSOs?
- How high is the general local interest in the event?

participants can contribute and thus why their attendance is appreciated and worthwhile. A good side effect from inviting all kind of stakeholder groups to the meetings can be the opportunity for them to network and discuss the project not only with the TSO but also with one another. Therefore, the closing plenary session should, if possible, be followed by an informal get-together with food and drinks. Sufficient time and space for these conversations are crucial.

When inviting local stakeholders via a broad advertising campaign, the organisers should carefully analyse the public interest and the resulting number of participants that is to be expected. For a brief discussion on managing high numbers of participants, please see the section “Potential audience size” below.



Local citizens' initiatives

If there are relevant LCIs in the area of a given grid project opposing either this or related projects, inviting them can be a good idea to send a positive signal and begin to create an atmosphere of trust and cooperation. Their direct invitation should, however, be carefully planned and their participation and integration into the event prepared in order to facilitate constructive dialogue. LCIs often participate effectively and constructively in Town hall meetings. However, in cases where there is not yet an atmosphere of relative trust and understanding between, primarily, the TSOs and the LCIs, a coordination meeting between the two can help to avoid surprises for both sides.

- What exactly are the concerns/demands of the Local citizens' initiatives?
- How is the atmosphere between TSO and LCI? Is there a constructive dialogue?
- What position and appearance of the LCI is to expect at the Town hall meeting?
- Could a pre-coordination meeting between TSO and LCI be helpful?

Power producers

If available, Power producers that are directly associated with the grid development project should be invited to the Town hall meeting and could even be considered as panellists or speakers. They can often credibly bring forward

- Are there any Power producers directly associated with the grid development project?
- Are any Power producers willing to act as speakers or panellists to

strong arguments for the need for grids, e.g. due to the integration of renewables.

explain the project from their view and answer specific questions from the public?

Permitting authorities
Regulator
Nat'l policy makers

In case they are available, it can be worth inviting or even officially involving representatives from Permitting authorities in events related to stakeholder participation such as Town hall meetings. As an active part, representatives from Permitting authorities can interact with other participants of the events and answer questions related to the role of Permitting authorities and the related procedures. The same holds true for the Regulators and National policy makers: They should be invited to a Town hall meeting so they can interact with other participants and answer questions related to their role over the project cycle.

- Are relevant Permitting authorities available to attend the Town hall meeting?
- Are representatives of the Regulator available to attend the Town hall meeting?
- What National policy makers could be interested in the event? Are there any parliament delegates from the surrounding area who are familiar with the issue?

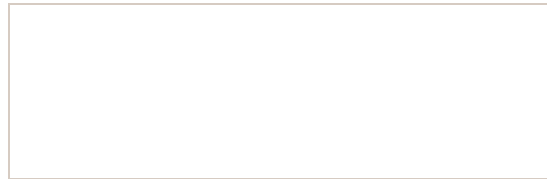
Environmental NGOs
Experts

Environmental NGOs are often invited to participate in public project events in order to gather their input. This participation in public events may complement individual meetings, and may allow Environmental NGOs to present their views in front of the public, in order to inform the general debate and increase transparency. As many Environmental NGOs have experts for power grids and energy networks themselves, they can usually provide very valuable input to the discussions and workshops of a Town hall meeting. Also, Environmental NGOs can act as important multipliers to the greater public, diffusing information about grid development and associated environmental issues.

If available, other experts may

- What Environmental NGOs could be invited to the event?
- Are there any experts available that could be invited for the event?
- How can they be included into the event? Are they interested in presenting or holding a speech?

participate in the meeting to provide an independent view on critical and controversial issues. In some cases they might even be considered as panellists or speakers.



Media

For local/regional media institutions, Town hall meetings are typically attractive events due to the high public interest associated with them. They can spread the information and atmosphere of the Town hall meeting to the greater public and hence act as a crucial multiplier. Media should be given enough opportunities to ask questions, make interviews, take pictures etc. A press conference before, during or after the event can be a crucial success factor. The conference should be held for the media only.

All local and regional media institutions should be informed about the event. A press release and a separate press conference – e.g. before the actual town hall meeting – can be helpful as well.

- Who are the media entities potentially interested in the Town hall meeting?
- Have media entities already taken a position on the grid project?

Potential audience size

A Town hall meeting can address a relatively big audience compared to other means of in-person communication. However, the group that can actually attend a Town hall meeting is limited by the size of the meeting venue.

Before sending out invitations and advertising the event publicly, the TSO together with local multipliers should carefully analyse the general public interest in the event. The overall advertisement as well as the planning of the event as such should depend on how many local stakeholders are likely to show up. Past events have shown that a high number of participants (several hundreds of participants are usually too much) can quickly

- How many people are among the affected stakeholders in the region of the grid project?
- How many people would fit into the space designated for the town hall meeting?
- How high do local multipliers and the TSO estimate the public interest in the project to be?
- How many people are likely to show up? Does the location provide enough space and opportunity for an informal get-together of an audience of this size?
- In case the number of participants

jeopardise a cooperative and constructive atmosphere as relatively fewer TSO speakers are available to answer specific questions and concerns, while at the same time more people will have a greater number of questions to ask. This will also lead to longer plenary sessions, at the cost of having less time for the workshops. This can be regarded as a disadvantage, as the small group workshops have proven to be much more effective in initiating a constructive dialogue between different stakeholders.

In case the organisers of a Town hall meeting expect the number of participants to exceed the capacity of the location and/ or the overall concept of the event, they should consider either splitting the event up into several small events or booking a different location and adjusting the concept of the event. As a last resort, the organisers could consider artificially limiting the number of participants on a first-come, first-served basis by requiring advance registration. However, they should be very careful in doing so, should be transparent about their reasoning, and should make this decision clear from the first day of their advertising campaign. Past experiences have shown that limiting the number of participants can quickly lead to the public perception that TSOs are unwilling to confront themselves with the concerns of the local population.

is very likely to exceed the capacity of the booked location, are there any alternatives?

- Is limiting the number of participants a necessary option? If so, how can this be communicated carefully without creating the impression that the TSO is avoiding contact with all local stakeholders? Is splitting up the event into several smaller events possible?

Cost/required resources

A Town hall meeting is a relatively costly channel to use for project proponents such as TSOs. Important cost drivers include renting the venue, providing technical equipment, transportation and accommodation of staff, commissioning an accompanying communications agency or at least an independent moderator as well as the costs for catering and security. The

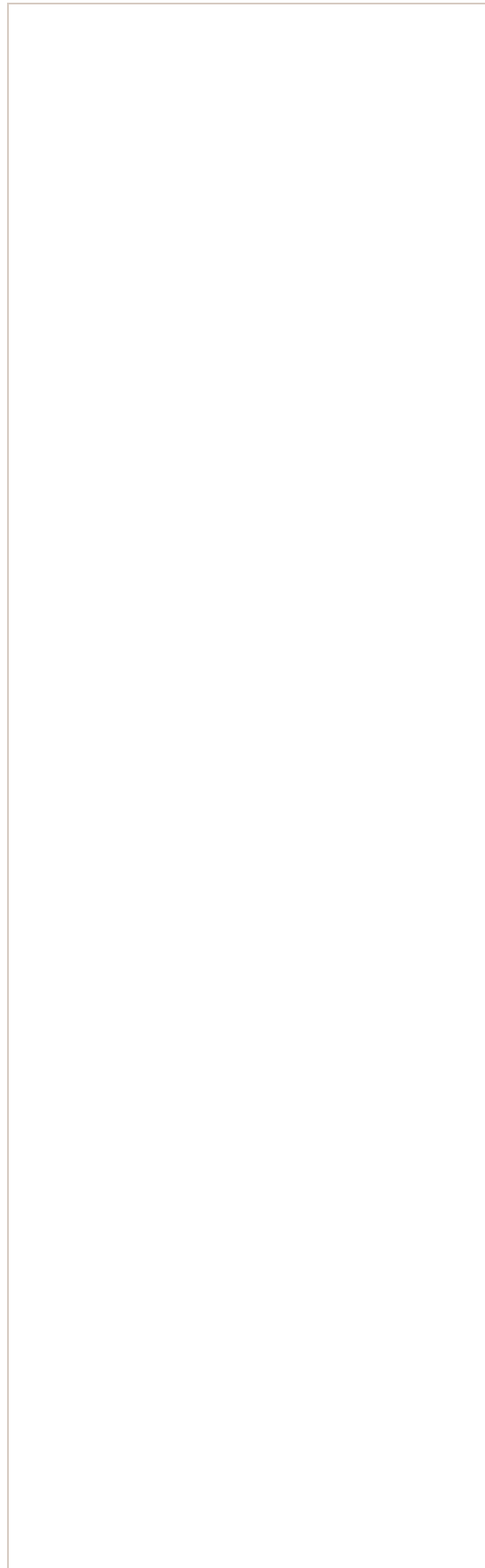
- How much will the rental of the town hall and equipment cost, including catering and security?
- How much time and money will the organisation and preparation of the Town hall meeting require?

planning should also consider the time-consuming preparations needed and the launch of a timely media campaign to inform local stakeholders of the possibility to participate in the event. The costs for organising a Town hall meeting in a rural area of a Central or Western European country can be estimated to average about EUR 8.000 to EUR 10.000, depending on different factors like the location, the size and the duration of the event, without considering the costs incurred for internal staff or an external communications agency. Since the setting of a Town hall meeting differs for every single event, the actual costs can vary significantly and may be a lot higher or lower than the estimated average.

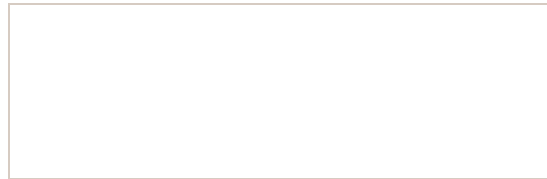
Still, Town hall meetings tend to be rather costly channels. Therefore, the possible number of these kind of events for a given grid project is limited.

Despite the relatively high costs, TSOs should ensure that the location and setting suits the planned activities. Past Town hall meetings have proven that inviting all kind of stakeholder groups can have the side effect that all stakeholders can network and discuss the project not only with the TSO but also with one another. Therefore, the event location should be suitable not only for a big plenary session and several small group workshops, but also for informal get-togethers across the entire group. The meeting can proceed into such get-togethers during breaks, and the closing plenary session should, if possible, be followed by an informal get-together with food and drinks. Sufficient time and space for these conversations are crucial.

A cost plan should contain all relevant expenses and should be drafted well in advance. Opportunities for cost-sharing should be contemplated, e.g. municipal



administrations could make the venue available at their expense to enable the TSO to organise several small meetings in interested towns instead of just one centralised one.



Type of communication

Information & dialogue

- Information can be conveyed from the project developers to the audience, for example through Presentations. One or several Presentations held by the TSO should be an essential part of the Town hall meeting. The Presentations should include comprehensive and new information which makes them worthwhile for already informed people to make the effort of participating. The plenary Presentations should be moderated by an independent moderator hired by the TSO or the municipality, e.g. from an external communications agency. This moderator should introduce himself as independent, introduce potential expert presenters and organise the Q&A sessions during which participants can have their questions answered by TSO representatives or other stakeholders whose role it is to answer a certain question.
- To establish a dialogue, a Town hall meeting can typically offer a good setting through small-group workshops with different stakeholders and TSO experts. These workshops should be an essential part of the event and aim to identify, collect and start discussing specific concerns of the participants. Also, participants might be less intimidated to ask specific questions in the small workshops than in the big plenum. The workshops can try to bring out these questions and specific concerns, collect them and discuss them. In a way, the participants should hence be enabled to drive the agenda setting of the workshop – especially when the event takes place at very early project stages, e.g. before Spatial planning. The participation of TSO experts (technical, legal, planning, project management etc.) in the workshops is crucial as they are most suitable to fully answer specific questions and also to directly receive the participants input themselves: If, for example, the participants give input regarding a potential local planning obstacle, a planning expert will know best what questions to ask and how to interpret the input.
- It is helpful to have an (ideally independent) moderator to open the Town hall meeting, to introduce the presenters and the project team and to explain the rules of the Q&A session and the workshops (e.g. switching off mobile phones, letting each other finish, and making constructive criticism). Also, all workshops should have a (independent) moderator to ensure the constructive dialogue and to encourage all workshop participants to engage in the discussion.
- Due to the large number of participants, working on specific aspects of the grid project and shaping specific project decisions is typically not feasible.

Content to be communicated

Project location

Project context

Project benefits to stakeholders

Technical details

Information on project developers

At a Town hall meeting, the organisers (typically TSOs) should ensure as much transparency as possible regarding the grid project in order to enter into a constructive dialogue with the affected stakeholders. Moreover, contents should not only be communicated and presented but also discussed in small group workshops.

The Presentations should include the planned location of the grid as well as alternative routes, the project context (such as the embedding of the project in the larger grid), project benefits to stakeholders, Technical details and Information on the project developers. Where decisions have already been made, e.g. regarding the technology of the project, these should be clearly explained to the Town hall meeting participants, especially in terms of why they were better than the respective alternatives.

The presenters at a Town hall meeting should bear in mind that the audience will at least in parts consist of stakeholders without any background in grid development. Therefore, they should give a good introduction into the field, using Presentation slides that are easy to understand and avoid as much technical language as possible (e.g. regarding legal processes of spatial planning or permitting). Moreover, they should ensure not to overload their Presentations with information and keep them concise.

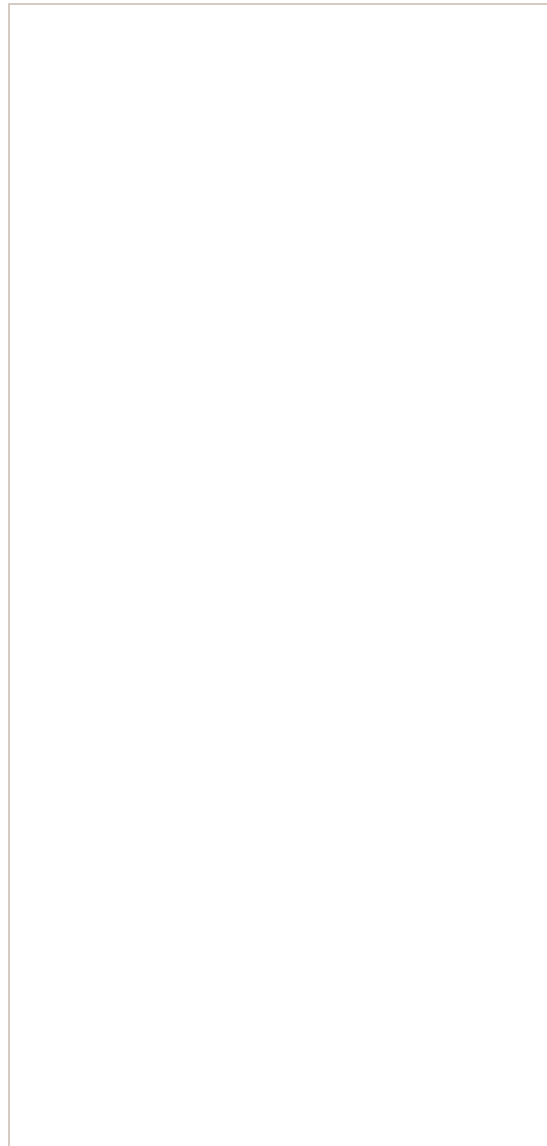
A good starting point for small-group workshop discussions is to equip the rooms with different maps, e.g. showing the planning ellipse, the current assessment of social and environmental sensitivities, a map of the region around

- How much information exists so far regarding the planned Project location?
- Can a strong and waterproof connection be established between the overall need for more and better grids (e.g. for the integration of renewables) and the specific project?
- Can a strong and waterproof connection between the grid project and concrete benefits for the (local) stakeholders be drawn?
- Which pieces of technical information are most relevant to the grid project?
- Which pieces of information on the project developers are most important for the (local) stakeholders and the grid project?

the project (e.g. to show power generation from renewables). Moreover, flipcharts should be available.

In addition to maps and flip charts, each workshop should have a formal minute taker who will keep the minutes of the workshop. The minutes could be published on the project's website for maximum transparency.

The TSO may decide if it lets the workshops be moderated by an external person or have them moderated by members of the TSO's communication team. This can for example make sense in case the TSO expects rather specific and technical questions and concerns that an external and independent moderator could not address and discuss as well as an internal moderator. It is part of the moderator's role to clearly explain the "rules of the game" for the workshop discussions in advance (e.g. switching off mobile phones, letting each other finish, and making constructive criticism). Furthermore, the workshop moderator should be joined by various members of the TSO's project team who can represent different areas of expertise (e.g. environmental issues like bird protection).



Project timetable / events Contacts

In order to maintain transparency and provide the possibility of an ongoing, constructive dialogue on the grid project, the TSO should provide information on the Project timetable and further events related to the project, as well as contacts for further information and exchange.

- Are further events related to the project already scheduled?
- Who is in charge of dealing with stakeholder questions/input?

Project stage at which best employed

Project preparation

At the Project preparation stage, the TSO can typically already convey concrete information and strong, uncompromising views have typically not yet arisen, which makes this stage ideal for a Town hall meeting. This also gives local affected stakeholders the chance to voice their concerns at a stage at which they can still be included in the project plan. At this stage, the TSO typically develops and presents first corridor options which can and should be discussed with other stakeholders to learn about local sensitivities before the opening of official spatial planning and permitting procedures. A town hall meeting is a good framework for these discussions, especially when they take place in small-group workshops.

- Is the project's progress at a stage at which the citizens' concerns/doubts/ ideas can still be integrated into the project?
- Has there already been strong local opposition voiced?

Spatial planning

A Town hall meeting can also be an appropriate channel for the Spatial planning phase, especially if the final decision on the route of the grid line has not been made yet. The Town hall meeting can then especially be useful to get a full picture of the concerns/doubts/ideas of affected communities.

- Is the project's progress at a stage at which the citizens' concerns/doubts/ideas can still be integrated into the project?
- Has there already been strong local opposition voiced?

Channel Roundtable

Channel description

In the context of power grid projects, Roundtables are formal, usually recurring meetings among a number of representatives from one or many stakeholder groups to discuss the current state of project progress. They are a fairly common channel for TSOs, regulatory authorities, policy makers and other project sponsors to engage in a regular, institutionalised form of dialogue with other (especially local) stakeholders to discuss and even jointly decide on certain aspects the grid project, e.g. the routing of an overhead power line or the choice of technology in different sections. Participants are typically representatives of larger stakeholder audiences such as spokespersons of Local citizens' initiatives. Therefore, communication via Roundtables can reach a lot of stakeholder groups as representatives spread the results of the discussions. At the same time, the number of participants of the event itself remains limited – thereby allowing for focused, constructive and manageable discussions. Roundtables can be organised not only by TSOs as project sponsors but also by any other stakeholder of a grid project such as local mayors or other representatives of municipal administrations.

In order for Roundtables (like any stakeholder involvement event) to be a success for every participant, expectations have to be realistically formulated and clearly managed. Among other things, it is thus important to agree on the “rules of the game” of the Roundtable beforehand and communicate them clearly. This may e.g. concern the agenda of the Roundtable that could be semi-open or closed which may be jointly determined beforehand, but should in any case be communicated ahead of time in order to allow participants to prepare the meeting. Moreover, the rules of the game include the discussion modalities, agreements concerning non-disclosure and privacy, and very basic and general communication standards, like giving *constructive* criticism or letting each other finish making a point. In addition, in order to enhance transparency it is recommendable to keep minutes of each Roundtable meeting and disclose the final minutes to the public.

Usual Patterns

Project-Specific Questions

Audiences

Local citizens' initiatives
Adjacent communities
Land owners
Local elected officials
Industrial consumers
Permitting authorities
Environmental NGOs
Media

Most importantly, Roundtables should be held at the local level along the corridor of the grid link in question and hence include representatives of all relevant local

- How many and which Local citizens' initiatives and action groups have been created in the communities affected?

stakeholders. Multi-stakeholder Roundtables really need to make sure to consider all stakeholders, so that everyone can live up to the requirements and expectations that come with a stakeholder's role in power grid development: e.g. the role of the Permitting authorities to explain the permitting process, the role of policy makers to explain the need for a grid project in of larger energy policy or the role of local communities to help find concrete solutions to the routing of the grid. Roundtables have often proven to be the best way to establish a recurring forum for dialogue throughout the planning of a power grid project where stakeholders can discuss the state of project progress together in a smaller, manageable circle that allows for constructive discussions. To allow for maximum participation from local stakeholders, who are non-professionals in the grid project, Roundtable should be scheduled to take place either in the evening during weekdays after close of business or on the weekend.

- Which business associations and farmers associations can speak best for concerns of the stakeholders that they represent?

Environmental NGOs

Focused Roundtables on specific issues and concerns that typically surround grid projects are excellent tools for project sponsors like TSOs to involve stakeholders and include their specific expertise in the planning process. Belgian TSO Elia, for example, has been planning to hold stakeholder-specific Roundtables with local representatives of NGOs in the context of the BESTGRID initiative in order to jointly assess sensitive environmental spots in the pipeline corridor and identify the best possible routing, e.g. regarding bird protection as well as the impact of the project on local forests and pasture lands. Other TSOs have had focused Roundtables with environmental representatives regarding the choice of technology and the specific up- or downsides of overhead lines and underground cables in different grounds.

- Which Environmental NGOs are active in the grid corridor that would be willing to participate in a focused Roundtable discussion?
- What are the environmental issues and concerns at stake in the specific grid project?

Potential audience size

For a single Roundtable, the number of participants should not exceed 30 people. When organising a multi-stakeholder Roundtable, it is crucial for the inviting party (e.g. the TSO) not to forget any representative in the affected area and invite participants individually. However, participants should be kept to one representative per stakeholder group (e.g. municipal authority, Local citizens' initiative of farmers' representation) in order to keep the discussion constructive and allow everybody to participate.

What is the best balance that can be struck between having everybody represented at the table while keeping the overall number of participants to a manageable level?

Cost/required resources

The resources required for a Roundtable event are fairly limited, because no major cost components except for some logistical needs (e.g. location, transportation of staff, and accommodation of staff, if applicable) and a local advertisement campaign to announce the Roundtable have to be considered. Nevertheless Roundtables are ideal channels that can be jointly organised by more than one stakeholder groups involved – for example the TSO driving the project and the municipality that is affected by the specific grid section in question.

- Which stakeholder could join the TSO in organising and calling a Roundtable discussion?
- Where would be the most cost-effective and well-reachable location for all participating stakeholders?

Direction of communication

Dialogue Participation

As early as in the invitation to get together for a Roundtable, the event should be labelled as a forum for dialogue, i.e. a meeting where the inventing stakeholders (e.g. the TSO) gives the participants the opportunity to give feedback to the current state of planning presented. It is imperative for the organiser to be transparent about the expectations of the stakeholders that are invited, so that it is very clear that participants will not only be informed, but that comments, remarks and questions will be discussed. In order to show sincerity vis-à-vis the concerns of local stakeholder it is important to have an independent keeper of the meeting minutes who takes down the comments and feedback given to the current state of planning. Such transparency and traceability of input is crucial for the establishment of trust among stakeholders.

Moreover, Roundtables can even be real participatory events where decisions are jointly taken. However, such room for manoeuvre needs to be clearly communicated in the announcement and invitation to create only realistic expectations of joint decision making.

Content to be communicated

Technical details of the project Project location

Whether for many different or just for one single stakeholder group, Roundtables should cover the specific “how” of a grid project, i.e. the technical design and its routing, rather than the fundamental need of a project which has usually been established already. Consequently, multi-stakeholder Roundtables at the local level should focus on the specific, on-site features of the grid project like the micro-routing of a power line within a specific municipality. In this regard, it is crucial to provide participants (ideally upfront) with up-to-date maps and other explanatory materials to discuss the latest status of routing.

- What materials have to be prepared to discuss technology and routing?
- To what extent is the current status of planning fixed and where exactly is room to manoeuvre, discuss alternatives and decide together on the project design?

Project stage at which best employed

Determination of need Project preparation

At the outset of a grid project, Roundtables with representatives from regional stakeholder groups (like state-level policy makers, regional or national NGOs, business associations) and interested local stakeholders (e.g. from municipal authorities) can contribute to building consensus on the need of a grid project. Early engagement before the initiation of official planning processes (Spatial planning and permitting) with Roundtables where all relevant stakeholders are invited to participate can help to build trust among stakeholders. Most importantly, early Roundtables can be used to inform about the procedures and milestones of the upcoming Spatial planning and permitting processes as well as the legally required and voluntary consultation and stakeholder involvement measures. Roundtable participants can together agree on a roadmap of stakeholder involvement activities in the subsequent project stages.

- Who are local stakeholders that need to be invited to participate in early-stage Roundtables, even though they do not yet know if they are personally affected?
- What are regional stakeholders that best represent larger audiences like environmental activists, municipal administrations, business and farmer associations that should participate in a Roundtable?
- How can policy makers be integrated early in the organisation and invitation process to hold the Roundtables on “neutral” ground?

Spatial planning Permitting

During the Spatial planning and Permitting stages, regular Roundtables (e.g. every 2-3 months) should be held upon the invitation of – for example – the TSO or municipal authorities to accompany the planning activities in preparation of the permitting application. In addition, Roundtables can be called on ad-hoc basis whenever a new milestone in the pre-permitting planning process has been reached. The main purpose of Roundtables in this stage is to include all relevant local stakeholders into the process of identifying alternative routes and choosing the preferred route. Therefore, Roundtables should be held on a district level (or at least with one Roundtable for every section of the grid) to keep them as local as possible while at the same time avoiding the overburdening of regional stakeholders like TSOs and Permitting authorities. Moreover, regular meetings can help to anticipate and prevent conflicts before they arise by intensive discussions about the planning of the project. Problems can be jointly identified, tackled and solved.

- What are the proper spatial intervals for Roundtables along the power grid corridor in question?
- Given the national legislation for Spatial planning and permitting, what are the most useful time-intervals at which Roundtables should be held, in order to assure that a new status of planning is discussed at every meeting?

Country-specific examples

Germany

TenneT has successfully established Roundtables in the post-spatial-planning phase of power grid projects in Germany. In the run-up to the submission of the permitting application, TenneT holds bimonthly stakeholder Roundtables in each planning section of the project. As the project covers different state-jurisdictions, in some cases the Roundtables are called by the local district administration while in other cases TenneT itself invites participants. The Roundtables have contributed significantly to improving the atmosphere, frequency and organisation of the stakeholder dialogue on the ground.

Channel World Café

Channel description

The World Café is an interactive and participatory event for collaborative dialogue and knowledge sharing to create a living network of ideas, conversation and action. A World Café generally works as follows: In a literal “café” ambiance, participants discuss an issue in small groups of four to ten people while sitting around the small café tables. At regular and pre-defined intervals the participants move to a new table to discuss another issue or challenge other participants with their opinions. One table host acting as a facilitator remains at each table during the entirety of the event and summarises each conversation for the whole audience and the newly arriving participants of the next round. Thus the proceeding conversation is cross-fertilised with the ideas generated in former conversations with other participants. At the end of the process the main ideas are summarised in a plenary session and follow-up possibilities are discussed.

In the context of communication and stakeholder involvement activities during grid projects, World Cafés can be a relatively unconventional way for TSOs and other project drivers like regulatory agencies to engage in informal discussions with other stakeholders, i.e. in formats that tend to avoid confrontation and bring about a constructive debate. World Cafés can also be integrated into Town hall meetings, open days, info-markets and other information events in the form of workshops or break-out sessions to decentralise and loosen up the agenda after panel discussions or conventional Presentations. In any case, in order to enhance transparency, it is recommendable to keep minutes of the results of a World Café and disclose the final minutes agreed upon with the participating stakeholders to the public.

Usual Patterns

Project-Specific Questions

Audiences

Local citizens' initiatives
Adjacent communities
Land owners
Local elected officials
Permitting authorities
Environmental NGOs
Media

World Cafés can for example be held in local communities affected by a grid project in a more advanced stage of the project when the corridor or even routing of the line in question is concrete enough. In this case, the Café needs to deal with more specific questions regarding the current state of planning, e.g. technology, routing, pylon positions, substation location as well as effects on Land owners and households

- Which Local citizens' initiatives have formed in the vicinity of the power line corridor?
- What are the most important concerns for local stakeholders that should be addressed during the World Café?
- What are the most suitable local media outlets to invite local

in the vicinity of the project. World Cafés can be an excellent – because open and interactive – way to engage with local stakeholders and address their concerns regarding negative impacts of power lines on health, environment and property prices. For example, every small Café table can have a dedicated issue (e.g. the potential health hazards caused by electromagnetic fields from high-voltage power lines). Moreover, the World Café provides at every small table excellent opportunities for project proponents to explain the project and its current state of planning to participants individually.

In any case, small-table discussions as usually performed during a World Café help to get everyone in the larger audience to participate as the threshold for speaking out is likely going to be lower for most people attending. That way, it is also less likely that a few individuals monopolise the debate in a larger forum and hence create the impression that they are speaking for everyone. It is important to initially mix members from different stakeholder groups (e.g. locally affected citizens, Land owners, officials from the municipality administrations etc.) at each table to have a maximum variety of views and opinions. The event should be timely advertised in the local press (especially local print Media and local radio stations) and should in any case be open to everyone who wishes to participate. From the invitation it should be clear that no local stakeholders are excluded, i.e. by avoiding ambiguous terminologies like “affected citizens” that leave recipients confused about whether they are addresses at all.

stakeholders to the World Café and ensure that everybody learns about the event?

Environmental NGOs
Regulating agencies
National/regional policy makers
Industrial consumers
Power producers

Alternatively, World Cafés can be a suitable form for TSOs to engage with stakeholders like NGO representatives,

Who are other representatives of larger stakeholder audiences involved in the national debate on power grid

Regulators, policy makers, Power producers and others at a regional level to discuss a project at an early stage, e.g. when debating the need to build new grid projects or when discussing initial alternatives of grid corridors. The participants of the Café will likely be personally invited and be in most cases professional experts that represent an organisation, e.g. NGOs, business and farmers associations, municipality and state administrations etc.

development?

Potential audience size

More than 12 and less than 100 people. The World Café can be a particularly useful channel to engage large groups in an authentic dialogue process. In other contexts than grid projects, groups of more than 1,200 people have participated in a World Café.

Given the local circumstances of the grid project or a section of the grid project, what is the anticipated number of participants?

Cost/required resources

The cost of organising a World Café event can be fairly substantial. The key cost drivers in a World Café process are the following: catering, recruitment and promotion of the event, venue and facilities, materials and supplies, travel and accommodation for staff (if needed) as well as personnel itself (host/team, especially table hosts and facilitators). Also, involving an external communications agency should be considered.

The actual Café event lasts a few hours – usually between four hours and an entire day, depending on the ambitions of the hosting stakeholder, most likely the TSO. Some flexibility should be left in place regarding the duration of the event. Of course, multiple Café events can be scheduled on consecutive days. The amount of time required to prepare for a given event depends upon the scale of the event and the intended participants.

A critical component in the World Café is the overall facilitator, who is to see that the

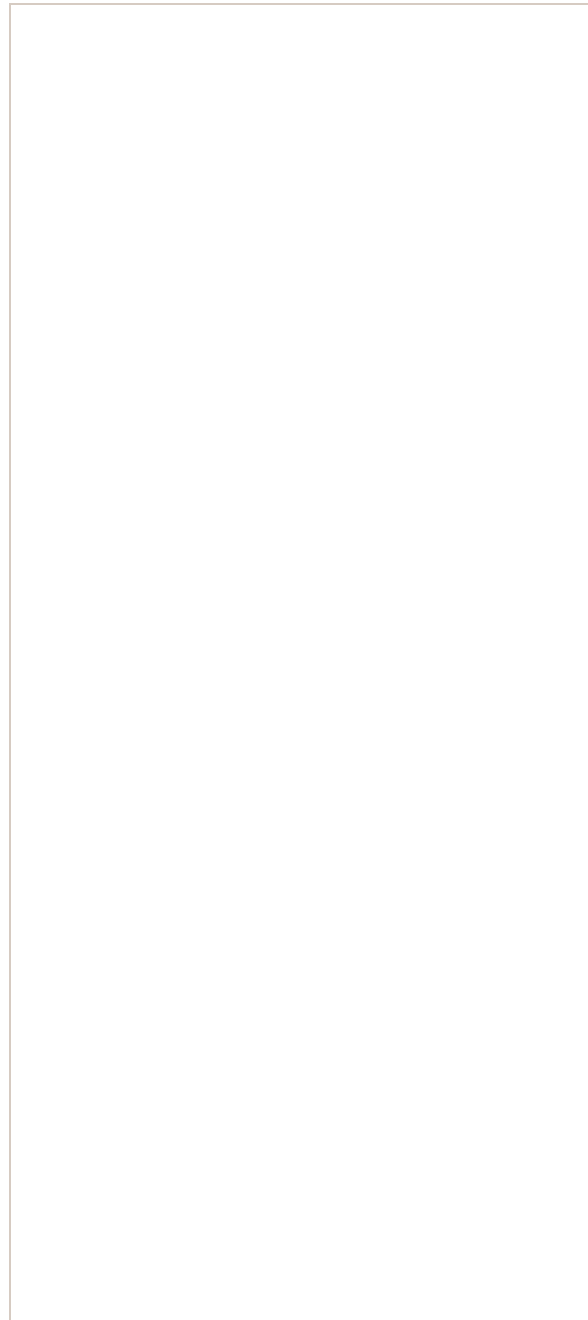
- Who are potential facilitators that will likely be accepted and respected by all participants in the World Café?
- Which specific entities could jointly host the event and share the cost associated with organisation and execution?

guidelines for dialogue and engagement are put into action. Hosting a Café requires a professional moderator that brings thoughtfulness, artistry and care to the event.

Regarding the location and facilities for the World Café event, it is crucial to create a hospitable space featuring social atmosphere or safe space, a warm and inviting physical environment, and lastly a café ambiance.

For supplies, it is especially crucial to have either tablecloths that can be written on or other tools like flipchart paper or paper placemats for covering the café tables.

The costs for organising a World Café that takes place as part of an information event in a rural area of a Central or Western European country can be estimated to average about EUR 10.000 to EUR 12.000, depending on different factors like the location, the catering, the size and the duration of the event. The setting of a World Café differs for every single event; hence the actual costs can vary significantly and may be a lot higher or lower than the estimated average. The costs incurred for internal staff or for an external communications agency are not considered in this estimation. Including these factors would substantially raise the overall budget needed, as the preparation and implementation, as well as the follow-up activities of a World Café are usually very time-consuming.



Direction of communication

Dialogue

As early as in the invitation to get together for a meetings, the event should be labelled as a forum for dialogue, i.e. a meeting where the inventing stakeholders (e.g. the TSO) gives the participants the opportunity to give feedback to the current state of planning presented. It is imperative for the TSO to be clear about the expectations of the stakeholders that are invited, so that it is very clear that participants will not only be informed, but that comments, remarks and questions will be discussed. In order to show sincerity vis-à-vis the concerns of local stakeholder it is important to have an independent keeper of the minutes that takes down the comments and feedback given to the current state of planning. Such

transparency and traceability of input is crucial for the establishment of trust among stakeholders.

Content to be communicated

Technical details of the project Project location

The contents of the discussions in the frame of the World Café depend to a large extent to the timing and conditions of the event, i.e. whether it takes place at an early point in the project cycle at the regional level or whether it takes place in the run-up to the Permitting stage at the local level. In the latter case, the World Café discussions should specifically cover the “how” of a grid project, i.e. the technical design and its routing, rather than the fundamental need of a project which has usually been established already.

Consequently, the on-site features of the grid project should be of particular concern like the micro-routing of a power line within a specific municipality. In this regard, it is crucial to provide participants (ideally upfront) with up-to-date maps and other explanatory materials to discuss the latest status of corridor and routing alternatives. Moreover, the café atmosphere can enable personal conversations between TSO planners and engineers on the one side and participants from local communities that may lead to a better understanding of certain grid-related issues. Because of this potential, the topics of table discussions need to be responsive to typical concerns that people have with grid projects in their vicinity – like health hazards due to strong electromagnetic fields or the negative visual impact of overhead power lines.

- What materials have to be prepared to discuss technology and routing?
- To what extent is the current status of planning fixed and where exactly is room to manoeuvre, discuss alternatives and decide together on the project design?

Project stage at which best employed

Determination of need Project preparation

Early high-level multi-stakeholder in early stages of the project cycle can initiate a dialogue among stakeholders – ideally in an informal, interactive way like a World

- Who are the stakeholders with a broad knowledge about the project area in question – that could potentially contribute with specific

Café to collect a maximum of individual input. Here, small group discussions with on focused questions like the changing landscape of power production in certain regions or the dynamics of stability in certain sections of the national power grid can help to make better informed decisions on the need of a project – and most importantly build consensus around the question. Likewise, during Project preparation, initial corridor alternatives can be debated in small-group workshops and participants can give specific input e.g. on local sensitivities in the proposed corridor alternatives that should be considered in the further planning. Small-scale, low-threshold and interactive formats like café-style discussions are much more likely to enable constructive, individual contributions than large-scale question-and-answer sessions.

spatial information on corridor alternatives?

- How can stakeholders be approached and motivated to participate in the World Café event even though it takes at an earlier project stage?

Spatial planning Permitting

Once the project has become sufficiently concrete (mostly in spatial terms), World Cafés should take place with members of local communities that will be affected by the future power line. In such World Cafés, the topics to be discussed will circle more and more around the micro-planning of the project e.g. regarding the specific routing of the project and even the positioning of individual posts. The small-table discussions can bring out local knowledge of participants e.g. regarding areas in the proximity of the line that are particularly sensitive to local communities, e.g. sports facilities, bike paths and other recreational areas. TSOs should use the insights from the World Café to optimize the specific planning on the ground.

Channel Closed-door meeting

Channel description

Closed-door meetings are small group or even one-on-one conversations behind closed doors – typically taking place in smaller circles than Roundtables and usually called because of a few specific issues that are disputed among the participating parties.

In the context of grid projects, Closed-door meetings with stakeholders can be initiated or requested by almost every stakeholder involved and they can be very suitable channels to enter into an intensive dialogue with important individuals who – as multipliers – communicate in turn with larger audiences. Closed-door meetings also work very well for a mutual briefing of stakeholders before a Town hall meeting or Roundtable.

In any case, Closed-door meetings should be initiated or requested on an ad-hoc basis because they remain – by definition – a comparatively non-transparent and secretive channel. Nevertheless, especially when opinions are diametrically opposed and long-standing disputes (e.g. among TSOs and Local citizen’s initiatives) are entrenched, personal meetings can be just the right channel to begin to resolve differences. In many cases, the simple fact that the meeting takes place will do a great deal in bringing two opposed sides together. Closed-door meetings can, however, be a controversial tool with regards to transparency. It is therefore recommendable to keep minutes of Closed-door meetings and agree on how the minutes shall be distributed before the meeting.

Usual Patterns

Project-Specific Questions

Audiences

Local citizens’ initiatives
Land owners
Local elected officials

Meetings with individuals from local stakeholder groups should occur early on in the planning process of a grid projects. In specific discussions, mayors or local representatives of farmers associations should be individually briefed on the planning process in order to enable them to communicate with local audience about the ongoing project. Moreover, individual meetings should take place on an ad-hoc basis in order to resolve conflicts and disagreements. The invitation of leaders of Local citizens’ initiatives to a private meeting can be itself a sign of appreciation, sincerity and willingness on the side of TSOs to discuss local perspectives on the current state of

- Who are local stakeholders that will be particularly affected by the project so that the TSO should meet with individually?
- What are specific, potentially sensitive issues about the project in question that should be addressed in such meetings?

planning. Individual meetings should thus be an integral part in any stakeholder's approach to the resolution of local differences.

Environmental NGOs

It may well be worthwhile for TSOs and other project sponsors to sit down with environmental experts in one or more focused meetings in order to discuss environmental issues arising along the route of the power line or cable in question – e.g. major crossings of birds or specially protected landscapes. As the local chapters of Environmental NGOs often possess expert knowledge about the immediate flora and fauna within the planning corridor, TSOs can learn and benefit from focused discussions on such issues: in meetings between NGO experts and TSO planners, mutually agreed upon routes can be identified and conflicts prevented.

- What are specific environmental issues that NGOs may have special knowledge about?
- Which Environmental NGOs are represented in the immediate environment of the intended grid project and how can they be contacted?

Potential audience size

The very purpose of Closed-door meetings is to keep the number of participants limited in order to be able to discuss pre-defined issues in a concentrated manner. In order to be effective in this regard the audience should be kept to 4-5 people.

How can the meeting be set up so that both the TSO's and the other party's side are equally represented at the table?

Cost/required resources

Cost and required resources are limited because of the limited size of the event that requires minimal organisational effort. Besides time resources required by the internal staff taking part in the event, budget is mostly only needed for transportation of staff as well as accommodation (if needed). As the project developers usually visit other stakeholders or meet them at their own venues, commonly no external venues need to be rented.

Who is best suited to host the event?

Direction of communication

Dialogue

As early as in the invitation to get together for the meetings, the event should clearly be designated as a forum for dialogue, i.e. a meeting where the inviting stakeholder (e.g. the TSO) gives the participants the opportunity to provide feedback on the current state of planning presented. It is imperative for the TSO to be clear about the expectations of the stakeholders that are invited (e.g. representatives of Local citizens' initiatives), so that it is very clear that participants will not only be informed, but that comments, remarks and questions will be discussed. However, as it needs to be clear for a dialogue-event, no joint decision making can be expected.

Content to be communicated

All

Closed-door meetings can take and should in principle take any content on the agenda – due to their ad-hoc character. In most cases where meetings occur at the initiation of a dialogue between project planners and local stakeholders, the Project location will be the most frequent topic. Here it is important to discuss different route alternatives in depth and explain in detail the advantages and disadvantages of different options on the table. Wherever possible, the meeting's agenda should be jointly agreed upon beforehand to include the attending participants in the process of calling the meeting and ensure that the meeting is worthwhile for all participants.

- Has the meeting been called to communicate specific information or to resolve a specific issue?
- How early in advance do participants have to be informed about the agenda so that they can prepare properly for the discussion in the meeting?

Project stage at which best employed

Project preparation

With Local elected officials (e.g. mayors, county heads, and members of parliament) and other local opinion leaders, individual meetings at the Project preparation stage can help to reach large audiences by enabling them to spread information about the planning process to other local stakeholder like the wider Adjacent communities.

- Which mayors and other locally elected officials are most likely to be the most far-reaching multipliers of early project information?
- How can mayors be incentivised to participate in early project meetings even if it is not entirely certain that their municipalities will be affected?

Spatial planning Permitting

During the Spatial planning and permitting

- What essential steps in the legal

stages, it is more likely that meetings will be necessary on an ad-hoc basis with local stakeholders in order to discuss, clarify and resolve disagreements and conflicts – especially as regards the routing of the project and the choice of technology. It is crucial for TSOs to offer to leaders of local stakeholder groups the opportunity to sit down for a focused discussion in order to collect feedback on the current state of planning and enter into a dialogue with any potential local opposition.

procedures for Spatial planning and permitting need to be explained in the meeting?

- What are legally required elements of the current project design that the TSO cannot influence due to underlying legislation?

Channel Citizens helpline

Channel description

A Citizens helpline is a phone number people can call to get immediate telephone counselling and information, either regarding a certain grid development project and its implications or regarding grid development projects and their implications in general. They are usually set up by TSOs or Permitting authorities to create a single point of contact for affected and/or concerned citizens. The helpline should be run by trained staff that is able to handle all usual kinds of potential requests and can react and respond accordingly.

In the context of grid development projects, Citizens helpline can be a powerful supplementary communication tool for all locally and directly affected stakeholders that don't have the time or opportunity to address their questions or concerns at information events, Town hall meetings, Roundtables etc.

Although Citizens helplines are more of an outbound communication channel to supply citizens with information and advice they could not retrieve anywhere else, the operators of a Citizens helpline should be advised and able to forward requests that can contribute to a dialogue between TSO, Permitting Authority and citizen.

Usual Patterns

Project-Specific Questions

Audiences

Citizen

As the name implies, citizen helplines are designed to supply citizens with relevant information if special counselling is needed. The operating staff is usually especially trained for needs and requests from citizens.

- What are the major needs of citizens?
- How can the operators be trained to meet the needs properly?

TSO Permitting authorities

Citizen helplines are commonly set up by TSOs and Permitting authorities to meet their respective information and participation goals.

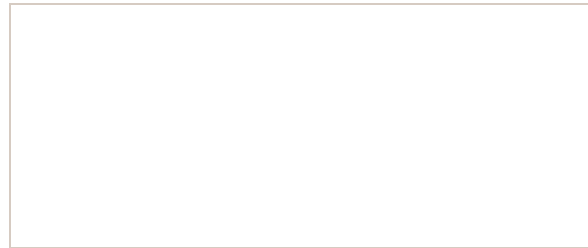
- Is there a need for one (more) Citizens helpline?

Potential audience size

A Citizens helpline has a relatively high number of potential addressees due to the amount of citizens forming part of the Adjacent communities of a grid development project.

- Is it possible to fully centralise the service?
- How many operators are needed to serve all requests?

However, only a very limited number of citizens in affected communities will have questions they need special phone counselling for. Operators should be trained in the local specifics of all grid development projects they are in charge of.



Cost/required resources

The costs for a Citizens helpline are scalable if it is run centrally. Costs occur for the infrastructure needed to run the helpline (possibly already existent) and for the operators of the helpline and their training.

Commonly, the helplines are a normal telephone line of the TSO or the Permitting Authority and the operators are employees that are involved in the grid development process anyway and don't need a special training anymore – which saves costs. If the operators are employees anyway, they can also run the helpline part-time and be appointed for other work while the helpline is not being used. Run like that, the Citizens helpline hardly causes any costs.

- Is there already a helpline set up for another project that can be used?

Type of communication

Information, dialogue, participation

A Citizens helpline is typically a communication channel to present additional information for locally affected citizens. However, the phone consultation is part of a dialogue with the citizens and it can be used to start a dialogue on certain topics beyond the phone counselling.

Content to be communicated

Project location/map
Project timetable/events
Technical details of project
Information on project developers
Compensation measures

All contents that are relevant for the stakeholder dialogue at large can become relevant for the affected citizens that are using the helpline. Therefore, the operators of the helpline should always be up-to-date

- What standard information and "messages" are to be delivered to the callers?
- How to make sure that all callers get

about current locations, timetables for upcoming events, Technical details, Information on project developers and potential Compensation measures and agreements.

the same answers to their questions?

Project stage at which best employed

Spatial planning Permitting

- Single citizens typically get involved at a later stage of the grid development process. It is only during the Spatial planning or even later that citizens typically become aware they might be directly affected by a grid development project.
- However, certain callers may have general concerns that can occur at any stage, such as general questions about grid development, health, the business of TSOs in general, etc.

- Which questions are most likely to be asked at the Spatial planning and permitting stages?
- Which general questions can occur?

Construction

- The Construction stage can change the content of potential requests the Citizens helpline receives. Instead of information regarding the implications of a planned power line, people might now call because they are affected by the construction process.

What questions are to be expected during Construction stage?

Channel Project information offices

Channel description

In the context of communication and stakeholder involvement in power Project information offices with public consultation hours can be established by TSOs or other project sponsors to temporarily base project staff in a central location along the route and make project information available to the interested public – while also providing a permanent opportunity to hand in feedback on the current state of planning. The office should have up-to-date information on the project available, for instance maps regarding the currently preferred routing and at later stages the exact positioning of pylons for overhead power lines – but also informative material e.g. on health impact of EMF.

Usual Patterns

Project-Specific Questions

Audiences

Adjacent communities
Local citizens' initiatives
Land owners

Project information offices should be established in a decentralised way in the major population centres along the route of the grid project – e.g. in the main city of every county. The main beneficiaries of the information provided via such offices and the main users of the opportunity to give feedback on project planning will likely be stakeholders from local communities directly affected by the project: Adjacent communities, Local citizens' initiatives and Land owners. It is hence very important that the project office offers all relevant information regarding local planning of the project (e.g. micro-routing and related maps). Many local stakeholders like representatives of Local citizens' initiatives will already possess detailed knowledge of the project that they have sought from multiple sources. Hence, the project office has to be able to offer them real value-added in terms of accurate, complete and timely information that makes the effort to come to office worthwhile. Finally, the process for taking into account feedback has to be fully transparent: most importantly, feedback has to be written down, co-signed as submitted to the TSO

- Which major towns and cities along the intended route of the grid project would be suitable to host a Project information office?
- How can the Project information office be reached by the rural population? Is sufficient public transportation access guaranteed?

or other office owner and then handed in copy to the feedback submitter.

Potential audience size

The Project information office has the potential to reach entire communities that are affected by a power line. It is – however – by definition merely an offer supplied and an opportunity provided by TSOs or other sponsors that local stakeholder have to actively use. The audience size will depend very much on the weekly opening hours of the project office. It is important to maintain opening hours in the evening (e.g. until 8 pm) at least once a week so that full-time employed members of the local communities can come in after work.

- Via which local media outlets can the TSO inform local stakeholders about the set-up of a Project information office?
- How can information on directions to the project office be made available so that every interested stakeholder knows how to get there?

Cost/required resources

Project offices are a comparatively cost-intensive channel for enabling stakeholder involvement. The costs of setting up a project office are mainly composed of the cost of renting office space, the cost of information materials provided as well as the personnel cost as determined by the weekly opening hours and the total duration of the office opening. Consequently, it should be contemplated by the TSOs and local municipal administrations to share the cost of setting up the office.

- Which specific stakeholders other than the TSOs can support the set-up of the Project information office financially?
- Can local municipal administrations possibly provide space for the office to be set up?

Direction of communication

Information
Dialogue

Through Project information offices, interested local stakeholders can both access information as presented in the offices (e.g. current maps of route alternatives, detailed positions of pylons or planned substations) and can obtain details about Spatial planning, permitting and licensing process to understand the full cycle of a power project. Moreover, the project office staff can and should allow for personal appointments where stakeholders can submit specific feedback regarding the current state of planning that is formerly noted and taken into account.

Content to be communicated

Project location map
Project timetable/events

Most importantly, the Project information office - as established during the Spatial planning phase has to give clearly mapped and up-to-date information on the route alternatives under consideration as well as details on the micro-planning of the route in specific communities, so that main concerns of the stakeholders who come to the office are addressed.

What different detailed maps should be kept ready at the office so that local stakeholders like Land owners or members of Adjacent communities can find and address the local concerns about their immediate environment?

Compensation measures

Moreover, Land owners and local communities can be informed via Project information offices about financial Compensation measures. Communication material like brochures and flyers with relevant information of compensation authorities, calculation procedures and disbursement modalities should be readily available in the office. Office staff should be able to explain compensation matters and answer questions of Land owners who made the way to have their questions answered.

Which legal boundary conditions on financial compensation need to be prepared in a presentable format that reduces complexity in order to be able to explain to office visitors how the compensation process works?

Project stage at which best employed

Spatial planning

During the later phases of the Spatial planning stage, when the routing of the grid project becomes concrete, Project information offices should be established to satisfy the naturally growing demand for a permanent focal point where local communities can turn to – that are just finding out that they may be affected by the project. It is especially important for the project offices to clearly communicate the criteria for selecting and deciding among route alternatives. Furthermore the steps of the Spatial planning procedure and the preparation of the permitting application have to be made transparent in the Project information office so that local stakeholders can understand and anticipate the next project steps.

- Where are important central locations for Project information offices along the project corridor in question that can be accessed from different communities that may be affected by one or the other route alternative?
- How can the decision criteria for choosing among route alternatives be made transparent and easily understandable for office visitors?

Permitting

During the permitting stage, the Project information office should remain in place. Here, it is equally important to make detailed information about the permitting process and procedures available in the office so that interested stakeholders can follow the ongoing project cycle. Planning documents (especially maps with micro-routing information) have to be kept updated and readily available so that they reflect the changes made in the permitting procedure.

- What essential information needs to be presented in the project office regarding the legal steps of the permitting procedure?
- What planning documents that are part of the permitting application can be made publicly available?

Country-specific examples

Germany
Ireland

In countries where several grid projects have led to strong local opposition, extensive needs to inform the general public and create opportunities for stakeholder dialogue, Project information offices have become preferred formats – especially for TSOs – to satisfy the growing and permanent demand for specific and up-to-date information in pre-permitting stages. For example, German TSO TenneT has established project offices open three days a week in all three sections of the very controversial overhead line from Wahle in Lower Saxony to Mecklar in Hesse – explicitly in order to meet the enormous demand for a permanent point of contact for local stakeholders. In the offices, TenneT explains the project and answers questions personally – both by appointment and on an ad-hoc basis. Project information centres are also integral part of EirGrid’s stakeholder integration and communication plans in Ireland.

Channel Doorstep visits

Channel description

Doorstep visits give the opportunity to directly engage with a small number of stakeholders at a time and address their personal concerns in the form of a discussion.

Doorstep visits require relatively large amounts of resources compared to the limited number of stakeholders that can be reached at once. Therefore, they should be planned thoroughly and conducted purposefully to discuss project related issues with specifically affected individuals. Doorstep visits are a particularly suitable tool for the dialogue between TSO and affected Land owners when it comes to discussing the conditions for using their land for the newly developed grid line. Commonly, Compensation measurements are a major point for discussion. Naturally, this kind of Doorstep visit takes place at a late project stage, typically during the late Spatial planning and early permitting stage. They can be continued and repeated during the project stage of construction.

Usual Patterns

Project-Specific Questions

Audiences

Land owners
Adjacent communities
Local citizens' initiatives

The typical audience of this individual communication channel are citizens that are directly and/or intensely affected by the grid development project (i.e. most of all Land owners).

A Doorstep visit can also be an good tool to informally discuss certain project related issues with opposition leaders or representatives of LCIs. Such visits offer the chance for TSO representatives to address individual concerns and take special time for important questions and concerns that could not be discussed at other events.

- Who are the individuals that are directly and/or intensely affected by the grid development project?
- Is a Doorstep visit useful to informally discuss certain issues with opposition leaders and/or LCI representatives?

Potential audience size

The size of the audience primarily depends on the number of directly and/or intensely affected individuals. All Land owners and affected citizens that are very likely to receive compensation should be involved in a direct dialogue with the TSO. A

- How many Doorstep visits are necessary? How many are feasible?
- Is there enough time to contact sufficient stakeholders through Doorstep visits?

Doorstep visit is a very personal and appreciative way to start and carry on such dialogue. If more resources are available, Doorstep visits can be extended to less prioritised target groups.

- Who exactly constitutes the audience to be targeted?

Cost/required resources

Doorstep visits do not require large cost investments into materials or equipment, as they commonly require few back-up materials or could involve relatively simple and already-available materials, such as brochures or event flyers. All discussions of Compensation measures should, however, be prepared thoroughly and be legally covered as the TSO should only offer such things if they are more or less guaranteed. While material resources are easily tolerable, Doorstep visits require significant human resources compared to others, as only few people can be reached at once. However, other stakeholders could perhaps support the TSO in spreading information, or the TSO could try to find volunteers to participate in their Doorstep visits.

- Have resources and time been provided and/or budgeted to conduct all Doorstep visits needed?
- Can the human resource costs be shared among different stakeholders or volunteers?

Type of communication

Information, dialogue, participation

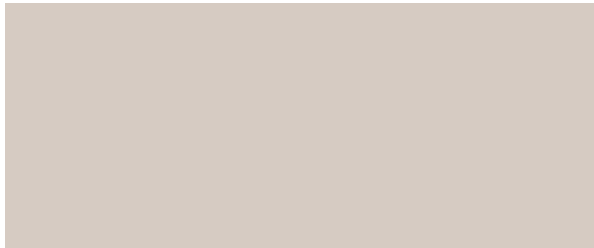
Doorstep visits make it possible to engage in direct and in-person discussion with members of the public. The interactive nature of this channel allows for both informational and participatory possibilities for communication.

Content to be communicated

Compensation measures
Project location/map
Project timetable
Technical details of project
Information on project developers

While Project location and Compensation measures are commonly along the prior interest of Land owners and affected citizens, also other project related content can be of interest to them and should be prepared before conducting a Doorstep visit.

- What are the specific contents that particularly interest a certain addressee of a Doorstep visit?
- Is there still content open for discussion or have most decisions been made already?



- How can contents be presented in an appealing, understandable and informative way?
- To what extent can the feedback of the audience be taken into account?

Project stage at which best employed

(Project preparation)
Spatial planning
Permitting
Construction
(Operation)

It is desirable to engage stakeholders at the earliest possible project stages, in order to raise awareness and solicit feedback even before final decisions have been made. However, due to the relatively high amount of resources required and the very local nature of this channel it is advisable to concentrate the Doorstep visit efforts once the Project location is concrete and affected individuals can be determined. In individual cases where (large) Land owners can be identified at the stages of Spatial planning or even Project preparation, early Doorstep visits can help in determining sensitivities early. This gives the possibility of starting a constructive dialogue and considering acquired information sufficiently early.

Commonly, specific door step visits cannot be planned and conducted before the stages of late Spatial planning and permitting. Follow-up Doorstep visits can be useful at the stages of Construction and even Operation.

- What are the topics that need feedback and discussion from specific individuals for the planning of the project?
- Should Doorstep visits begin right after the announcement of a location or before? What is the appropriate time?
- How can the TSO best respond to people's initial reactions and concerns?

Country-specific examples

Germany

In Germany, the TSO 50Hertz successfully conducts certain expert Doorstep visits at affected Adjacent communities. Independent experts come to the citizens' homes to assess and explain the effects of the newly developed grid line on their house and living. This creates trust through transparency and helps in reassuring affected citizens.

Channel Field visit

Channel description

In the context of power grid development, Field visits are a comparatively innovative and unconventional channel for local stakeholders and project developers (especially TSOs) to get together in an informal way in the vicinity of an existing transmission line in order to learn about each other's concerns about a specific grid project. Field trips of TSOs, local communities and partner institutions, such as community colleges and regional universities, to existing high-voltage power lines usually take place to bridge the gap between project developers and local affected communities – typically in light of a specific concern that Adjacent communities have, e.g. regarding Electro Magnetic Fields (EMF) and visual impact of overhead lines. Alternatively, field trips can be undertaken to examine on site some examples of Compensation measures that have been put in place by TSOs, especially visible environmental measures like creation of habitats to make up for the impact of a project on the flora and fauna around it.

A field trip may – for instance – take the form of a get-together or informal meeting in the countryside around a transmission line or can take place as a bus trip organised by the TSO where affected families from a local community go on an excursion to an existing project. The idea of the field trip is to render a power grid project less abstract and more tangible for affected citizens, so that they can better understand the features of a future project that may concern them personally.

Usual Patterns

Project-Specific Questions

Audiences

Local citizens' initiatives

Adjacent communities

Land owners

Media

Joint field trips of TSOs, local communities and regional universities to a high-voltage power line have, in some European countries, are usually organised for addressing specific concerns that local stakeholders commonly have: (1) health concerns for families in the vicinity of high-voltage power lines due to anxiety about hazardous impacts of EMF and (2) environmental and social concerns including the countryside's disfigurement and negative visual impact of overhead transmission lines. The invitation to the field visit should be

- Which regional universities with technical or engineering departments could be approached by the TSO for jointly organising a field visit regarding EMFs?
- What other external experts can be approached to come along on a field visit, e.g. to give onsite explanations of pylon design and the visual impact of overhead lines?

kept open to the general public in the affected communities.

Environmental NGOs

Field trips organised by TSOs to explore the power line corridor together with Environmental NGOs (especially with their local chapters) can significantly contribute to building trust among stakeholders. Here, TSO planners and experts of Environmental NGOs can jointly investigate and discuss on site the important issues regarding the protection of the flora and fauna in the corridor. Here, expert input from Environmental NGOs can actually enhance the TSO's planning and moreover avoid conflicts between TSOs and Environmental NGOs in later stages of the project.

- Which are the local chapters of Environmental NGOs in the corridor of the grid project under development that possess local expertise on environmental conditions?
- What are the specific hot-topics from an environmental viewpoint in the context of the given project that should be discussed during the field visit?

Potential audience size

Considering the practical and logistical limitations of a field trip, as well as the need for the organising stakeholder (e.g. the TSO) to be sufficiently responsive to all participants during the trip, the number of participants should be kept to no more than 50 people per trip.

- How large is the general audience, either within local communities or from a specific stakeholder group (e.g. NGOs), that could be invited to a field visit?
- How many field trips can be organised to allow as many interested people as possible to come along?

Cost/required resources

The cost of organising a field trip with stakeholders from local communities are comparatively high and chiefly depend on the following cost drivers: logistical expenses (e.g. for the bus rental and the staff travel to the location), supporting communications materials (e.g. brochures, Fact sheets etc.), catering during the trip, and most importantly the cost of bringing enough expert personnel to the trip so that participants can ask all the questions they may have. Involving an external

- Which stakeholders other than the TSO could jointly organise and finance the field trip, e.g. municipal administrations, regulatory or Permitting authorities?
- Which suitable project to visit is closest to the project under development and should hence be visited in order to save on travel costs?

communications agency in the organisation and the implementation of the event should be considered carefully, as it could be helpful but also requires substantial budget.

To share costs, field trips can also be jointly organised by TSOs and local political authorities or other stakeholders in favour of a grid project.

- Are any necessary items already available (e.g. printed materials) or could be acquired for free (e.g. free bus rental)?

Type of communication

Information
Dialogue

As early as in the invitation to jointly embark on a field visit, the event should primarily be labelled an informative event where attending stakeholders can learn about particular aspects of a specific sample project – for example in terms of EMF and visual impact. Moreover the field trip can serve as an informal forum for dialogue, i.e. a meeting where the inviting stakeholder (e.g. the TSO) gives the participants the opportunity to provide feedback on the current state of planning. As far as stakeholders' expectations are concerned, it is imperative for the TSO to make it clear that participants will not only be informed, but that comments, remarks and questions will be discussed. However, as with other dialogue-type events, the announcement of and the invitation to a field visit should not create the unrealistic expectation of joint decision-making.

Content to be communicated

Technical details of the project

The field visit is explorative in nature and should familiarise local stakeholders with the Technical details of the project – for instance the actual EMF intensity for overhead, high-voltage power lines. Field visits are a very hands-on approach to experiencing the technology of transmission lines – for instance when allowing participants to personally measure the EMFs around a power line with certified devices in order to compare the actual intensity with legal limits and regulations.

How can Technical details of the project like the voltage level be made as tangible as possible in the context of the specific project that is being visited?

Project stage at which best employed

Spatial planning
Permitting

Joint field trips with local communities should take place when the corridor of the power line in question has become sufficiently concrete and it is clear which communities will be affected. Therefore, the later part of the Spatial planning phase and the Permitting stage are most suited.

What is another, already developed power grid development project in the relative proximity of the currently developed project which would be suitable for a visit?

Country-specific examples

Germany

German TSO 50Hertz has in the past successfully organised field trips with members of local communities looking to be directly affected by new power grid development. 50Hertz has had positive experiences with using so called “Infomobiles” (i.e. buses) to take local citizens to another high-voltage overhead power line (usually in cooperation with a local university/college) and let participants use technical devices to personally measure the actual EMF levels below the line. 50Hertz has found that such a field trip helps to create trust in the TSO’s technical know-how and the technology behind an overhead power line – as members of local communities can verify themselves that the TSOs more than fulfil the requirements in terms of protecting them from health hazards caused by EMF.

Belgium

The Belgian TSO Elia plans to establish field trips with Environmental NGOs as a key component of his stakeholder involvement approach that is supposed to be tested in the context of Elia’s pilot project as part of the BESTGRID initiative. Elia’s idea is to first establish a permanent Roundtable with local chapters of Environmental NGOs to investigate the corridor of a planned underground cable in terms of important environmental considerations like protected habitats for flora and fauna. In the frame of one Roundtable meeting, Elia plans to conduct a field trip with the NGOs to scrutinise environmental issues on site and jointly decide on the final routing within the corridor.

Channel Project website

Channel description

A Project website enables the TSO to showcase in a clear and structured way the main features of the project (e.g. objectives, timeframe, funding etc.). It is likely to be one of the first information sources the public will consult and should therefore be an informative and appealing representative all further communication effort of the project developers.

Creating and managing a website involves certain costs, particularly if it is available in different languages and/or includes well-designed digital content.

Mainly communication of informative kind is expected to be carried out, but any attempt to welcome participatory communication (through comments, opinion pages, FAQs or “Contact us” sections) will certainly be well regarded by all types of visitors. However, opening up a website to comments might pose the risk of a firestorm or of external comments getting out of hand. Further, it requires greater time and human resources investments by the TSO in order to maintain a dialogue or respond to questions.

Usual Patterns

Project-Specific Questions

Audiences

All

Today, a Project website can be considered as a must, since many stakeholders will turn to the internet to search for information. A website is very easily accessible by any type of audience and can definitely host a wide range of content.

The Project website will help foster transparency and exchange, as it provides all key project information in one accessible location and creates a basis for discussion between the different stakeholders.

- How can the Project website be designed to meet the various needs of all different user groups? What information is required, how is the website to be structured?
- How can participatory elements be included in order to foster the constructive dialogue and without inviting for potential "firestorms"?

Potential audience size

Thanks to a dedicated Project website, the project developers can reach a very large audience – locally, nationally and even internationally. Indeed, a Project website has perhaps the largest reach of all communication channels available.

Cost/required resources

Different cost drivers of a typical website are the creation of its content, the design, hosting and management/maintenance.

Some of these costs are one-shot costs like the design and the creation of content, others, like hosting and maintenance costs are ongoing costs. Unlike Social media, however, updates on a Project website would not be required daily (possibly not even weekly), thus requiring fewer human and time resources.

- Are resources available to manage the website?
- Is there any opportunity to share the website management between different projects or stakeholders?

Type of communication

Information/ Dialogue

Information flow through a classic website is mainly top-down. The project developer is the publisher of information and publicly communicates on the project throughout the different project stages. However, some websites enable comments on each article published (like in a blog) or even allow viewers to publish articles within opinion pages. Alternatively, a “Contact us” link, together with an FAQ section, could help establish opportunity for exchange, and would likely be favourably regarded by visitors. Even more importantly, integrating participatory elements into the Project website can help to foster the public dialogue and public participation which has proven to be one of the most crucial elements in raising acceptance for grid development projects. Project developers have to weigh the opportunities and risks of including broad participatory elements into their website.

Content to be communicated

All

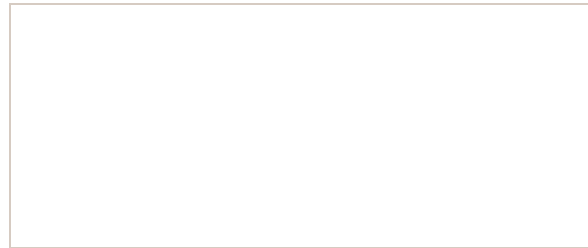
A description of project objectives, location, timetable and upcoming steps and events are typically the basic information of a Project website. Some Technical details could be released online, although more specific communication channels like Roundtables or close-door meetings may be more appropriate for them. The same holds true for Information on project developers.

Moreover, there should be a dedicated, prominent section on the website that gives up-to-date information on the current stage in the project cycle. Interested stakeholders will likely turn immediately to the website to find out what the current

- If any space is left for visitors to put comments or spread opinions, the TSO might be at risk to get publicly challenged on the project.
- What is the basic information to be provided in order to meet all the various visitors' needs?

project status is at any given point in time.

For all content, regardless of its type, it is recommended to present the information clearly and without using overly complex terms, keeping in mind the broad diversity of website readers.



Project stage at which best employed

All

A project-specific website can be created as early as the Project preparation or planning stage of the project. If the website is launched before the project's location is fully determined, the project developer can communicate on, for example, the overall need for the project, corridor options being considered and any project events or consultations in which other stakeholders may participate. Otherwise the TSO may wish to communicate early on via its general webpage, and create a project-specific site only once a location has been determined.

Over the course of the project, a website can serve as a central source of key information, with project developments, events, decisions and news updated regularly. Early and regular communication via a Project website boosts awareness and transparency among stakeholders, consequently lowering the risk of conflict.

- Should a project-specific website be created before the exact location of the project has been decided? Which information could be communicated at this point?
- How can a regular updating of relevant progress be ensured? Who is responsible?

Country-specific examples

None

Although there is not any specific barrier to implement a website, two warnings can be issued regarding geography:

- It is important to translate the website into as many languages as needed – at least languages in use in the countries or regions concerned by the project. An English version may be a must for bigger projects, since they attract media, academia and experts from around the world. It has to be noted, however, that translation is an additional cost item.
- Since grid infrastructure projects tend to raise local concerns, a filter function by regions (in bigger countries like Germany or France) would enhance the website's user-friendliness.

Channel Social media

Channel description

Social media is a communication channel that is widely and easily accessible to all potential stakeholders. Therefore, a very large audience can be reached at once and continuously throughout the duration of the project. Social media is particularly useful to publish updates and information in real-time. It can be used by the project developers and also Permitting authorities and other public authorities, Regulators and even NGOs to inform about and discuss certain grid development projects as well as grid development in general.

Social media allows for informational as well as participatory communication elements and can therefore also serve as a potentially valuable source of information with regards to the views and planned events of other involved stakeholders, including opposition groups.

At the same time, Social media creates the potential for opposing views and individual, unconstructive opinions to be widely spread and for firestorms to come up in response to a grid project in general or specific information related to a project.

Given the potential risks of Social media to give room for unconstructive protests and blockades, project developers should balance pros and cons of whether they would like to use Social media to actively engage stakeholders via their own Social media sites and/or consult other stakeholders' Social media pages in order to retrieve information. In any case, project developers that make use of Social media should dedicate sufficient human and time resources to their Social media activities and keep full transparency on how they aim to interact with the users. This includes providing clear rules on which comments will be allowed or blocked respectively.

Among the most commonly used Social media platforms are: Facebook, Google+, Twitter, YouTube, Flickr, LinkedIn and Pinterest.

Usual Patterns

Project-Specific Questions

Audiences

All

Social media can be an effective outlet for quickly distributing information to a large audience.

Social media's interactive format also means that the public's interest in and reaction to the information published can be assessed nearly immediately.

At the same time, opening a Social media page to public comment and exchange carries the risk of giving a forum to non-

- Does the TSO already have a Social media page? How is it used?
- Do other stakeholders want to set up a Social media page or support the project developers in the communication through Social media?
- Could the Social media page be linked to the TSO's website? For example, could a Twitter feed be integrated into the Project website's

constructive critique rather than constructive debate. Further, responding to a multitude of reader comments requires a substantial investment of resources, while not replying could send the message that reader feedback is being ignored. It may therefore be desirable to limit the interactive features of a Social media profile, for example by disabling comments. The page could then serve to communicate key information and to gauge public interest (via e.g. page views), but the risk of a firestorm would be reduced. Rather, other stakeholders could be engaged via other more appropriate channels.

The host of a project related Social media page should make sure that, despite Social media's informal nature, all content published is of the necessary quality and, where possible, backed by appropriate evidence, in order to maintain credibility.

homepage?

- Which project content could be communicated via Social media? How can content quality be ensured on such an informal channel?
- Does the TSO have the resources to respond to stakeholders' comments?

Potential audience size

Social media can potentially reach an extremely large audience, including both stakeholders directly relevant to the project and any other members of the public who are interested in the page. Social media is especially relevant for the interaction with young people since they are typically very active on Social media platforms.

How can content be adapted to a very wide and diverse audience?

Cost/required resources

The use of Social media platforms is free of charge. However, some Social media platforms offer enhanced services for a relatively limited fee.

At the same, substantial human and time resources are required to maintain a Social media page, to make regular updates, post new content and react to comments from users. A careful and thorough management of any Social media activities is absolutely necessary to avoid that these activities backfire. If regular updates and a continuous monitoring of Social media

Are resources available to regularly update Social media platforms, manage their content and react to comments?

pages where activities take place are not foreseen, the utility of a Social media page (as opposed to a website) is questionable.

Type of communication

Information, dialogue, participation

Social media can be used both to spread information and to receive feedback on the information provided. Additionally it can be a measure of stakeholder interest via audience size (e.g. number of 'likes' or 'followers').

Further, Social media pages of other stakeholders can provide an indication of their opinions and activity related to the project.

Content to be communicated

All

All contents that need to be communicated to stakeholders can potentially be communicated through the various forms of Social media (e.g. Facebook, Twitter, YouTube, Flickr, LinkedIn, and Pinterest).

However, the project developer or other owners of project related Social media pages should reflect on contents that would be most appropriate to communicate via Social media, and on ensuring quality information. If the Social media page is open for public comments, the TSO should also try to anticipate public reaction to particular project content.

- Which project contents are most appropriate for Social media and at what point in time is best to publish them?
- Do certain contents need special preparation or revision before they can be published via Social media?

Project stage at which best employed

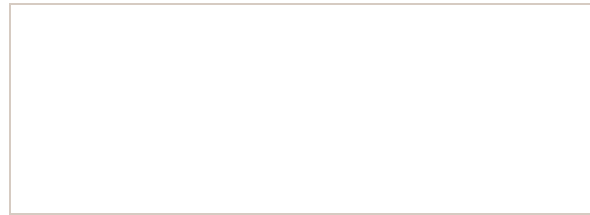
All

Social media can be used throughout the entire project to provide accessible, easy-to-update project information to the public in order to boost awareness and transparency. Further, key project events could be advertised and reported on, and public project documents, reports, consultations or decisions could all be advertised or shared via Social media.

Social media can also be used to gauge other stakeholders' opinions and

- How can project events and consultations be best promoted via Social media?
- Which project documents could be made available via Social media?

responses to project information. This capacity of Social media makes this channel especially useful at early project stages when as many stakeholders as possible are to be engaged in the constructive debate on a grid project.



Country-specific examples

Ireland

EirGrid uses Social media platforms to a limited extent. For instance, to ensure quality content, all content posted on Facebook is linked back to the EirGrid website, where all material has undergone a quality assurance process. To prevent a firestorm, commenting functions are disabled on EirGrid Social media. The page thus serves a primarily informative purpose.

Channel Mediation

Channel description

In general, Mediations are typically referred to as structured, voluntary procedures to find constructive solutions to a conflict among different parties, commonly in order to avoid long lasting and unsatisfying court proceedings.

In a deadlocked conflict situation where finding a compromise seems unlikely, Mediations can set the stage for renewed dialogue, listening and constructive solution finding. A crucial component of any Mediation is to find a suitable mediator, an impartial moderator of the dialogue whose primary task is to guide and monitor the dialogue procedurally instead of giving any opinions at all on the subject matter. It is important that he is equally respected and supported by both parties involved.

In the context of power grid development projects, Mediations may be a potential channel for stakeholder dialogue and integration when local opposition to a project is very fierce and entrenched, i.e. when local conflicts between project developers (especially TSOs) and project opponents (for example Local citizens' initiatives, Land owners, Environmental NGOs) cannot be solved bilaterally.

Mediations require a certain set of procedural prerequisites regarding the attitudes of participants to the Mediation, chiefly voluntary participation and openness to results by all stakeholders as well as impartiality and external discretion of the mediator regarding all issues up for Mediation. The specific subject that is the matter of the Mediation needs to be clarified beforehand, e.g. whether an entire grid project as such, the technology chosen or a project's routing are discussed in the Mediation process. This serves the critical purpose of managing expectations of participants realistically. Among other things, it is important before initiating a Mediation process to agree on its rules beforehand and communicate them clearly. This may e.g. concern the agenda of the Mediation meetings that should be communicated ahead of time in order to allow participants to prepare the meeting. Moreover, the rules of a Mediation process include the discussion modalities and very basic and general communication standards, like offering *constructive* criticism and letting each other finish making a point. In order to keep full transparency it is recommendable to keep minutes of each Mediation meeting and disclose the final minutes agreed upon by the stakeholders to the public.

Typical Mediations are structure along five phases: (1) clarification of meditation mandate and subject matter, (2) collection of topics and issues, (3) positions and interests with their backgrounds, (4) collection and evaluation of solution options, and (5) a final agreement.

Usual Patterns

Project-Specific Questions

Audiences

TSOs
Local citizens' initiatives
Adjacent communities
Land owners

Local elected officials
Permitting authorities
Environmental NGOs
Media

In the context of grid projects, Mediations may help settle a profound dispute between project proponents and opponents – either on the merits of the entire project or just selected aspects (e.g. technology, routing, and stakeholder integration).

On the one side, it can be TSOs, policy makers and/or Regulators that push the project forward and on the other side it can be Local citizens' initiatives, Environmental NGOs, Land owners and other members of Adjacent communities. Mediation provides the ultimate forum for negotiations and dispute settlement. It requires certain attitudes from all stakeholders involved that have been outlined above, most importantly the commitment of the TSO to halt all planning or construction activities during the Mediation period if appropriate and requested.

- Who are the spokespersons of the project proponents (e.g. TSOs, policy makers, regulatory authorities, and business)?
- Who are the spokespersons of the project opponents (e.g. chairmen of Local citizens' initiatives and action groups)?
- Are the two parties willing to start a Mediation procedure?

Potential audience size

For a single Roundtable that constitutes a Mediation meeting, the number of participants should not exceed about 30 people.

When organising a multi-stakeholder Mediation, it is crucial for the mediator not to forget any representative in the affected area and to invite participants individually. However, participants should be kept to one representative per stakeholder group (e.g. municipal authority, Local citizens' initiative or farmers' representation) in order to keep the Mediation focused and constructive.

Beyond the individual Mediation meeting, the entire procedure should be fully transparent to the public and the reporting media. However, even the Mediation meetings themselves can be conducted in

What is the best balance that can be struck between having everybody represented at the table while keeping the overall number of participants at a manageable level?

front of a large audiences, e.g. through live documentation (e.g. web-streaming) of the sessions.



Cost/required resources

The resources required for a Mediation process can be quite substantial, even though an individual meeting does not incur enormous cost because no major components except for the independent mediator himself and some logistical needs (e.g. location, transportation/ accommodation of staff) have to be considered.

The overall cost will depend on how many rounds of Mediation are necessary for stakeholders to reach an agreement. Mediations are ideal channels that can be jointly organised and hosted by an impartial stakeholder, e.g. regional Government at the state level.

Project developers should be aware that Mediations are very often and in many ways a good alternative to a court proceeding which can be the alter "solution" of a deadlocked conflict situation. Among commonly higher stakeholder satisfaction on both sides and less time losses, Mediations are usually cheaper than long-lasting court proceedings.

In some Member States (e.g. Germany) Mediations that are suitable for avoiding court proceedings which would cause even higher costs, can be set off against tax liability.

- Which stakeholder could join the TSO in organising and calling a Roundtable discussion?
- Where would be the most cost-effective and well-reachable location for all participating stakeholders?
- Is it possible to set the costs of the Mediation procedure off against tax liability?

Type of communication

Dialogue
Participation

By definition, Mediations involve intense dialogues and ideally arrive at a jointly supported decision. It is imperative for the mediator to be transparent about the expectations of the stakeholders that are invited, so that it is very clear that participants will not only be informed, but that comments, remarks and questions will be discussed.

In order to show sincerity vis-à-vis the concerns of local stakeholders, it is important to

have an independent keeper of the meeting minutes who takes down the comments and feedback given to the current state of planning.

Moreover, Mediations are per se participatory events where decisions are jointly taken. However, such room for manoeuvre needs to be clearly communicated in the definition of the precise issue up for Mediation to stimulate realistic expectations only.

Content to be communicated

All

At the outset, the issue up for Mediation needs to be clearly defined: Is it the entire grid project? Or does it simply deal with one specific aspect of the current state of planning, e.g. regarding technology, routing or stakeholder integration?

Moreover, the mediator needs to specify whether or which part of the Mediation deals with fact finding (e.g. regarding social and environmental impact of a new power line) and whether or which parts deal with solution finding.

- What materials have to be prepared to discuss technology and routing?
- How can the mediator ensure that the materials objectively represent unbiased facts about the project?

Project stage at which best employed

Project preparation Spatial planning Permitting

The conflicts between TSOs and local stakeholders opposed to a power project typically break out when the project is becoming more concrete in terms of the specific route that a grid project is supposed to take – i.e. when members of local communities are personally affected. The consultation procedures mandated by Strategic Environmental Assessments (SEAs), Spatial planning and permitting procedures have typically not sufficed to reach a broad stakeholder consensus on the project design – thus there is a need for a more innovative, extraordinary measure like Mediation.

- Which consensus on which project aspects have already been reached with project opponents in the context of consultation procedures during Spatial planning and permitting?
- When does resistance to a project become so entrenched that a Mediation process appears a realistic way to re-start the multi-stakeholder dialogue?

Country-specific examples

Germany

In Germany, the case of the underground train station in Stuttgart, a project called “Stuttgart 21”, may serve as an example for how a Mediation offered a way out for all stakeholders from entrenched conflict and ongoing protests. When construction works were finally set to begin after extensive permitting procedures and court cases, demonstrations against the project erupted with up to 150,000 people participating. At the same time, project supporters took to the streets as well. In the end, a 2-month Mediation procedure in the fall of 2010 with Heiner Geißler as mediator began, a former Minister in the Federal Government and member of Attac.

The project developer Deutsche Bahn, the State Government and other authorities in favour of the project sat down at a table with citizen action groups and NGOs that opposed it. The Mediation Roundtables with 10-20 participants were broadcasted on national television and web-streamed via a dedicated Mediation website that made all documents of the discussion public. The Mediation amounted to both a fact- and compromise-finding mission. In the end, the mediator declared his verdict to continue the project with significant alterations to consider the concerns of the citizens of Stuttgart. The project developers agreed to amend their planning accordingly, incurring substantial additional costs.

4. Content types

The “Contents” of this toolkit present content types that are essential to be communicated over the course of a grid project. Not all contents are available to be published at the beginning of a project and most of them will become more precise during the project as they are being decided on at later project stages.

TSOs should prioritise early communication of relevant contents to inform stakeholders about the planning of a grid project in due time. All stakeholders, at the same time, should understand that grid development projects are lengthy proceedings as decisions and assessments take a long time if they are done thoroughly.

Content Project location/Map

Content description

The location of a power grid is one of the most important contents for all stakeholders of a grid development project: The position of a grid tells citizens, Land owners and local governments if their settlement zones or estates are concerned, it helps environmentalists to elaborate and assess if protected areas might be threatened and Experts/Academia as well as the media can assess and inform about the relevant corridors.

It is therefore essential that public authorities and TSOs inform the stakeholders about the Project location as early as possible and visualise their messages through appropriate maps.

It is important to choose a convenient time to publish the Project location data and – even more importantly – never to publish Project location information without a description explaining; how to read and interpret it. Communicating possible Project locations at an early stage when there is not yet a decision on a specific corridor can either lead to a lack of interest, as the public might not feel directly concerned by the project, or it can lead to a broad public response because a huge public feels concerned. The latter may cause a great number of requests for TSOs to deal with. This is why the location shall not be published without detailed description and information stating whether it is binding or not.

Project developers should be aware that communicating possible Project locations late can lead to mistrust and a low willingness to cooperate as the public might feel excluded from the planning process, being presented with a fait accompli. Another very important advantage of an early communication of the Project location is that information about the resistance points within a broad potential area is essential for an exhaustive and foresighted space resistance analysis which in turn helps to avoid later resistance at an early stage and creates a constructive dialogue between all stakeholders from the beginning.

Therefore, besides the right timing it is also important *how* the location is communicated. If the project is still at an early stage, the public recipients should be made aware of that and should know how to interpret and read the according maps. Stakeholders should be encouraged to share their knowledge and positions regarding potential space resistances within the planning area to enable a planning process according to this information.

Usual Patterns

Project-Specific Questions

Content examples

The maps should contain the project area with landmarks and topographical and geographical information.

Adequate scales for the maps are essential. For an early planning stage, many TSOs work with a scale from around 1 : 500,000 up to 1 : 1,500,000 – depending on the size of the project area and their plotting capacities. At later stages, the maps should become more detailed as the project realm becomes more detailed as well.

- What area is part of the planning space? (getting more specific over time)
- What are the likely route options?
- What villages, cities, forests, swamps, roads, train lines, rivers, lakes, reserves etc. lie within the planned Project location?

Significance of content for stakeholder dialogue

TSOs

TSOs/project developers are usually at the source of the mapping material. The early maps on a national planning level, however, are commonly provided by the Regulators or responsible TSO. Once a TSO started the Project preparation process, they will evaluate different routes and corridors.

To support a constructive stakeholder dialogue, TSOs can profit from an early publishing of relevant mapping material.

What channels and formats can the TSO use best to publish the mapping material?

Media

The media should make use of published mapping material and make it part of their reporting on specific grid development projects. If insufficient mapping material is published by planning authorities or TSOs, it can be part of media investigations and research to ask for such material and publish it.

For local media, the published mapping material can help to decide if a report about a certain grid development project is of local relevance or if it is not.

How can all relevant media be provided with the most recent mapping material?

Experts/Academia
Environmental NGOs

For Experts/Academia as well as Environmental NGOs project maps are an important information and tool to assess the implications of possible grid corridors. Since Project location maps contain precise data on any natural reserves, bird habitats, other infrastructure, settlements or other important landmarks that may be located in the way of the planned line and need to be considered.

Can NGOs, experts and academia *provide* maps that show certain important local information?

Local elected officials
National/Regional policy makers
Land owners
Adjacent communities
Local citizens' initiatives

For all other stakeholders, Project location maps are important information as the location of the project defines them as major stakeholders if they live in the sphere of influence of a grid development project.

How can all public stakeholders obtain access to the map material?

Required resources for content generation

Important cost factors are: location, geographical, environmental, topographical, social, and any other information about the area; an appropriate map processing program; media for public presentation, e.g. posters.

How can all relevant stakeholders be involved in providing relevant content and information?

Format best used to transmit content

Brochure/Flyer/Leaflet/Fact sheet
Presentation

In different scales, maps can be used in Presentations as well as in brochures, flyers, leaflets and Fact sheets.

How detailed is the map and which scale is appropriate therefore?

Channel best used to communicate content

Project website
Social media

The TSO can balance pros and cons of publishing mapping material online at an early stage. At least when the maps are distributed through other formats, putting the map online will help to increase transparency about the project and the planning process.

The Project website as well as potentially related Social media sites can be highly efficient to distribute new mapping information as soon as it is published at a low cost as the maps do not need to be printed.

Before publishing, the TSO should communicate the grade of obligation of a certain mapped project area as well as the current stage of negotiations to avoid misunderstandings.

How can the latest project map material be put online while communicating its relevance and the current decisions?

Doorstep visits

Public space events

Town hall meeting

Roundtable

Closed-door meeting

Field visit

Maps can help at all public events that involve any stakeholders of grid development projects.

Printing the map on posters and self-standing displays can help in all stakeholder meetings to inform, to visualise and eventually also to assist in discussions about local peculiarities in the context of a planned grid line.

What is the latest mapping information?

Project stage at which best communicated

Determination of need

At the stage of need, publishing maps showing potential new grid lines is important to raise early awareness for the project and start the stakeholder dialogue.

As the planning corridors are still very broad at this stage, regional or even broader channels are suitable for the

What channels are appropriate to publish the early map material?

publishing of all relevant material, including maps.

Project preparation

It can be helpful to publish Project location maps at this early stage as it involves the relevant stakeholders directly.

Local sensitivities can be taken into account at an early stage which can help avoiding unpleasant surprises for both, project developers and concerned stakeholders.

- How can the Project location be visualised best?
- How can it be made possible to involve other stakeholders in the decision process concerning the final location of the project?

Spatial planning

As soon as the Spatial planning concretises potential corridors, it can be helpful to publish Project location maps. This will start a dialogue with the local stakeholders, which then helps to assess the potential corridors and to find out about local sensitivities.

Publishing mapping material early can – as all information material – help to improve public acceptance of the project as it demonstrates transparency.

- How can the Project location be visualised best?
- How can it be made possible to involve other stakeholders in the decision process concerning the final location of the project?

Permitting

When the TSO is applying for permission of certain corridors, these corridors should have been discussed and evaluated publicly with all relevant stakeholders.

Maps are an important tool to visualise the evaluation and discussion of different locations.

Afterwards, publishing the resulting Project location maps increases transparency in the process and keeps the stakeholders updated.

- How can the Project location be visualised best?
- How can it be made possible to involve other stakeholders in the decision process concerning the final location of the project?

Construction

Once the Construction stage has started, detailed maps of the local construction plans inform locals and other stakeholders

- How can the most important stakeholders be provided the map material directly to foster their

of the construction process and the local implications.

This information should be published as early as possible because communities, conservationists, land and forest owners and local authorities might need to meet preparations together with TSO and constructors to ensure a trouble-free construction.

cooperation support?

- What other channels are useful to publish the map material at this stage?

Content

Project timetable

Content description

A Project timetable is a plan that designates the times when certain events occur or are scheduled to occur. With regards to grid projects this might include all events of importance to the grid project such as events within a communication campaign steered by a TSO or dates for milestones in Planning, Construction and Operation of the project.

For communication efforts, Project timetables are highly important for the project developers to establish a spirit of transparency and openness. They also leave other stakeholders such as the Adjacent communities the chance to prepare themselves for the respective events and constructively contribute to them. However, it needs to be noted that once Project timetables are disclosed by the project developers they need to be adhered to by them since otherwise disappointment and a feeling of deception can be induced.

Usual Patterns

Project-Specific Questions

Content examples

A Project timetable might, for example, state the planned dates as well as the respective agenda items (as far as they are known) for public events related to a grid project.

Furthermore, a Project timetable might show different milestones in the planning process of a grid project. Also the meetings planned by Adjacent communities or NGOs can be fixed in Project timetables.

- Do examples of Project timetables from previous grid projects exist?
- Do examples of Project timetables from other infrastructure projects exist?

Significance of content for stakeholder dialogue

All

Keeping all stakeholders informed about the schedule of the grid project is a crucial precondition for their engagement. However, the specific Project timetables conveyed might differ significantly depending on which stakeholder is preparing them and which stakeholder is addressed. Whereas DSOs or Power producers are, for example, primarily interested in the key dates regarding the actual Construction and Operation of a grid, local Adjacent communities, Land owners, local elected politicians and media entities are also interested in information

- Which specific stakeholders are primarily interested in information regarding the grid project's (technical) progress?
- Which specific stakeholders are also interested in detailed information on events accompanying/surrounding the grid project?

and consultation events surrounding the grid project.

Required resources for content generation

Project timetables are easy to compile since they typically only reflect the events/dates that are already known to the stakeholders, e.g. the project developers, who develop the Project timetables.

Do the project developers already have internal Project timetables based on which public Project timetables can be developed?

Format best used to transmit content

Infographics
Presentation

A Project timetable can be displayed in digital formats such as Infographics and Presentations. This allows users to obtain information which is relevant for them in a rather playful/interactive way which enhances the possibility that the Project timetable is remembered.

- Do the IT-skills to properly integrate a Project timetable into Infographics exist?
- Are Presentations being developed that should bear a Project timetable?

Fact sheet
Brochure/Flyer/Leaflet/Fact sheet

Fact sheets or brochures/flyers/leaflets are particularly suitable formats for Project timetables since they can be kept by the addressees, which makes it easier for them to note down the respective dates and events and plan accordingly.

- Are activities planned where brochures/flyers/leaflets can be distributed?
- Which events potentially featured in the Project timetable are of importance to the people among whom brochures/flyers/leaflets are distributed?

Channel best used to transmit content

Mailings

Presentations and email texts bearing the Project timetable information can be transmitted through emails while letters and brochures/flyers/leaflets with Project timetables are best brought to the addressees through mailings. In addition, emails require that prior contact has been established between sender and recipient in which the recipient has provided their

- Which are the stakeholders that should receive personalised emails or letters on specific events?
- Which events potentially featured in the Project timetable are most important to the recipients of personalised emails/letters?

email address. Mailings do not require this since material provided through mailings can simply be put into the mailbox of every household in the affected region.

- Which events potentially featured in the Project timetable are most important to the recipients of non-personalised emails/letters such as newsletters?

Public space events
Town hall meeting

Public space events and Town hall meetings are among the most important channels to establish transparency between the project developers and the local affected public. To affirm this transparency, Project timetables should be presented at these events.

- Which events are of interest to the potential attendants of a Public space event/Town hall meeting?

Project website
Print media
Radio/TV

Websites/blogs as well as print media have the advantage of being accessible to a user for an extended time frame. Hence, if users forget about certain dates they can go back to the respective channel and obtain the information again. Especially local print media and local radio also bear the potential to convey crucial information such as Project timetables to the affected local communities in a targeted way since they are typically among the most important sources of information for rural communities.

- Which are the local newspapers/radio stations that reach the Adjacent communities of a grid project?
- Which events potentially featured in the Project timetable are most important to the recipients of the local newspapers/radio stations?
- Which events potentially features in the Project timetable are of importance to the general public/visitors of the website?

Project stage at which best communicated

Determination of need
Project preparation
Spatial planning
Permitting
Construction

At all stages at which future planning regarding grid development is undertaken, i.e. all but the Operation stage, Project timetables should be an essential part of the communication activities.

- At which stage will a detailed schedule of the project's (technical) progress be feasible?
- At which stage will a detailed schedule of events surrounding/accompanying the grid project be feasible?

Country-specific examples

Germany
Belgium
Netherlands
Ireland

In Germany, Belgium, the Netherlands and Ireland local Adjacent communities and their representatives, i.e. Local citizens' initiatives and local politicians have shown to be sensitive with regards to the early availability of Project timetables. Clearly and early published Project timetables typically caused TSO to be perceived as more transparent and led to a more constructive cooperation between TSOs and the local community.

EU

On the EU-level, especially NGOs have made the experience of not being informed about important events early enough to be able to prepare themselves appropriately. This led to suboptimal outcomes with regards to the inclusion of their ideas and expertise. An earlier and clearer communication of Project timetables could avoid these problems.

Content

Technical details of project

Content description

Grid development projects are technically complex undertakings. It is a crucial condition for transparent, rational and constructive dialogue that stakeholders get informed regarding the Technical details of a project. Important Technical details regarding grid-related health issues, the visual and the environmental impact of grid lines, the effect a given grid line has on the security of supply as well as the costs a grid project entails.

Whereas some of the Technical details related to grid projects are usually easily understandable for the greater public, some typically require further explanation by specialists, e.g. by TSOs. In addition, there are typically more controversial issues, e.g. those concerning the impact of grid lines on human health, and issues that are less contentious. Any communication campaign should therefore take into consideration that some technical details need in-depth explanation and close interaction between stakeholders, especially between the TSO and the Adjacent communities. This can also help to address concerns such as fears that grid lines might harm human health.

Usual Patterns

Project-Specific Questions

Content examples

Important Technical details of grid infrastructure projects include data on the strength and the range of electromagnetic fields that are created by grid lines transporting alternating current. Details on the height of the pylons, the length on the grid lines or the costs of building these lines are similarly important, still less difficult to understand for non-expert stakeholders.

Do examples of edited technical details from previous projects exist?

Significance of content for stakeholder dialogue

TSOs
Power producers
Permitting authorities
Regulators
Industrial consumers
Private consumers
Experts/Academia

The main actors along the value chain of electricity energy, e.g. producers, transmitters, distributors and consumers, are typically most interested in the technical details that affect their part of the value chain. While a power producer is, for

- Which are the specific stakeholders that form part of the electrical energy value chain in a given project?
- What are the specific technical

example, interested in the effect the technical design of a grid has on connecting new power plants to the grid, a consumer is, for example, more interested in the costs of grid projects and the effects they have on the cost of electrical power. In the value chain, permitting and regulating authorities have a strong influence on the different actors. They are not only recipients of content by the TSO but also need to communicate technical details that are based on their requirements.

details that are most important for each stakeholder?

Local elected officials
Environmental NGOs
National/Regional policy makers
Land owners
Adjacent communities
Local citizens initiatives

Apart from stakeholders, members of the value chain, other stakeholders could be interested in different types of technical details. This comprises technical details relevant for the visual impact of the grid lines, for example the height of the pylons; details relevant for human health, for example the electromagnetic fields created by the current transported in the grids; and details relevant for the environment, for example the swath that has to be cut through forests for the construction of grid lines.

- Which are the specific stakeholders that do not form part of the electrical energy value chain in a given project?
- What are the specific technical details that are most important for each stakeholder?

Required resources for content generation

The technical details are typically easy to compile since the entities that have the main responsibility for developing the grid lines already hold all necessary information. However, due to the high complexity of some technical details some effort needs to be put into the proper explanation of the content in order to also make it understandable for non-experts.

Do the resources and the knowledge exist to edit the technical details for making them easily understandable?

Format best used to transmit content

All

In general, all formats can be used to

- Are activities planned where

convey information on the technical details of a project. However, some formats, such as the elements of an Exhibition, typically only attract the audience's attention for a limited amount of time. There, complex Technical details should be avoided since the audience usually does not spend enough time on them to properly understand and digest the content. In contrast, technical details that are complex and/or might be subject to controversy, such as the potential health impact of electromagnetic fields, should be conveyed in formats which the audience typically spends more time on such as Brochures, Flyers, Leaflets or Factsheets.

relatively complex technical details are to be conveyed?

- Are activities planned where relatively controversial technical details are to be conveyed?

Channel best used to communicate content

Doorstep visits
Public space events
Citizens helpline
Citizens consultation hours
Town hall meeting
Roundtable
Closed-door meeting

Channels that entail direct interaction between stakeholders are typically the best way to convey complex content, since they allow to answer questions and to address doubts. However, it needs to be noted that these questions can often not be addressed in detail with channels in which a large number of stakeholders participate, for example in town hall meetings. There, the content explanation needs to be well prepared in order not to leave any unanswered questions.

- Which specific technical details shall be conveyed through channels entailing direct interaction with stakeholders?
- Which specific stakeholders shall be addressed through channels that entail direct interaction allowing for immediate dialogue?
- Which specific stakeholders shall be addressed through channels that entail direct interaction but do not allow for immediate, extensive dialogue?

Print media
Radio/TV

Print media and radio/TV are channels on which the audience typically does not spend much time and through which no interaction takes place. Therefore, they are appropriate for technical details of little complexity and

Which print media and/or radio/TV entities are of relevance for a specific grid project?

little controversy such as the length, height and construction duration of a grid project.

Project website

A Project website can be a good place at which all relevant technical data on a grid project is published. Websites give the audience the opportunity to choose how much time to invest in dealing with the content and give the stakeholder running the website the opportunity to explain all relevant technical details in a way that non-experts can understand them.

Which specific technical details shall be conveyed through the project website?

Field visit

Interaction with local affected stakeholders, such as land owners and adjacent communities and their LCI, can be usefully carried out through field visits. For instance, some TSOs have conducted interesting experiences with letting people from Adjacent communities measure electromagnetic fields themselves. This reduces the likelihood that different stakeholders assume different technical details and helps to build a trust-based dialogue between stakeholders.

- Which specific technical details shall be conveyed through field visits?
- Which specific stakeholders shall be addressed through field visits?

Project stage at which best communicated

All

The availability of precise technical details to all involved stakeholders is a crucial precondition for constructive stakeholder interaction at all project stages. It is, however, very important for project developers to provide well-edited information on the grid projects at an early project stage. This helps to form a basis for an informed dialogue and builds trust.

At which Stage can precise technical details on the specific grid project be provided?

Country-specific examples

Belgium
Netherlands
Germany

The TSOs from Belgium, the Netherlands and Germany provide all relevant technical details on their websites and usually get positive feedbacks for this. 50Hertz in Germany and ELIA in Belgium have exhaustive websites that provide technical details on such complex areas as the grid load in a well-edited way. The 50Hertz grid load map is available at the following link: <http://www.50hertz.com/netzkarte/?wcmLocale=en> and ELIA's grid load and load forecasts, as well as a variety of additional data and facts on the electricity market, are available here: <http://www.elia.be/en/grid-data/consumption-grid-forecasts>

Poland
Bulgaria
Hungary

In countries where a national public debate on grid projects is largely absent, strong direct interaction between project developers and non-expert stakeholders is necessary to convey the technical details of grid projects. Due to the fact that information on grid projects is often not easily accessible, especially to the local affected stakeholders in the rural areas of these countries, the project developers are often the only institution that can comprehensively inform the respective stakeholders.

Content

Compensation measures

Content description

Compensation measures are benefits or mitigation measures which can help compensate for the direct or indirect impacts of the project. Compensation measures can be negotiated early on in the project, and can provide an opportunity to introduce a positive element to a grid project to the local stakeholders – potentially raising acceptance.

In general, a differentiation can be made between two categories of Compensation measures:

- Direct Compensation measures that genuinely compensate for losses to local people or to the natural environment. These are likely to be required in law or through planning conditions. This type of Compensation includes direct payments to the owners of the land where the pylons are installed. Payment for the land can be regarded as simply negotiated land transactions, while the Compensation payments for losses of Land owners (e.g. due to a restricted use of the land for agriculture or forestry) are typically negotiated separately.
- Community or environmental benefit measures which a project developer decides to offer voluntarily – in recognition that host communities should benefit (not just that they should be compensated for direct losses).

Regarding the second category, it is important to ensure that proposed measures actually benefit specific stakeholders affected by a project. More general measures run the risk of targeting the wrong stakeholders and may be unsuccessful at reaching those most affected. In addition, Compensation measures should not be understood as a means to buy the support of local affected stakeholders but to really compensate them for the impact caused by grid projects.

It should be kept in mind that Compensation measures of both kinds, and particularly financial measures, may be limited by specific national legislation, which should be considered before any measures are proposed.

Usual Patterns

Project-Specific Questions

Content examples

Possible Compensation and local benefit measures can vary widely and are dependent to some extent on applicable national legislation with regards to a TSO's right to compensate a community affected by a grid infrastructure project.

Besides the direct financial Compensation measures paid to Land owners, public authorities or to avoid and reduce environmental impact, local benefit measures can, for example, include:

- What relevant legislation is applicable in the country / region of the project? Which Compensation measures does legislation prohibit and which does it permit?
- What are the community's key needs which could potentially be supported by the TSO? (E.g. the need for community centre; need for internship opportunities for local young people; etc.)

- Direct financial support to the affected local communities
- Sponsorship of local events or activities
- Other voluntary environmental activities that help to limit the direct and indirect environmental impact of projects
- Education and employment opportunities and programs
- Sponsoring projects for increasing the touristic potential of a region, i.e. sponsoring art projects or projects for enhancing the recreational potential of an area affected by grid projects

- Will the project impact the local environment in a way that could be compensated? (E.g. compensation for relocated houses; alternative habitats for affected animals; measures to reduce or avoid environmental impact for affected areas etc.)
- How can the TSO ensure that the proposed measure is perceived as a fair repayment, rather than an attempt to buy the community's support?
- How can the TSO ensure that Compensation measures actually compensate the affected individuals?

Significance of content for stakeholder dialogue

Local elected officials
Environmental NGOs
Adjacent communities
Local citizens' initiatives
Land owners

The TSO may choose to communicate on Compensation and local benefit measures at a very early stage, particularly to those stakeholders whose input could help inform appropriate measures. This communication will thus be highly interactive, and Compensation and local benefit measures will be developed jointly. To keep full transparency, locally affected citizens might even be invited to vote on different compensation options.

- Which stakeholders can help develop Compensation measures to be proposed?
- What input can each of these stakeholders provide? (E.g. relevant policy expertise; knowledge of community needs; previous experience with Compensation measures in projects, etc.)

Private consumers
Adjacent communities
Media

Several non-local stakeholders might have an interest in being informed about Compensation measures, too. Though they can typically not benefit directly from these measures, being informed about adequate Compensation measures for other

- Which stakeholders might be interested in receiving information on Compensation measures?

stakeholders potentially helps build trust.

Required resources for content generation

Generating proposals for Compensation measures, as well as concepts for local benefits, requires significant resources in terms of time and human resources, in addition to the budget for the actual Compensation measures. The activities necessary for content generation require primarily time and human resources and include, for example, drafting ideas of Compensation measures and local benefits to propose and meeting with other stakeholders to develop and negotiate Compensation measures together.

The budget for the actual Compensation measures may vary significantly depending on the measures that are to be implemented. Some measures are relatively low-budget options (e.g. organising community projects), while some might be much more costly.

For example, the creation of five small lakes for new habitats in Germany (as indirect local environmental benefits) required an investment of EUR 100,000. It needs to be acknowledged that different TSOs also face highly different financial constraints which affect their ability to engage in costly Compensation measures.

- How much time and human resources need to be set aside to develop a Compensation measure proposal? How many meetings would need to be set up with other stakeholders?
- How much would the implementation of the proposed Compensation measure cost? Which financial and non-financial resources would be required? Over what period of time?
- Does the TSO or the project have budget set aside for Compensation measures?

Format best used to transmit content

Presentation

Presentations can allow TSOs to pave the ground for informed in-person discussions on Compensation measures with affected stakeholders.

- Which information on Compensation measures for a specific project can be put into a Presentation?

Brochure/flyer/leaflet/Fact sheet

Information on Compensation measures can be provided in a more targeted way only to affected stakeholders via printed or emailed information disseminated to the community. Concise formats, such as Fact

- Which information can be provided in a one-directional, informative way?
- At which point should these formats be used? Before (in preparation for)

sheets, brochures, newsletters or e-mails, can help provide key information on Compensation measures in a clear and straightforward way.

an interactive format? After consultation, once everything is finalised?

Channel best used to communicate content

Roundtable

Closed-door meeting

World Café

Relatively small meetings with targeted groups (e.g. Local elected officials, Environmental NGOs, etc.) can be useful for communicating and consulting on potential Compensation and local benefit measures while they are being developed, and for receiving feedback and suggestions before consulting with the broader public or communicating directly with the public on a final proposed measure.

- Which stakeholders could be consulted in a group and which should be consulted individually?
- How many meetings are necessary to negotiate a finalised Compensation measure proposal?

Doorstep visits

Public space events

Citizens helpline

Project information office

Town hall meeting

In-person and interactive channels that aim at a larger group of individuals can be useful to communicate about Compensation and local benefit measures within the broader affected community, both to consult with local citizens while deciding on a measure and to spread information about it and update on progress once the measure has been decided upon and is being implemented. Citizen consultation on a Compensation measure may be most effective once the measure is already quite developed and would deal with specific points or options, rather than broad concepts, while still leaving room for choice and input.

- How much of the Compensation measure is left open to discussion, modification or choice once its terms begin to be communicated to the public?
- In the local setting, what is the most effective way to communicate to the local population about Compensation measures?

Social media

Website / blog

Traditional media

Print media, Social media and online

- Should the communication measure

channels can be used to spread the word to the wider public about a proposed Compensation measure and thus to boost awareness of the positive aspects of a grid infrastructure project. These kinds of channels can reach not only the local community, but also a wider audience, potentially generating positive attention to the project and building trust. However, before using such a far-reaching communication channel, it is important to ensure that the proposed measure will indeed have the intended positive effects and that its follow-through is certain.

be spread to a wider audience?

- Should the information be contained to a particular region (e.g. via regional radio, regional TV, outdoor advertising, etc.) or spread more generally via the internet?
- If the measure is being spread to the broader public, should any particular groups be targeted?
- Is there a risk of a negative reaction from the broader public?

Project stage at which best communicated

Project preparation
Spatial planning
Permitting

Compensation measures, especially voluntary activities such as local benefit measures, should be developed in the early stages of the project, during which project planning and other decisions are being made. As consultations and project approval will occur during these project stages, negotiations on Compensation measures should occur concurrently. The various stakeholders involved in planning and approving the project will thus base their decisions on a plan that involves proposed Compensation measures.

- How quickly should discussions on Compensation measures begin?
- Is the project facing significant opposition from key local figures at an early stage, and could this opposition be reduced by starting a conversation on Compensation measures?

Country-specific examples

Germany

Under recent German legislation governing grid development, municipalities have the right to receive up to EUR 40,000 for every kilometre of a grid line that cuts through their area. This amount is reimbursable for TSOs via grid fees paid for by power consumers. In addition, some TSOs engaged in specific, targeted local benefit measures. For example, the German TSO 50Hertz created five small lakes in the Siebendorfer Moor Landscape Protection Area. This aimed at the creation of new habitats that were initially disrupted due to an overhead line.

Hungary

The Hungarian TSO MAVIR has engaged in community-based local benefit measures, such as donations to schools and kindergartens.

Spain

The Spanish TSO also engages in direct payments to affected communities. These payments have been started in Spain after compulsive payments for licensing procedures for new projects have been abolished. The payments are considered sufficiently high as to receive an acceptance rate of 95% from local municipalities and 90% from Land owners.

Belgium France

The Belgian and the French TSO engaged in the restoration of wildlife corridors under overhead lines and created new habitats in Natura2000 sites. This project also aimed to demonstrate that active management for biodiversity can reduce the costs of securing and maintaining corridors.

In addition, the French TSO financed a full-time employee for three years (potentially renewable) who works exclusively on bird issues related to grid infrastructure.

Ireland

Recent policy statements from the Irish Government allowed for the incorporation of community gain considerations into major infrastructure projects. With regards to the visual impact of power lines, the Irish TSO EirGrid elaborated a community gain mechanism that is based on two elements:

- A Local Community Fund, administered by the local authority on behalf of the adjacent local communities: EirGrid will contribute 40,000€ per kilometre of 400kV lines into this local benefit fund once the line is completed. The fund is for the benefit of communities that live close to pylons and stations of the new line.
- A Proximity Allowance scheme to directly recompense owners of residential properties (or those with planning permission) within a 50 to 200 metre corridor of new pylons or stations: At a proximity of 50 metres, owners receive a once-off payment of 30,000€, which decreases on a sliding scale to 5,000€ at 200-metre proximity. Individual agreements are met if the property is closer than 50 metres.

Content Information on project developers

Content description

The stakeholders having the responsibility for the Planning, Construction and Operation of grid projects are typically called project developers. While usually only TSOs fall into the narrower definition of this category, it makes sense to also include other stakeholders within the definition who assume the responsibility for crucial aspects of grid development projects. This includes permitting and regulating authorities who have a major influence on the actual placement and design of grid projects or national elected politicians who are often the main political drivers for grid projects and provide the legal framework for them. Information on project developers hence typically includes all information on the above mentioned actors that is relevant to other stakeholders.

Usual Patterns

Project-Specific Questions

Content examples

Information on the project developers should typically include the names of the entities acting as project developers as well as their specific role in the grid project(s). In addition, providing the names of specific contact people and their contact details give the project developers a face and enhance opportunities for constructive dialogue among the stakeholders. Conveying Information on project developers also includes providing opportunities for further information through Citizens helplines or consultation hours.

- What are the names of the project developers of the specific grid project?
- What are the roles of the project developers in the specific grid project?
- Which opportunities exist for other stakeholders to inform themselves on the project developers?

Significance of content for stakeholder dialogue

TSOs
Permitting authorities
Regulators
National/Regional policy makers

For the project developers it is crucial to always convey basic information on themselves to all other stakeholders. Whether a project developer communicates with an Adjacent community or an NGO – it needs to be clear who is in the driving seat for a specific project, what their role in this project is and who can be contacted for further information.

- Who are the main project developers in the specific grid project?
- What information are the main project developers willing to provide?

Local elected officials
Environmental NGOs
Land owners
Adjacent communities
Local citizens' initiatives
Industrial consumers
Private consumers
Media
Experts/Academia
Opinion leaders

The stakeholders who do not form part of the group of project developers typically have a strong interest in understanding who the main drivers for grid projects are. This is the basis for entering into a constructive dialogue with the project developers as well as targeting their own communication activities being informed about the roles and competences of the project developers.

Which stakeholders are most interested in information on the project developers in the specific grid project?

Required resources for content generation

While information on the project developers can be compiled easily by the project developers themselves, it might be necessary for them to carefully select the pieces of information that shall be actively communicated in order to create added value for the other stakeholders. This also entails editing the information in a way that makes it easily accessible.

- Which pieces of information on the project developers are most important to the stakeholders of a specific grid project?
- Is well-edited information on the project developers already available for the specific grid project, e.g. from previous projects?

Format best used to transmit content

All

The project developers should include basic information on themselves in every format they use. This helps to always make clear who is communicating and who can be addressed in case of questions/ doubts/ concerns. Also when other stakeholders make use of different formats in their communication activities, it is typically useful to include information on the project developers and their roles in order to set the scene for constructive and informed interaction.

- Which formats do the stakeholders plan to employ for a specific grid project?
- Is the information on the project developers available in a way that it can be easily included into different formats, e.g. are template texts available that can be used for brochures or Presentations?

For example, in a Presentation or a brochure used to convey information by the project developers it should always be clearly stated who the project developers and their roles in the respective grid project are.

Channel best used to communicate content

All

Similar to the formats that are used to transmit the content, project developers should always convey basic information on themselves, including their roles and competencies as well as contact details, whenever they make use of a communication channel. This allows the audience of these channels to identify whom they are communicating with.

Which channels do the stakeholders plan to employ for a specific grid project?

Project stage at which best communicated

All

Since the project developers play a crucial role in every project stage, there is a need for information on them throughout the whole process of a grid project. It should be noted, however, that it is of high importance that the project developers comprehensively present themselves to the other stakeholders as early as possible. This creates transparency, accountability and trust which are needed for the interaction at further project stages.

Have the stakeholders already been informed comprehensively on the stakeholders?

Country-specific examples

Germany
Netherlands
Belgium
Ireland

In several countries, especially in Central and Northern Europe, TSOs already inform other stakeholders in a relatively comprehensive way. For example, TSOs typically set up Project websites early on in the process of grid projects. Throughout the project's progress, these websites serve as main point of information on the project developers where stakeholders can inform themselves.

At the same time, other stakeholders who assume responsibility for essential parts of the projects, such as Permitting authorities are typically just beginning to actively inform other

stakeholders about their specific roles in grid projects.

5. Formats

The “Formats” in this toolkit can be used in the context of different communication channels and communication contents. The selection of formats presented give ideas of how the contents (see: “Contents”) can be efficiently communicated while using the suggested channels (see: “Channels”).

Format Brochure / Flyer / Leaflet / Fact sheet

Format description

Print formats, such as Brochures, Flyers, Leaflets and Fact sheets, are usually quite short (1-2 pages) and present information related to grid development projects in a clear, concise and visual manner.

These formats often mix short texts with images, graphs and other visual elements. Short printed materials such as these are typically intended for distribution to the wider public, as they can provide information in a clear, visual and comprehensible manner. These materials can be distributed to the public via mailings, by doorstep delivery or by placement in public spaces, such as schools or community centres. They may also serve as supporting or accompanying material to public events or Presentations.

TSOs – but also other stakeholders such as Permitting authorities, NGOs or Experts/Academia – may use short printed materials to communicate key project information or to spread awareness about project decisions and related assessments.

These materials may provide a concise overview of an entire project, or may focus in more detail on specific project elements. Printed materials can also be helpful for disseminating information about project events, such as consultations or town halls. Indeed, other stakeholders may request to be informed on project progress and events via such materials, which can be easily disseminated to a wide audience and do not require, for example, internet access.

Different types of printed materials may be particularly effective for communicating certain information. For example, a flyer could serve to promote a particular project event, a Fact sheet could provide concise factual – and largely textual – information on the project in general and a brochure could present an entire project or specific project aspects in a more visual manner.

Usual Patterns

Project-Specific Questions

Cost/required resources

Brochures, flyers and other printed materials can be produced at relatively low cost, though costs can vary depending on the complexity of the document’s design and on the quality of printing (paper, colours, etc.). Human resources and time

- Are synergies possible with other project materials or website contents (e.g. are images, graphs or text available? Does a template exist for brochures, Fact sheets and other documents?)

are needed to design and put together materials, though the need for these resources can be reduced by using standard templates and designs.

Audiences

Land owners
Adjacent communities
Local citizens' initiatives
Private consumers

Short visual printed materials can be effective in regularly updating the local public about key project information, events and progress. Such materials can be easily distributed in a community and accessed by local residents. While concise informational materials may also provide key project information to interested non-local stakeholders, the main audience for such materials is likely to be those who are most directly affected by a project.

- What kind of information is relevant for the core audience and how can it be presented appropriately?
- Where and how could such materials be distributed in order to facilitate access for local residents?

Content to be communicated

All

Printed materials may include any combination of basic project information, such as location, timetable, project developers, etc. Indeed, such materials could provide an overview of several different items, or could focus on a particular item, such as a specific project event. Short print materials could also allow TSOs to present technical project details in a simplified and visual way.

- How can complex technical information be presented in a clear way in a short printed document?
- How can Presentation of project information be best adapted to different kinds of printed formats (e.g. brochures vs. flyers)?

Channel to be used to transmit format

Doorstop visits
Public space events
Project information office
Town hall meetings

Print materials can be disseminated through in-person channels, particularly those targeting the general public. Materials can be directly distributed to individuals or can be made available at

- Where could print materials be made available in order to facilitate access by local residents?
- Which materials are important

events, meetings or public spaces, allowing interested individuals to take a copy.

enough to be directly distributed via, for example, doorstep visits?

Project website
Social media

While printed documents typically target local communities, they may be uploaded to Project websites or Social media to improve transparency and provide access to information to other stakeholders.

- Which printed materials would be of interest to non-local stakeholders?
- Can digital versions of the printed documents be uploaded online?

Format Presentation

Format description

A Presentation slide deck is a set of slides which usually presents information in a synthetic way, and may include text (usually in short bullet points), images, graphics and other elements.

Presentation slides can serve as a basis for an oral Presentation of different contents related to a grid development project, in which they are often supplemented with additional oral information or commentary, or can act as standalone and self-sufficient content bearers that can be viewed by audiences, for example in paper hand-outs or online.

In the communication process of a grid development process, a Presentation offers the opportunity to convey a broad range of information to a varied audience in a way that highlights key elements and is often more legible than long or technical documents. This versatile format can be used to communicate general or specific information on grid infrastructure expansion as a whole, a particular project or specific project stages or activities.

A Presentation may have persuasive power, as it allows presenters to emphasise specific points and to clearly deliver a particular message via text and supporting charts, graphs and other visuals. A Presentation can also be more engaging than other formats, as it leaves some room for creativity, and can punctuate written information with interesting visuals. Presentations can include both, factual and technical information, as well as messages or visuals intended to elicit a more emotional response.

Usual Patterns

Project-Specific Questions

Cost/required resources

Presentation costs may vary widely, depending on the graphical complexity of the Presentation and the need to develop dedicated visuals.

If no original or complex graphics are to be developed, a Presentation can be created with relatively limited financial, time and human resources investment.

In general, the need for resources may be minimised through reusable and customisable elements, such as Presentation templates, master slides, or image and graphics libraries.

- What synergies can be created with other Presentations and other content formats? Can a customisable Presentation template be created for all Presentations? Can visual elements created for other Presentations or for other formats (brochures, Infographics, posters, etc.) be reused?
- Which original elements need to be created for a particular Presentation? Text-based elements? Graphical elements?
- When "recycling" other Presentations, how much effort is

used to adapt it to the new audience?

Audiences

Private consumers
Local citizens' initiatives
Land owners
Adjacent communities
Media

The general public in the local community can be effectively reached through clear and engaging Presentations which summarise key information and deliver an understandable message.

A Presentation intended for the public may serve to keep people informed throughout the project, or may strive to convince people with regards to specific aspects of a project or the project as a whole.

An informative Presentation may serve to simply present key information about the general context of grid development, to explain the project or a particular element of the project, to provide an update on project progress or to respond to specific questions which have been brought forward by the public. A Presentation intended to shape opinion may place greater emphasis on presenting convincing arguments and data addressing the public's questions or concerns.

Presentations may also pose questions to the public and encourage them to provide input, for example orally (during a live Presentation), on a dedicated website or by mail or email.

- What is the goal of the Presentation: to inform? To respond to questions? To convince? To solicit feedback?
- Has the local public raised specific questions which could be addressed or clarified via a Presentation?
- Is there a need to summarise specific complex or technical project information in order to keep the public well informed?
- How can Presentations be made available to a wide audience? Can they be placed online? Can hand-outs be placed or distributed in public spaces?
- If the Presentation asks for reader feedback on specific issues, which feedback platforms can be established?

Permitting authorities
Environmental NGOs
National/Regional policy makers
Regulators
Industrial consumers
Experts / academia

Presentations can be effective for communicating targeted information to groups with specific interests or areas of expertise. Even if based on a standard template, Presentations can be adapted to different stakeholders with a specific role or interest in the project, in order to provide the most relevant information. Unlike for the public, Presentations to professional or expert groups may be more technical and go into greater detail in areas of the stakeholders' expertise, while still remaining legible, visual and succinct.

As with Presentations to the public, Presentations targeted to specific stakeholders may be informative (by presenting information relevant to the group), convincing (by addressing specific concerns or doubts expressed by each group and highlighting those arguments that would be most relevant to their interests) or interactive (requesting stakeholder feedback as a follow-up to the Presentation).

- Which stakeholders involved in the project need to be informed on specific project aspects, and when? What are their expectations of the Presentation?
- Which information will be most relevant to the interests and activities of the stakeholder being addressed? How can the Presentation be best adapted to highlight information of interest?
- Has the stakeholder expressed any specific aspects/concerns that can be addressed through a Presentation?

Content to be communicated

All

Given the versatile nature of a Presentation, all key content types can be included. Presentations could include both content best communicated in written form (e.g. Information on project developers, Compensation measures, etc.) and that which is best communicated visually (e.g. Project location or timetable). Specific project information which should be retained by stakeholders, or any technical information, should, if possible, be presented visually to facilitate comprehension.

A single Presentation can combine any number of content types, though care must be taken to ensure that the Presentation flow and organisation are

- Which stakeholders will have read/view the Presentation? Do they have technical or policy expertise, or are they mostly members of the general public?
- Do contents used in other formats need to be reviewed or adapted before they can be used in a Presentation?
- Which project contents (timetable, events, Technical details etc.) have been finalised at this stage and can be presented as final?
- Which project contents have not been finalised, but could benefit from stakeholder feedback?

maintained.

Presentations can include finalised content, but can also be used to encourage feedback, for example by asking readers to send ideas to a particular email address or to fill out a questionnaire online. Slide decks presented orally can also encourage the audience to provide comments and questions directly.

- Has any content been specifically requested by the intended readership of the Presentation?
- Is any certain content potentially expected by the audience? Can the Presentation fulfil their information needs?

Channel to be used to transmit format

Public space events

Roundtables

Closed-door meetings

Presentations can be delivered orally at large or small meeting involving various stakeholders. When presented orally, the textual and visual information provided in the slides can be supplemented with precisions, commentary, explanations and additional information delivered verbally.

Slide decks can be presented to a large group at various group gatherings as well as Public space events. These Presentations on local projects may also be timed to coincide with other local events or meetings in order to attract a bigger audience or to target particular stakeholders.

Presentations may also be conducted in smaller-group settings, in private meetings or Roundtables with specific stakeholders, if meant to present information to a particular group. They can serve as a basis for a follow-up discussion or other formats.

Presentation decks can also be provided as paper hand-outs at these events, in order to allow stakeholders to refer back to them or examine them more carefully after the meeting.

- What are the target groups and their expectations of a Presentation held at a certain event?
- Where do local citizens and groups usually gather for events?
- Are there any scheduled local events at which a Presentation could be made?
- How much of the information should be included in the slide deck and how much should be added orally (particularly if paper copies of the Presentation are to be provided to the audience members)?

Town hall meetings

One or several Presentations held by the TSO should be an essential part of a Town hall meeting. The Presentations should include comprehensive and new information which makes them worthwhile for already informed people to make the effort of participating. The plenary Presentations should be moderated by an independent “host” hired by the TSO or the municipality, e.g. from an external communications agency. This host should introduce himself as such independent moderator, introduce potential expert presenters and organise the Q&A sessions.

The Presentations should always be followed by a Q&A session where the participants can have their questions answered by the project proponents. Both, Presentation and Q&A session require thorough preparation.

If applied to a Town hall meeting, Presentations should – if possible – always be accompanied by small group workshops with different stakeholders and TSO experts. These workshops should be an essential part of the event and aim to identify, collect and start discussing specific concerns of the participants. Also, participants might be less intimidated to ask specific questions in the small workshops than in the big plenum. The workshops can try to bring out these questions and specific concerns, collect them and discuss them in a way that goes far beyond the characteristics of a Presentation.

It can be helpful to have the workshops followed-up by a short Presentation in the plenary session again, to hear what major concerns have been raised in the workshops and to hold a final Q&A session.

- What information is new, relevant and understandable enough to be part of a Presentation at a Town hall meeting?
- What topics should be covered in the plenary Presentation, what topics are better to be addressed in the workshops?

[Social media](#)
[Project website](#)

Presentation slide decks can be made available to stakeholders electronically and spread to a wide audience by being placed on a website or being linked to on a Social media page.

Placing Presentations on electronic channels can allow stakeholders to access them at their leisure. Including a clear, engaging and user-friendly Presentation on a TSO's or Project website can help introduce various stakeholders to the project and quickly convey key information. However, as users would have to go through the Presentation on their own, it is important to keep it short, interesting and to the point.

- Can a Presentation be technically integrated into the TSO or Project website in a way that is easy to view?
- Who is likely to access the website and how to encourage various stakeholders to actually view the Presentation?
- Which key information should be included in an online Presentation in order to keep it short but comprehensive?

Format Exhibitions

Format description

Exhibitions involve the presentation of several photographs, posters, maps or other images, 3D models, videos and/or interactive digital displays in a single public space. They are commonly hosted by the project developers but a collective effort of other stakeholders (e.g. communities, elected officials/mayors, NGOs) is possible and desirable.

Exhibitions are focused on visual presentation of information, though images may be accompanied by short explanatory texts and/or an Exhibition brochure or booklet.

In the context of grid projects, the host may set up Exhibitions as standalone displays or as part of another event, such as a Public space event. These Exhibitions may be on display for one day only, or for an extended period of time (for example, if the TSO establishes an ongoing local presence via a consultation office). Exhibitions may present useful project information in an accessible and visual manner, allowing viewers to visualise important project aspects (for example via project maps), as well as the final result (for example via a 3D model or digital rendering).

Exhibitions can also be an engaging way to track project progress, for example by providing photographs of different project stages. Images can also add a human dimension to the works, for example by profiling workers involved in a project or providing photographs and videos of a local consultation or event. Exhibitions can offer a way to tell the story of a project in a creative, informal and engaging way.

If the Exhibition is not on display in an outdoor area, its opening times should be arranged so that stakeholders have a chance to attend.

Usual Patterns

Project-Specific Questions

Cost/required resources

The costs and resources required depend on the size of the Exhibition and the methods employed for display. For example if interactive digital technologies are used for display, the costs will be higher than those of Exhibitions limited to images. The costs also depend on the running time of the Exhibition.

Human and time resources are required to design, construct and manage the Exhibition for as long as it lasts. Speakers or special guests could also be invited to Exhibition openings in order to raise interest and awareness.

- How can the information be displayed to answer the most relevant questions of the audience?
- Could any items be reused from previous exhibits or events?

Cost savings could be achieved if certain Exhibition elements can be reused from previous exhibits or other events.

Audiences

Adjacent communities
Local citizens' initiatives
Land owner
Private consumers
Media
Environmental NGOs

An Exhibition gives the opportunity for any interested member of the community to get more detailed information on the project in an appealing and visual format. An exhibit may also give local citizens the opportunity to interact with the hosts of the Exhibition (e.g. TSOs) and any invited speakers or guests.

How can the exhibit be made accessible to local audiences? At what time and day are most audiences available to view the Exhibition?

Content to be communicated

Project location

The choice of the Project location could be explained in greater detail and in a visual manner for the stakeholders who are seeking more in-depth information. Maps could be displayed as posters, or could be made available digitally, perhaps with interactive features.

How could Project location be presented in a visually appealing and informative way?

Technical details

Exhibitions are also a good format to explain Technical details of the project and the effects the new technology will produce. The various technical elements could be demonstrated visually, and a rendering of the final result could clarify the intention of the project to stakeholders and possibly alleviate concerns about visual impact.

Which Technical details could best be communicated via visuals?

Channel to be used to transmit format

Town hall meeting
World Café
Public Space Events

Project information office

An Exhibition can be set up at a gathering of the local public, for example at a public event, in a public space or at a dedicated Project information office. An Exhibition may be set up as a standalone informational format, or may accompany another event or Presentation in order to provide additional visual and interactive information to attendees.

At which public event or site would it be appropriate to set up an Exhibition? What information could it add?

Format Infographics

Format description

Infographics (short for “information graphics”) are visualisations of data or ideas that try to convey complex information in a manner that can be quickly received and easily understood. They are also referred to as “explanation graphics” as they merge different content elements, e.g. geographic and technical information.

In the context of power grid developments, Infographics can – for example – be effectively used by TSOs, political decision-makers, regulating or Permitting authorities to communicate corridors, route alternatives or specific locations of grid development projects via maps. Infographics could be placed on websites, posters or brochures. A major advantage of Infographics is that they allow for faster reception of content than a written text, thus enabling audiences to easily relate and connect to the information transmitted. This feature of Infographics could make up for the growing trend of a decreased attention level from many types of audiences.

Infographics can sometimes (e.g. in online applications) even be dynamically enhanced to allow for flexible visualisation, i.e. showing high or middle-voltage power lines in different regions, mere extensions or entirely new developments, or even pointing out on-going stakeholder-involvement activities on the ground.

Usual Patterns

Project-Specific Questions

Cost/required resources

The costs of developing Infographics are relatively high, as compared to less complex and static graphical formats. Infographics will in most cases require graphical design done by communication experts. In a web context, for instance, they may require advanced programming skills in dynamic tools of content representation. At the same time, they should not be a “playground” for designers per se. Instead, they should serve to raise public understanding of grid development projects, to the extent that audiences find information in Infographics easy to digest.

- To what extent can synergies be tapped with regard to other formats and channels that require the sourcing of graphic design capacities, e.g. web design, poster drafts?
- How can extra costs for dynamic Infographics on Project websites be shared amongst various stakeholders (e.g. TSOs, regulatory authorities, Permitting authorities etc.)?

Audiences

Private consumers

Media

The general public can be effectively informed with the help of Infographics,

- What kind of information regarding grid development is the general public

because they can easily showcase the need for a particular regional or even national endeavour to extend a power grid – beyond the individual project in question. When combined with a map of the region or country, the graphics can help explain individual projects within the “big picture”.

Moreover, interactive features are likely to attract and retain the interest of audiences (e.g. a visitor to a Project website) for a longer period of time, as they can explore different contents almost playfully.

likely to be interested in?

- How can it be illustrated with the help of Infographics?
- Can online or print media outlets be approached to adopt pre-designed Infographics when reporting on grid development projects?

Adjacent communities
Local citizens' initiatives
Land owners

Local audiences such as Adjacent communities, Local citizens' initiatives, and Land owners can also be effectively informed of grid development projects with the help of Infographics. They help illustrate the significance of a single project in the greater context of a grid network – thus highlighting the significance of an individual link for the functioning of the entire power supply chain. Moreover, Infographics can help to illustrate some technical aspects of a power-line that local audiences are interested in, e.g. profile-views of pylons that show measurements (height, width) and Technical details. In that sense, local stakeholders can call upon TSOs and permitting and regulatory authorities to present project-related information (e.g. on routing, technology, capacities) in a simple manner.

- What information of local relevance are local audiences likely to be interested in?
- Which information could be most easily presented through Infographics, as opposed to a text-based format?

Content to be communicated

Project location

Infographics are a helpful format to communicate the precise location of a grid development project, e.g. via an interactive map that singles out substations at starting and end points of each project (if applicable). Infographics can also show clear differences between voltage-levels (380kV, 220kV) that are of particular interest to local audiences.

Moreover, map-based Infographics may help to visualize the need of grid development, or highlight major connections to Power producers (e.g. large off-shore wind farms connected to private and Industrial consumers through the new power lines).

Some TSOs also use map-based Infographics to illustrate capacity utilisation rates of different lines across their grids – thus highlighting bottlenecks and capacity shortages (e.g. through a colour-code) in specific grid legs. Such Infographics can make the case for a grid development in an explicit and transparent way to other stakeholders.

Any other type of important communication content (e.g. the Compensation measures) for Land owners and Adjacent communities can also be represented with Infographics.

- Does the grid development project in question play a role in a larger grid development initiative (e.g. at the national level) that could be highlighted via a map?
- What are the key geographic parameters of a project that need to be highlighted, like substations, transformers or Power producers at the outset?
- How many types of content can be combined in a single Infographic (e.g. network context, Project location, Technical details, project schedule)?

Channel to be used to transmit format

Website/Blog

Infographics are most effective in informing stakeholders online, whether embedded in a specific Project website, the existing homepage of the TSO or the internet presence of a public authority (political, regulatory or permitting). Users can click through different pieces of information and thus flexibly dig deeper into project contents.

Where and to which extent can Infographics replace texts as a form for presenting content? This echoes the principle that “a picture is worth a thousand words”.

Town hall meeting
Public Space Events

Infographics can also be a suitable format to present complex project information through channels that allow for a more thorough study by interested audiences. Such channels might be Public space events (e.g. Infographics on posters, roll-ups etc.), open days or Town hall meetings during which Infographics are used during a Presentation or small Exhibitions.

- Can Infographics be used as a format of communication that is used across different channels?
- Do the project-specific communication activities contain online, print and personal channels?

Country-specific examples

Germany
United Kingdom
Denmark

For policy makers and TSOs in countries such as Germany, the United Kingdom and Denmark that face similar challenges in terms of paving the way for future energy systems largely reliant on renewable energy sources, grid development is an issue of national importance. Infographics at the level of National policy makers and Regional/national TSOs can effectively demonstrate this “national importance” by highlighting the significance of power transmission across regions from producers to consumers. A case in point is the initiative of the German Federal Ministry for Economics and Technology “Ja zum Netzausbau!” which mainly relies on an Infographic on its front-page to guide a website visitor through the different projects across the country as well as their interconnection.

<http://www.bmwi.de/DE/Themen/Energie/Netzausbau/ja-zum-netzausbau.html>

Spain
Portugal
Greece
Finland
Sweden
Ireland

In geographically peripheral countries in Europe, Infographics can help to communicate to local and global audiences the challenges of implementing the “n-1 rule” which requires TSOs to provide a backup for each transmission line in the grid as well as realising sufficient interconnections with other Member States. A joint Infographic–map could communicate why and where parallel power lines for n-1 standards are necessary that might seem redundant to the formerly uninformed audience.

6. Practice examples

The “Practice examples” in this toolkit present a selected set of project communication and stakeholder integration activities across Europe. They are inspired by external stakeholder interviews, but otherwise rely entirely on publicly available sources. The kind permission to publish these case studies was granted by the TSOs involved.

Practice Example Early-stage Town Hall Meeting by 50Hertz

Organisation name	Organisation type
50Hertz	<u>ISO</u>
Primary contact person	Country
TBD	Germany
Project years	
Ongoing	
Overall project context	
<p>Germany experiences one of the strongest changes in the EU in terms of its domestic power generation due to the envisaged shutdown of all nuclear power plants until 2022 (eight nuclear power plants were shut down in 2011 and the other nine are to follow step by step). The fast expansion of power production from renewable energy sources accompanies the nuclear phase-out. Thus, energy is high up on the political agenda and grid development is subject of a national public debate.</p> <p>50Hertz operates the transmission network in the North-Eastern <i>Länder</i> of Germany, where a lot of new renewables have been installed in recent years, producing much more energy than consumed in the region. In short, this requires the further development of the transmission grid system in order to transport electricity to the consumption centres further to the South.</p>	
Project stage of engagement	
<u>Project preparation</u>	
<p>In its grid projects, 50Hertz has tried to establish a spirit of transparency and openness from early on by publishing extensive information on the planned projects and reaching out to affected local stakeholders thereby creating trust that later a growing stakeholder dialogue can build upon.</p> <p>As a part of this general approach, 50Hertz gained the experience that it is helpful to reach out to affected stakeholders as early as possible and involve the public in the projects – before official spatial planning and permitting procedures commence. In order to establish a constructive dialogue with stakeholders of each project and in</p>	

order to collect local input when developing corridor alternatives, 50Hertz organises Town hall meetings at a very early project stage.

Organising first Town hall meetings at the project preparation stage gives local stakeholders the chance to get information on the planned project as well as the planning procedures and concepts surrounding it. Getting in touch with affected stakeholders early highlights 50Hertz's ambition to start and implement the whole project as a joint multi-stakeholder undertaking and marks the beginning of a cooperation that should ideally last for the entire project, i.e. for several years.

Besides informing local affected stakeholders to enable participation in the upcoming formal consultation, Town hall meetings at the stage of project preparation also bear the chance for stakeholders to voice their concerns at a stage at which few details of the project have been decided yet and – particularly – input regarding the preferred routing can be included in the planning. 50Hertz has experienced that the input given as part of such events is very useful as it enriches the planning data with locally-sourced knowledge before the opening of official spatial planning and permitting procedures. Especially within small-group workshops, very valuable input can be discussed and collected.

Description of relevant activities

Each event is thoroughly prepared. For 50Hertz, the individual inclusion of so-called multipliers and representatives from as many different regional and local stakeholder groups as possible is a crucial success factor of (early-stage) Town hall meetings. Therefore, 50Hertz has worked to build long-term relationships with relevant authorities on a regional level (policy makers, regulator, permitting authority, environmental NGOs) and reaches out to relevant local multipliers (Regional policy makers, local elected officials, local citizen initiatives, local environmental NGOs, local associations of land and forest owners etc.) via meetings. Relationship-building activities encourage key stakeholders of the grid development projects from the national and the local level to actively take part in the Town hall meeting, as they know what to expect from the TSO and the event as such.

Participation of all stakeholders that are affected by grid development projects and also those that have responsibilities as part of the procedure has been proven very important for the entire projects. 50Hertz has experienced that a constructive stakeholder dialogue that advances a grid development project depends on different stakeholders living up to their responsibilities and play the roles they need to play. For example, 50Hertz's Town hall meetings work much better if they can encourage policy makers to explain their national and regional energy policy or have Regulators or Permitting authorities explain their assessment of the technology used in a project.

In order to collect input from local stakeholders, 50Hertz has made very good experiences in designing the events in a way to give participants enough space and opportunity to voice their opinion and start a dialogue with the project developers. Therefore, 50Hertz combines plenary sessions with predominantly informative presentations with small-group workshops and break-out sessions. Each workshop is typically equipped with big maps of the project area showing the current status of corridor planning, e.g. different corridor alternatives. During the workshops, local stakeholders work together with 50Hertz's representatives on the maps in order to

specifically discuss local concerns with the project.

What worked well

Important success factors of 50Hertz's town hall meetings but also their communication strategy as such are:

- Being as transparent as possible from the very beginning on and using available information to support arguments with factual evidence. Working with information on loads and utilisation rates is a particularly important tool.
- Building and maintaining long-term relationships with general stakeholders of grid development projects are important to encourage them to "play their roles" and also show responsibility during Town hall meetings. Since different stakeholders besides the TSO such as permitting authorities or regulators are responsible for various aspects of a grid development project, e.g. the regulatory framework, 50Hertz sticks with its primary role as the implementer of energy policy decisions. For other aspects, the respectively responsible stakeholders are called upon to speak to the affected population. This allows for a clear identification of the stakeholders' roles and places the burden of communication on multiple shoulders.
- Approaching all important local multipliers via in advance of the town hall meetings to brief them and invite them personally leads to higher and more diverse participation as well as a more active engagement during the event.
- Combining presentations held in a big plenary session with small-group workshops where details of current planning location and corridor alternatives are presented. These workshops should be an essential part of the event and aim to identify, collect and discuss specific concerns of the participants. Also, participants might be less intimidated to ask specific questions in small workshops than a big plenum. In a way, the participants should hence be enabled to drive the agenda setting of the workshop – especially when the event takes place at a very early project stage.
- The participation of TSO experts (technical, legal, planning, project management etc.) in the workshops is crucial as they are most suitable to fully answer specific questions and also to directly receive the participants input themselves.
- It is helpful to have an (ideally independent) moderator to host the town hall meeting, to introduce the presenters as well as the project team and to explain the "rules of the game" for Q&A sessions and workshops (e.g. switching off mobile phones, letting each other finish, and making constructive criticism).

Key content provided

All

50Hertz experienced that publishing all available content as early as possible increases trust as well as support and helps to build strong arguments.

Key contents of an early stage town hall meeting by 50Hertz are:

- brief and appealing information materials on the activities of 50Hertz and their general role and mission
- information of the procedures of grid development projects in general and the roles and responsibilities of different stakeholders
- specific information on this project, the Project timetable and the technical details
- credible evidence as well as a recapitulation of the need of the project – even though it may have been officially determined already
- maps on the current state of corridor determination that show local social and environmental sensitivities.

In general, the presenters at a Town hall meeting should bear in mind that the audience will at least in parts consist of stakeholders without any background knowledge in grid development. Therefore, they should give a good introduction into the field, using Presentation slides that are easy to understand and avoid as much technical language as possible (e.g. regarding legal processes of spatial planning or permitting). Moreover, they should ensure not to overload their presentations with information and keep them concise.

A typical request 50Hertz is commonly confronted with by the local participants of Town hall meetings is to provide evidence for the specific need of the grid development project and to prove the claim that it will serve the integration of renewables and/or enhance security of supply. As part of 50Hertz's presentations held at the Town hall meeting, they substantiate their arguments with clear empirical evidence – tailored to the local grid situation. For example, in regions where renewable energy production has continued to grow over the last years, 50Hertz uses the local production and consumption data combined with the capacity data of existing grids to illustrate the need for the grid development project. Moreover, 50Hertz has developed an online tool showing real time data and of loads within the 50Hertz network. Using and referencing this data again to (the target audience of) town hall meetings has worked very well to foster public acceptance for the project.

The publicly available utilisation rates of 50Hertz's grids can be accessed via the following link: www.50hertz.com/lastflussdaten

Other key stakeholders involved

Adjacent communities
Local elected officials
Land owners
Environmental NGOs
Local citizens' initiatives
Power producers
Permitting authorities
Regulators
National/Regional policy makers
Opinion leaders
Representatives of local associations

50Hertz personally invites local multipliers and distinctive stakeholders as part of their relationship building via meetings and invitation letters to participate in the event and

possibly even be an active part of the presentation or the workshops. Moreover, 50Hertz announces the event through ads in local media and the internet to have as many interested members of adjacent communities as possible participating.

Key communications channels used

Town hall meeting

The town hall meeting profile of this toolkit has been extensively inspired by the concepts of 50Hertz. If you want to learn more about good practice approaches for town hall meetings, we encourage you to continue reading in this profile.

Key communications formats used

Infographics

50Hertz makes extensive use of Infographics as part of their presentations in town hall meetings and also on their website. These show, for example, the planned grid lines or the current degree of capacity utilisation of the existing grid. This dynamic, easily comprehensible format helps to significantly increase transparency.

Examples for 50Hertz's publications can be found via the following link:
www.50hertz.com/en/netzausbau.htm

Transferability to other Member States

All

In principle, the early-stage town hall meeting as practiced by 50Hertz is a suitable channel for first engagements of the local public in all European grid projects.

Practice Example

“From Power Stations to PlayStation” by EirGrid

Organisation name	Organisation type
EirGrid	ISO
Primary contact person	Country
TBC	Ireland
Project years	
2012 – Present	
Overall project context	
<p>EirGrid has identified that it is important to raise overall interest in and knowledge of the electricity system as this helps encourage a greater understanding of electricity’s functionality and the role of the transmission system in meeting electricity demand.</p> <p>EirGrid has recognised the value in taking the time to share information and knowledge with school-age students across Ireland and Northern Ireland.</p> <p>The EirGrid school science programme – From Power Station to Playstation® - engages with schools, students and teachers to provide assistance in preparing junior cycle students for science experiments in their curriculum.</p> <p>In 2012, the programme was delivered to almost 3,000 students and 60 teachers in Ireland and Northern Ireland. The programme consists of an interactive show composed of live experiments, animations (Ohm’s Law, Conductors & Insulators, etc.) and demonstrations supported by audience participation.</p> <p>The experiments and activities are delivered by EirGrid staff, and there is a focus on the real life application of the “STEM” subjects relevant to the curriculum. EirGrid intends continuing to develop the programme, with further events planned in 2014.</p>	
Description of relevant activities	
<p>EirGrid has created an interactive science programme for junior cycle (“middle school”) students in Ireland. This programme is shown at many different venues around the country and consists of an exhibition of electricity related experiments and a 45 minute show presented by EirGrid engineers. At any one show, several hundred students from different schools may attend, accompanied by teachers. This initiative is not tied to a single project, but is rather a general educational initiative undertaken by EirGrid. The educational content of the programme also tries to inform the Irish youth about the importance of the activities EirGrid undertakes and the opportunities the transmission system presents for the region, the country and Europe.</p>	
What worked well	

As a travelling show, the project has engaged with students (and indirectly parents, teachers and other stakeholders) in a number of different locations across the country. The fast pace and interactive nature of the show appeals to the students who are learning while having fun. EirGrid has received a lot of positive feedback and recognition of this programme.

Key content provided

Technical details of project

The “Understanding Electricity - From Power Station to PlayStation” initiative provides general technical information related to energy, electricity, electromagnetism, renewable energy, and transmission. This is coordinated with students’ science curriculum, providing a hands-on experience to complement their textbook and classroom learning.

Other key stakeholders involved

Industrial consumers

Intel, one of EirGrid’s largest customers, and one that purchases bulk electricity directly from the transmission grid, has also participated in the initiative, providing venue and additional educational opportunities to the participating students.

Opinion leaders Adjacent communities

Teachers and school administrators can be voices in local communities. By reaching out to these groups and providing a no-cost educational experience to their students, EirGrid has succeeded in providing stakeholders with a contribution which is valuable to all parties involved. Since the initiative covers a significant part of the Irish territory, it is likely that the addressees of the initiative would be part of or be aware of the debate on grid infrastructure. Additionally the enduring nature of the relationship with teachers who partake in the event results in continued sharing of this knowledge with many more children.

Key communication channels used

Public space event

The show is typically presented in a rented or granted venue (typically an amphitheatre or other setting), with the ability to welcome several hundred students at a time. Using such a large venue allows the organisers to reach more students for each production of the show.

Key communication formats used

Exhibition Interactive format

The show is a sort of Exhibition, travelling from one location to the next, and is by its nature an interactive event. Students participate in hands-on experiments to better understand the principles of electricity and to gain a better appreciation for the effort made to ensure a sustainable supply of energy.

Transferability to other Member States

All

In principle, this practice is transferrable to any and all other Member States. It may be particularly useful in locations where there is entrenched scepticism of grid projects and where the project developers need to improve their overall image. As this approach is not linked to any single project, it should be used in addition to other more specific measures.

Practice Example Bird protection measures by MAVIR

Organisation name	Organisation type
Mavir	TSO
Primary contact person	Country
Mónika Hackl	Hungary
Project years	
First nests placed on pylons in 1991, LIFE Program since 2007	
Overall project context	
<p>Dialogues with local stakeholders were especially successful in raising public awareness after the TSO had been willing to negotiate with opposition groups and other affected stakeholders (such as Mayors, academics, NGOs etc.) directly, showing interest in their concerns and needs. Volunteering in public organisations (kindergartens, schools etc.), as well as committed donations to NGOs and local facilities, have been successfully used in the context of villages/rural areas and also cities.</p> <p>Through a special program for the protection of birds, MAVIR managed a turnaround in its public perception – from being regarded as a TSO whose business potentially threatens birds towards being regarded as the TSO which protects birds by giving them a home on their high voltage pylons and deflecting them from the grid lines.</p>	
Description of relevant activities	
<p>One part of the bird project focussed on the integration of artificial nests into high voltage pylons. Several hundred nests have been installed in recent years and a plethora of young birds have been bred in them, with the public able to follow birds in selected nests via MAVIR's homepage and Facebook page. The program worked as good PR for MAVIR as the TSO could establish itself as a well-known bird protector. According to MAVIR, today there are more <i>saker falcons</i> breeding in their artificial nests than in the wild across Hungary.</p> <p>The second part of the bird project focussed deflecting birds from power lines so that they don't fly into the wires and die. A second series of "fire-fly" deflectors is being installed, taking past experiences into account. Several hundred deflectors have been used in MAVIR's recent projects, delivering good results.</p> <p>Directly related to the development of new grid lines, public acceptance has been successfully raised through direct discussions and meetings with opponents of the projects, debates surrounding key concerns and MAVIR's willingness to cooperate and find compromises. Donations to cities and volunteering in the context of more rural areas have worked well as a kind of Compensation measure.</p>	

What worked well

- Establishing a programme that integrates artificial bird's nests into pylons
- Attaching well-developed bird deflectors onto the operating power grids
- Showing commitment to dialogue with opponent groups
- Compensation measures through volunteering in public institutions and donating money to cities and NGOs

Other key stakeholders involved

Environmental NGOs

The whole bird programme has been developed and promoted in cooperation with local NGOs committed to the protection of birds. Together with the NGOs, MAVIR hosts an annual bird conference. Apart from the cooperation with Environmental NGOs through the bird projects, MAVIR has been successful in raising their acceptance through committed volunteering and donations.

Local elected officials

MAVIR organises Closed-door meetings with Local elected officials such as mayors, and invites them to participate in public events to learn about their concerns.

Land owners

Adjacent communities

Local citizens' initiatives

Private consumers

Media

MAVIR uses their bird programme to demonstrate and promote their commitment to the protection of birds in Hungary. Therefore, they invite interested citizens to the locations of their bird's nest programme, host conferences on the protection of birds and holds press conferences dedicated exclusively to the latter. This creates a positively shaped public awareness of MAVIR, which can help in raising the acceptance of grid development projects in general – even before they might be planned. In many countries, the TSO is not broadly known by citizens until they are affected by a power grid or its development, which in most cases is accompanied by rather negative connotations. Through their commitment to the protection of birds, MAVIR managed a shift from being hardly known and having a rather difficult position towards being associated with the protection of birds and developing a more positive reputation.

Key communications channels used

Social media

TSO Website

The nest programme was promoted through an online live stream showing birds breeding in one of MAVIR's artificial nests that was placed on a high voltage pylon. The stream was also included in their Facebook page. The website received 1,500 clicks on the live stream

during breeding time and 600 "likes" on Facebook.

Field visit

MAVIR organised events related to their bird programmes, inviting interested citizens and NGOs to the grid lines where the birds were breeding to show their commitment to the protection of birds and the success of the breeding project.

Transferability to other Member States

All

Possibilities for a one-to-one transfer of MAVIR's practices to other countries are readily available. The general idea of bird protection through deflectors on grid lines and the promotion of a TSO's environmental commitment through artificial nests integrated in pylons also seem to be promising for other countries.

The transferability of donations and volunteering of TSOs to raise acceptance for their project needs to be checked for other countries as national laws related to the use and extent of Compensation measures may vary in strictness. Additionally, this concept can – depending on local practices – be regarded as "green washing" which can have negative effects on public acceptance.

Practice Example Itinerant Exhibition by REE

Organisation name	Organisation type
Red Eléctrica de España (REE)	TSO
Primary contact person	Country
TBD	Spain
Project years	
Since 2010 until today	
Overall project context	
<p>REE has learned from previous projects that in order to enter into a constructive dialogue with affected stakeholders it is crucial to build a common understanding of why grids are needed. Conveying the principles of electric grid operation is particularly necessary for enhancing this common understanding. This helps to raise general awareness of what is at stake when it comes to grid extension projects and reduces the potential for conflict once specific grid lines are determined.</p>	
Description of relevant activities	
<p>The Spanish TSO launched a travelling Exhibition in 2010 in the city of Granada. This itinerant Exhibition, called “A highway behind the wall socket. Electricity from the power station to your home”, is an interactive demonstration explaining electricity production, transport and use; the functionality of electricity systems and the economical, technical and environmental impact of electricity consumption. Since 2010 it has been installed in six Spanish cities and has attracted some 270,000 visitors.</p> <p>The installation is divided into three themed zones:</p> <ul style="list-style-type: none"> • <i>“Electricity, the force of nature tamed”</i>: This part of the exhibit presents the general nature and properties of electricity. It also ties them back to transmission, for example by demonstrating the need for high voltage transmission, explaining alternating current and illustrating Spain’s meshed transmission grid. • <i>“A highway behind the wall socket”</i>: This section presents the process of power supply, the functionality of the grid system, renewables integration and balancing of supply and demand. The section also gives examples of REE’s actions to protect the environment and indigenous species (e.g. bird saving spirals). • <i>“From your side of the wall socket... responsible consumption”</i>: This section presents the effects of electricity consumption on the system and aims to make the user reflect on using electricity efficiently and sustainably. <p>This Exhibition not only invites the visitor to participate, carry out experiments and discover</p>	

electricity and the electricity supply process, but also offers practical tips for efficient energy use. The Exhibition uses a number of visual and interactive elements, such as screens, models, hands-on lab experiments (e.g. visualising an electric arc or a Tesla coil) and interactive displays. The exhibit also features the interactive CONTROLA simulation game, also available on REE's website (<http://www.ree.es/en/educaree/controla-game>), in which players adopt the role of operators of the Electricity Control Centre of the Spanish electricity system (CECOEL) and have to control and maintain electrical supply at levels sufficient to meet various consumers' needs, and in response to various events, such as temperature fluctuations, demand fluctuations, requests for supply from neighbouring countries, etc.

Recently, REE launched an Educational Resources Kit, composed by a "webquest" and two student and teacher books with exercises about electricity system (www.unaautopistadetrasdelenchufe.com).

A detailed English-langue guide to the Exhibition can be found at:

http://www.ree.es/sites/default/files/09_EDUCAREE/Ferias%20y%20exposiciones/guia_UAD_E_merida_ing.pdf

What worked well

Red Eléctrica's Exhibition has already been in five other Spanish cities. Since its launch in 2010, it has been on display in five science museums: the Parque de las Ciencias in Granada, the Casa de las Ciencias in Logroño, the Museo de la Ciencia in Valladolid, Museo Elder de la Ciencia y Tecnología in Las Palmas de Gran Canaria, and the Casa de la Ciencia in Seville; registering over these years a total of 270,000 visitors. Currently, the Exhibition is placed in the Museo Abierto de Mérida. In the coming years the Exhibition will be shown in other cities across the country. The Exhibition attracted a mixed crowd, including students, families and senior citizens. Certain nearby towns have arranged special bus trips for residents to visit the exhibit, and it is sometimes included in certain tourist visits.

The survey results show that after visiting the Exhibition, the rejection of power lines and substations is reduced by 50%. In addition, 84 % of visitors commented that after attending the Exhibition, they realised why power grids are needed.

Practice example details

Key content provided

Technical details of project

Project location

In an extremely didactic way and through an interactive tour, the Exhibition shows the phenomenon and properties of electricity, as well as the electricity supply process, and propose some ideas and recommendations for a rational and efficient use of energy. In this way, the visitor takes centre stage and becomes the protagonist of the electricity process with the ability to choose what, how and when to consume electricity, thus contributing to a greater efficiency and sustainability of the electricity system.

Furthermore, the Exhibition provides information related to generic Technical details of grid

projects, including how transmission works, explanations of the need for high voltage transmission and visuals of grid infrastructure. It also provides maps of existing grid infrastructure as a result of past projects.

Other key stakeholders involved

Experts / academia

In each travelling, REE collaborates with the local government and a science museum in order to show the Exhibition in their city and promote related activities, as for example guided tours, educational programs, technical conferences and several workshops.

Key communications formats used

Exhibition

While this Exhibition is not done in the context of a specific project, it is an interesting example of the way in which this format can be used to educate the public on issues surrounding electricity, the electrical grid and environmental impacts of electricity use. Raising awareness on these subjects can help promote public understanding for the need for grid development.

Transferability to other Member States

All

A static or travelling Exhibition aiming to raise awareness on general issues relating to electricity production and use could be replicated in any MS and could appeal to a wide range of stakeholders.

Practice Example Grid-Development Initiative Schleswig-Holstein by TenneT

Organisation name

TenneT
State Government Schleswig-Holstein
District governments/administrations
Municipalities
Associations of Power producers

Organisation type

TSO
National/Regional policy makers
Local elected officials
Power producers

Primary contact person

TBC

Country

Germany

Project years

2010 – ongoing

Overall project context

Schleswig-Holstein, the most Northern of the German *Länder* or states, is particularly affected by the German *Energiewende*, the energy turnaround that includes the phasing out of nuclear power and the switch to renewables, such as large offshore wind parks in the North Sea off the west coast of the state. Currently, communities onshore are thus particularly affected by large transmission grid projects that are needed to bring offshore wind power to large consumption centres in Western and Southern Germany. TenneT, the regional Transmission system operator (TSO), currently develops several extra-high-voltage grid projects in Schleswig-Holstein, among others the *Westküstenleitung*, a 380kV overhead line (alternating current) along 150km between Brunsbüttel (Hamburg) and Niebüll with four including transformation substations. The Initiative (i.e. the stakeholder members TenneT, the State Government etc.) chose the *Westküstenleitung* as a pilot project.

TenneT, as well as the State Government of Schleswig-Holstein and district/municipal administrations, saw the need to launch a joint initiative for stakeholder dialogue and citizen participation prior to the beginning of official consultation processes during the Permitting stage.

Project stage of engagement

Project preparation
Spatial planning

The Initiative launched the stakeholder dialogue at an early stage in the project cycle (Project preparation stage) before official consultations in the formal permitting process began. The State Government decided to forgo a formal Spatial planning process and consider all Spatial planning aspects of the project within the frame of the permitting procedure. It was agreed among the participating stakeholders to use the additional time gained by the abstention from an official Spatial planning process for the intensified stakeholder dialogue. Moreover, TenneT agreed to submit its documentation of the

stakeholder dialogue as part of the permitting application in order to make the process and decision making behind the concept submitted (especially in terms of routing) transparent to the permitting authority and all affected stakeholders.

Description of relevant activities

TenneT (TSO), the State Government of Schleswig-Holstein (regional policy makers) and several district/municipal governments/administrations jointly launched the “Grid-Development Initiative Schleswig-Holstein”. This initiative aims at raising public acceptance through stakeholder dialogue and participation in major grid projects in the State at an early Stage in the project cycle. Thereby, the Initiative hoped to face fewer objections in official consultation procedures in order to accelerate the overall planning and permitting process. A new grid development, the Westküstenleitung, was chosen as a pilot project.

As principle guidelines for the stakeholder dialogues, the members of the Initiative concluded two formal agreements: (1) an “Acceleration Agreement” that outlines the contribution of early stakeholder integration to an overall quicker project implementation and (2) a “Realisation Agreement” that stipulates the detailed stakeholder dialogue activities as well as the commitments of all parties. Both documents were published via the State Government’s website. The Initiative then focused on three phases of stakeholder dialogue in the Project preparation stage, prior to the official permitting process:

(1) The first phase included so-called regional conferences in the four districts/counties affected. It focused on dialogue about the need for the project as well as high-level planning concepts, e.g. broad corridors.

(2) Subsequently, the second phase focused on information events (Town hall meetings) for mayors and citizens at the municipal level. The second phase included stakeholder dialogues which provided information on the need for the project, the planning and permitting process, route alternatives, search areas for transformation substations – and above all: feedback opportunities for citizens in the affected municipalities.

(3) From October 2013 onwards, before submitting the permitting application for all sections of the project, TenneT– during a third phase – is continuing the dialogue with the affected communities. Activities take place throughout the preferred corridor, both with the municipalities at large and with individual Land owners via direct meetings and public information events like Town hall meetings. TenneT’s goal is also to base the fine-tuning (e.g. regarding pylon positions on private property) on an intensive, even one-on-one dialogue with local stakeholders.

The intended result of the three-phase stakeholder dialogue is to jointly prepare permitting application documents and especially to submit a corridor/route for permitting that is acceptable to a maximum number of local and regional stakeholders.

What worked well

- Process steering and moderation by the State Government as an independent authority (during the first and second phase of the stakeholder dialogue), recognised as “impartial” by all participating stakeholder groups.
- Close involvement of municipal and district governments into the entire process.
- All stakeholder groups in the process acknowledged their role, agreed to specific

commitments and took responsibility for specific aspects and steps in the grid planning process: policy makers took responsibility for the *Energiewende*, Permitting authorities took responsibility for the permitting process (e.g. duration, documentation, solutions to local conflicts in planning), TSOs took responsibility for project planning, disseminating information on the current state of planning and discussing planning alternatives with stakeholders.

- A binding timetable for all stakeholder involvement activities (e.g. milestones) was agreed and adhered to by all stakeholders.
- TenneT focused on voluntary, early participation before drafting the Spatial planning and permitting applications and before launching legally required consultation activities.

Other key stakeholders involved

Environmental NGOs

TenneT cooperated intensively with the Environmental NGO Deutsche Umwelthilfe e.V. (DUH) during the first and second phase of the stakeholder dialogue. The DUH participated in the information events and gave input both on the dialogue itself as well as on environmental concerns.

Regional policy makers

Local elected officials

During the first phase of the stakeholder dialogue, information events and hearings took place in the four affected district/county parliaments. During these hearings, TenneT gave preliminary information on the need for the project (i.e. especially the connection and transmission of offshore wind power) as well as the general project concept, including choice of technology (AC overhead line) and the broad corridor.

Adjacent communities

During the second phase of the stakeholder dialogue, information events for the general public took place in the affected districts/counties that were especially intended to initiate a dialogue with mayors and ordinary citizens. During these events, citizens were able to give feedback to the route alternatives considered.

Land owners

During the second phase of the stakeholder dialogue, TenneT contacted Land owners within the preferred corridor directly to discuss the positioning of pylons on their property and thereby jointly optimise the fine-tuning of the route.

Key communications channels used

Town hall meetings

Public information events

In all phases of the early stakeholder dialogue, the members of the Initiative chose public information events in order to inform and collect feedback from larger local audiences.

Direct meetings

During all phases of the early stakeholder dialogue, direct meetings between TenneT and other stakeholders took place. On the one hand, TenneT called such meetings with mayors to jointly identify locations for transformation substations. On the other hand, meetings took place with Land owners to discuss the micro-routing of the overhead line, especially regarding the positions of pylons on private property.

Project information office

During the third phase of the stakeholder dialogue, TenneT set up a Project information office in Husum, the main city within one planning section, as a go-to location for affected local stakeholders. TenneT promoted the office via its website as a permanent opportunity for obtaining information on the current status of planning and for giving feedback thereto.

Key communications formats used

Presentation

During the information events of the second phase of the stakeholder dialogue, TenneT presented the route alternatives within the broad corridor to the communities affected. Moreover, the Presentation detailed the search areas for transformation substations.

Compensation/mitigation measures

In the realm of the Westküstenleitung, TenneT launched another prototype for stakeholder involvement in grid projects – the *Bürgeranleihe - Westküstenleitung*, a financial stake in the project in the form of a corporate bond for citizens emitted by TenneT. The bond was exclusively offered to citizens in two adjacent districts/counties affected by the project. In the end, only ca. 140 households actually bought the bonds and TenneT acquired less than EUR 1 million in debt finance instead of an envisaged EUR 40 million. In subsequent surveys and workshops that were conducted to identify the primary lessons-learned, a majority of stakeholders nevertheless stressed the arguments in favour of the general idea of financial participation for Adjacent communities, especially the strong potential to raise local public acceptance. Stakeholders pointed to the poor financial structuring of the bond as well as the negative – and often inaccurate – media coverage as the predominant reasons for the overall “flop” of the bond in this particular project.

Transferability to other Member States

All

Almost all positive takeaways from the pilot project of the Grid-Development Initiative Schleswig-Holstein can be transferred to other Member States of the European Union. This holds true both for the pre-permitting stakeholder dialogue at large, as well as individual aspects of stakeholder involvement, such as the concept of exclusive financial participation for Adjacent communities.

7. Messages

This section outlines a comprehensive framework for project developers (mainly TSOs) to organise and structure the messages and stories they communicate in the context of a specific grid project. It goes beyond the general multi-stakeholder usability of the toolkit, because messages *per se* imply a direction from a sender to a receiver, e.g. messages from project developers (mainly TSOs) to other stakeholders in order to raise public acceptance.

The storyline presented here challenges TSOs and other promoters of grid projects to benchmark their messages and stories in terms of how they could be structured, organised and detailed. Beyond a structural guideline, we intend for this section to serve as a source of inspiration for TSOs to consider alternative, innovative and particularly “affective” approaches to messaging and storytelling in the frame of their communication campaigns – for instance by emphasizing a genuinely European case for grid development.

The outline of this section is structured as follows: (a) First, we present a common European message to make the overall case for grid development as a joint European effort across the continent. This subsection aims to raise both general awareness of the necessities for grids and to argue in favour of specific projects. (b) In the following, we give specific ideas of how the need for and the benefits stemming from any specific power project could be convincingly communicated. (c) We outline a framework for communicating the choice of technology in a given grid project against the backdrop of the concerns that are typically voiced by local stakeholders. (d) Finally, we turn to the communication of specific choices for routing a grid project. This last subsection marks a transition to communication and stakeholder integration activities on the ground as a given project develops – i.e. the elements of the communication toolkit itself.

In summary, this section thus outlines a storyline and framework for messaging in the context of a grid project – with specific elements to make a strong European case for power grid development:

a) The European case for grid development: A collective European effort to upgrade our power grids

Plain and simple, the overarching European case for grids is that our European power transmission network

ENABLES
RELIABLE,
SUSTAINABLE and
AFFORDABLE
POWER SUPPLY.

All over Europe people are engaging in a collective effort to upgrade, expand and further develop the European power grid in order to meet the energy challenges of the 21st century: securing reliable, sustainable and affordable power supplies for the citizens of Europe.

The common message about power grid development that is equally applicable across the continent is hence: “Our European Grid – Enabling reliable, sustainable and affordable power supply”.

Whatever the main driving forces may be and whatever ultimately determines the need for an individual power grid project, one general statement holds true across the continent:

Europe is undertaking immense efforts to enhance our electricity transmission network in order to prepare our energy system for the coming decades. Our power grid is the enabling link in the energy system that is able to guarantee that tomorrow's electricity that we produce and consume is equally reliable, sustainable and affordable – and that is the European case for developing our power grids.

To sustain this continental effort in developing our power grid, European institutions have become more and more involved in the process – mainly to improve cross-border coordination, support funding and give political backing to key projects. For instance, each Ten-Year Network Development Plan (TYNDP) of the European Network of Transmission system operators for Electricity (ENTSO-E) identifies specific needs for investment in the refurbishment or new construction of extra high-voltage power lines – usually on hundreds of grid projects across the continent.

The TEN-E Guidelines (www.eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0347&from=EN) provide a strategic framework for the long-term energy infrastructure vision of the European Union. Following the TEN-E Regulation, the European Commission has adopted a list of key energy infrastructure projects, so called "Projects of Common Interest" (PCI). Every two years the list of PCIs will be updated.

PCIs particularly benefit from:

- Accelerated planning and permit granting procedures,
- A single national competent authority, which will act as a one-stop-shop for permit granting procedures,
- Lower administrative costs for the project promoters and authorities due to faster and more efficient environmental assessment procedures,
- Increased transparency, enhanced visibility and attractiveness, improved public participation, and
- The possibility to receive financial support under the Connecting Europe Facility.

Thus, European stakeholders intensify their efforts to master the energy challenges of today and the future by upgrading our power grid – in order to enable reliable, sustainable, and affordable power supply. The three components of this common European case for grids “Our European Grid – Enabling **reliable**, **sustainable** and **affordable** power supply” materialise as follows:

RELIABLE: The European Case for Grids – Enabling power supply across borders

The transmission network across Europe requires constant maintenance and investment to guarantee the stability of the system and ensure maximum **security of supply** – not only in terms of power generation, but also in terms of power transmission. The ageing of existing infrastructure makes urgent upgrades necessary and thus drives in many cases the transmission policies of countries across Europe.

Moreover, a well-integrated and well-interconnected European grid helps to secure supply for European consumers in many ways:

- **Maintaining overall system stability across borders:** In Europe, cross-border interconnections are a particularly important contributor to strengthening system stability and guaranteeing maximum security of supply. The larger the interconnected area that is covered by an interlinked power transmission network, the more easily the network can absorb unexpected outages and a growing share of remote, variable power production from renewable sources. New transmission lines in this context may be fundamentally necessary to eliminate energy bottlenecks in the overall network. Cross-border interconnections also allow Europe to make the most of its natural renewable resources, such as wind power in the North Sea, solar energy in Southern Europe and biomass in Eastern Europe. Finally, further development of cross-border interconnectors can significantly reduce power congestion at borders – currently an expensive feature of poorly connected markets.
- **Aligning supply and demand across Europe:** In many countries in Central Europe, many new grid development projects focus on interconnection with neighbouring countries in order to bring power supply from places of abundance to areas of scarcity. A good example is Hungary where grid links with Slovenia, Slovakia and Serbia are implemented to guarantee security of supply and increase electricity trade across borders. More and better interconnections between Member States are equally important in other European regions that remain less intensively integrated with the rest of the continent. Island Member States (e.g. Malta and Cyprus), as well as countries situated at the periphery of the European continent, like Portugal or Ireland, typically only have a limited number of potential power sources which can, for example, result in high energy costs for consumers due to the lack of a fully functioning integrated energy market. But at the same time, these Member States often have a significant share of renewables in their energy production portfolio (e.g. solar power in Portugal or wind power in Ireland), which enables them to export energy at peak times. Europe as a whole strongly benefits from improved physical interconnection of electricity markets: on the one hand, countries like Portugal and Ireland can export their renewable power to other EU Member States at peak times and on the other hand, they can import power when renewable energy production is low.
- **Connecting remote areas:** Grid developers across various regions from Lisbon to Helsinki and from Athens to Dublin implement projects to bring high-voltage power to remote areas that have never before been fully covered by the transmission network. European grid integration with cross-border transmission lines can do a great deal to enhance the power supply of remote areas – for example in South-Eastern European countries. The intra-European connection of electricity markets through physical transmission links can help to end "energy isolation" in countries such as Estonia, Latvia and Lithuania or the Iberian Peninsula as a whole. With the help of European market integration and cross-border transmission lines, these countries can overcome the self-sufficiency paradigm of power supply for their citizens and focus on reaping the benefits of a truly inter-connected European Union. Therefore, the European Council has always set clear targets for the interconnection of electricity markets, e.g. during its Barcelona Council more than 10 years ago when it stated: "[The Council] agrees the target for Member States of a level of electricity interconnections equivalent to at least 10% of their installed production capacity.

As all other Member States, the Baltic States have the obligation under EU law to fully implement the rules relating to electricity market opening and integration; these rules

were to be implemented by March 2011. That said, Baltic Member States are still isolated in terms of electricity interconnections. For historic reasons, these states remain connected to the Russian system, forming the so-called BRELL ring (Belarus-Russia-Estonia-Latvia-Lithuania) and are highly dependent on electricity imports mostly from Russia. Therefore the Commission has promoted and supported the Baltic Energy Market Interconnection Plan to bring an end to this isolation, setting out a roadmap by which full market liberalization should be achieved in the period 2013-2015.

The low level of interconnections between the Iberian Peninsula and France has been identified as a major obstacle to creating a regional market in the South Western region, therefore the necessary electricity infrastructure has to be developed. It is urgent that the electricity interconnections are developed to reach the target of 10% of interconnection (6% will be reached by mid-2015 when the interconnection Baixas-Bescano will enter into service). To date there is only one interconnection project labelled as a Project of Common Interest (PCI) between France and Spain: the under-sea interconnection in the Bay of Biscay planned for 2020, which will bring the interconnection target to 8%.

SUSTAINABLE: The European Case for Grids – Enabling more renewable power production

In many regions across the continent, power production is increasingly shifting from conventional, non-renewable sources like fossil fuels and nuclear power towards electricity generation from **renewable energy** sources. The integration of large, often remote and decentralised power producers from renewable energy sources such as wind power requires the expansion of grids to bring the newly developed green electricity to the consumer.

Across the European continent, more and more renewable energy sources are integrated into our energy mix. Unlike conventional power generation, many of these new sources of power supply are quite remote from centres of power demand – either because they are concentrated in large remote installations like wind parks or because of the rapidly growing smaller-scale, decentralised production (e.g. from biomass CHP or solar panels on private homes and business buildings). The collective European effort to bring our continent's energy mix into the age of renewable energy requires power transmission lines to connect supply and demand.

In this context, the collective undertaking to upgrade the European power transmission grids will then help Europe to meet its ambitious goals in **combating climate change** through reduced emissions of greenhouse gases (e.g. in power production).

European climate and energy policy plays an increasingly important role at the national level as Member States have repeatedly committed themselves as a community to combat climate change by aggressively developing power generation from renewable energy sources and cutting greenhouse gas emissions. Consequently, any decisions of energy policy – including the expansion and upgrade of our high voltage power transmission grids – have to be viewed nowadays in a European context and not just against the backdrop of national or even regional politics.

For more information on the case for grid development in the context of renewables, please see also part (iii) of subsection b.

AFFORDABLE: The European Case for Grids – Enabling downward pressure on consumer and wholesale prices

For the past ten years the European Union has, step by step, opened up the electricity market in Europe. Member States are committed to fully integrate their national energy markets to give consumers and businesses more and better products and services, more competition, and more secure supplies.

Building an integrated, well-connected European market is one of the most critical next steps. While it is essential to maintain a strong industrial base through competitive electricity coverage, Europe must also secure a **reliable electricity supply at affordable prices** for all consumers.

The physical interconnection of national power markets via transmission infrastructure enhances the development of a fully-fledged European energy market. With the help of more transmission lines enabling the trading of electricity across borders, more and more consumers will be able to choose their preferred utility from a range of companies competing for their demand. Ultimately, **enhanced competition among European power providers** – as enabled by better interconnectivity of the grid – will specifically result in **lower electricity prices** for consumers across the continent.

The completion of the internal energy market requires a denser network of power transmission lines across Member States. The past decade has shown that the step-by-step integration of the European electricity market leads to significant price convergence, i.e. the gradual and natural harmonisation of wholesale electricity prices in different member states. Moreover, full European market integration requires deeper changes than mere market coupling – for example it would be necessary to establish a truly competitive system of power generation to enable the location of renewable generation capacity across Europe where it is most effective. The recent study "Benefits of an Integrated European Energy Market" (http://ec.europa.eu/energy/infrastructure/studies/doc/20130902_energy_integration_benefits.pdf), commissioned by DG Energy, gives an excellent overview of the significant economic benefits from European market integration in electricity. It concludes that "full integration will require large investments in transmission capacity, albeit not much larger than is already desirable without it. But this is much cheaper than the alternative of further investment in generation capacity."

b) Raising specific awareness for the need of grid projects – WHY do we need power grid development and why do we need specific grid links?

i) WHY GRIDS? – "Transmission" as the connection of power demand and power supply

What's behind the plug? – Tracing the world behind the plug

No matter where in Europe you live: Have you ever asked yourself how the power you consume in your home and office reaches the socket into which you plug your charger? Have you questioned what's behind the power outlet in your wall? Have you ever asked yourself how power always comes to you and why you never have to go to the power source?

Readily available power supply has become natural for almost all of us – we just turn on a switch and the light bulb shines, the TV turns on or the computer begins to boot, allowing us to start our day in the office. In any of these cases, we usually do not lose too much thought on how it is possible that electricity is available – virtually whenever and wherever we possibly want.

Transmission is fundamental

It requires a little bit of curiosity and investigative skills to trace the power we consume back to its source, wherever it may come from – from a local gas-fired thermal power plant operated in the local municipality or from a wind turbine offshore far out in the sea. Even more important is the question of how our power manages to bridge the distance between sources and users, between power generation and power consumption. Answering this question requires us to re-connect with the fundamental concept of “transmission” – to literally “make the connection” with the idea that power in almost all cases has to be transported from supply to demand, thereby bridging a spatial gap that can sometimes be hundreds of kilometres wide.

Mapping the journey

To reach our power outlet, electricity takes a long and sometimes surprising journey through the power grid. It commences with the electricity’s journey through the high-voltage transmission grid that consists of power stations, high-voltage transmission lines across long distances, and substations linking the transmission grid with the lower-voltage network. The transmission grid supplies power to transformers for large parts of a country’s population and moreover directly brings high-voltage power to large, energy-intensive Industrial consumers, like steel mills or aluminium plants. At the substations of the transmission grids, transformers reduce the voltage to a lower level for eventual distribution to commercial and residential users – like us in our homes.

The high-voltage transmission lines are the arteries of the power grid, the main suppliers of our daily power consumption that achieve the bridging of larger spatial distances between power producers and power consumers. These are often – and increasingly so – located far from one another. Re-connecting with the idea of “transmission” requires us to recall the significance of the high-voltage power grid that is the most fundamental element – the central bloodstream of our energy transportation infrastructure. Different from a human body, however, where the central blood system stays almost entirely the same throughout life as the inner organs remain where they are, our energy system needs to be upgraded and improved. This is especially the case when energy consumption or production is shifting from one place to another – or new countries are getting more connected to the system. Both developments are currently under way: By transitioning Europe’s energy systems towards an age of “renewables”, energy production is increasingly shifting from central power plants towards many small plants using renewable sources such as wind, water or solar energy wherever it is efficient to do so. Also the interconnection of countries is still an ongoing endeavour that aims to complete the European energy market, thus making it more efficient and ensuring overall security of power supply.

The importance of transmission and thus also its maintenance and further development hence calls for our attention and awareness. While electricity availability has long been taken for granted, renewed efforts are needed to pursue the success story of EU power grids.

ii) WHY GRIDS? – Paving the Way for the Integration of Renewables

At the EU level, there is a deep political consensus to shift power production into the age of renewables. The EU is committed to **raise the share of renewable energy** sources in final energy consumption to over 20% by the year 2020. By that year, some Member States have even pledged to achieve higher shares, such as Sweden with 49% of renewables in total final energy consumption. Germany aims to achieve 35% renewables in final electricity consumption.

The integrated energy policy framework for the period up to 2030 that was presented by the European Commission in January 2014 affirms that renewables will play a key role in the transition towards a sustainable energy system. The Commission proposes an objective of increasing the share of renewable energy to at least 27% of the EU's final energy consumption by 2030.

For renewables to deliver on the enormous potential they have to reshape our energy future and in order to tap the vast renewable energy resources across Europe, the **power production** from wind, solar, tidal, geothermal, and biomass has to be integrated into the power system as a whole. Most importantly, it **needs to be fully integrated into the grid**, which often requires updates of existing lines or the expansion of the grid. For Germany, for example, a study conducted by the Deutsche Energy Agentur determined that up to 24,500 kilometres of high voltage grids need to be replaced or newly developed to reach the target national share of renewable energy production. This is equivalent to 19% of the existing electricity grid. The study can be found at

www.dena.de/fileadmin/user_upload/Projekte/Energiesysteme/Dokumente/denaVNS_Abschlussbericht.pdf.

The facts presented constitute a powerful reason to expand and develop our high and extra-high-voltage transmission grid. Grid developers thereby act as service providers and enablers of this European consensus-project and help our continent to reach its ambitious climate goals. Another study by the consulting firm eclareon, which is an expert in the renewable energy sector, strongly underlines the need for grid development to reach the renewable energy targets in Europe

(www.eclareon.eu/sites/default/files/res_integration_final_report.pdf). In many cases, grid development is already the pacemaker of Europe's shift towards a renewable future.

Reducing greenhouse gas emissions

With the help of the power production from renewables, Europe is reducing **greenhouse gas emissions** to 80-95% below 1990 levels by 2050. Power production from renewables is the primary path to reaching this target, as Europe cannot decarbonise without renewables.

Increasing independence from fossil fuel imports

Yet, while climate change policy has been a main driver of renewable energy deployment, this development also offers people more **independence from fossil fuel imports** – for example, with regards to natural gas that is today delivered in large parts from outside of the European Union. The more interconnected the European transmission grid becomes, the more it can **make full use of its indigenous renewables resources**.

Creating jobs

The green industry of renewable energy production also creates **jobs along the entire value chain** of the industry, starting from research and development of advanced photovoltaic systems and modern wind turbines to the installation of wind parks or the construction of biomass CHP plants.

Challenges for integrating renewables

The integration of renewables into the transmission grid and the power system as a whole poses two big challenges: first, the places that generate the most **renewable power** are often **far away from the places with the highest electricity use**. This sometimes requires difficult engineering in difficult conditions (e.g. offshore wind farms). Moreover, these connections may need to cover quite some distance.

Additionally, many smaller-scale installations of electricity production from renewable energy sources – e.g. solar PV roof top systems – are located closer to consumption points. The same can be said for small biomass CHP installations. However, such on-site renewables make the electricity system **highly decentralised** and mark a clear shift from centralised, conventional power production (e.g. in coal or nuclear plants). The decentralisation of power production and this systematic shift requires robust, well-linked power transmission systems to connect supply and demand and stabilise the overall network.

In addition, we cannot control when the wind blows or how much the sun shines – **renewable energy production is variable** over time. This means that renewables have to be linked via transmission lines with other conventional Power producers and become part of a highly interconnected grid to ensure that, when the wind does not blow in one area or the sun does not shine, another conventional energy sources can fill the gap. Renewables thus require a high degree of connectivity in the transmission grid – not only nationally but across inner-European borders.

Telling the story of the integration of renewables

At the level of each specific grid project, three considerations and related messages in this context are particularly important:

- **Backing up the relationship of grids and renewables with evidence:** Specific projects for developing renewable energy production can often be directly linked to specific bottlenecks in the transmission network that arise when energy supply is disconnected from energy demand. This can be shown, for example, for large offshore or onshore wind energy projects that have to be connected at once. In the context of these projects, facts and figures about the capacity loads in the grid and power production capacity of the renewable projects are usually readily available for project developers to illustrate why integrating a higher share of renewable energy sources in their grid requires grid extension. The European public can rightfully demand transparency and access to straightforward data that backs up the relationship of grids and renewables with evidence. A good example of such transparency is provided by the German TSO 50Hertz that publishes real-time information on the loads in its grid via the company's website: <http://www.50hertz.com/netzkarte/?wcmLocale=en>.

When arguing for grid development in the context of ever-growing power production from renewable energy sources, it is very important to make the case for an individual

grid link in a project-specific and ideally regionally focused manner. For policy makers, regulators or TSOs it is hardly enough to point out that a grid project is needed in order to implement the country's overall energy policy, which aims for a gradual shift towards renewable sources in the energy mix. Instead, precise regional imbalances between specific renewables on the supply side and regional consumption on the demand side should be highlighted in order to justify the need for greater transmission capacities. The Ten-Year Network Development Plan (TYNDP) compiled by ENTSO-E has found that 80% of the 100 identified bottlenecks in Europe are directly or indirectly related to the integration of renewable energy sources (www.entsoe.eu/major-projects/ten-year-network-development-plan/tyndp-2012/). Often, these bottlenecks are intrinsic to certain regions where the newly-installed renewable energy sources produce much more energy than is consumed in the region. For example, this is the case for several grid development projects in Germany, e.g. the upgrade of the 220kV line between Bertikow and Pasewalk in North-Eastern Germany where a lot of renewables have been recently installed (<http://www.50hertz.com/en/3641.htm?languagevariantid=ENG&lang=en&switchLanguage=yes>).

- **Considering the wider context of grid costs:** Clearly, it is imperative to be honest about the costs that we bear due to the development of our power grids in order to increasingly integrate power production from renewables. However, the opportunity costs incurred by the failure to make our grids ready for renewables are in many cases substantially higher than the investments in necessary grids. What might sound provocative at first, can nevertheless be backed up with evidence. One European TSO very clearly showed to opponents of further grid developments that the European consumers as a whole pay EUR 150-200 m every year in foregone subsidies for putting wind farms on hold because the grid simply can't take their power when the wind blows at large! In Germany, a parliamentary interpellation found that compensatory damages for these situations in Germany have risen from EUR 6 m in 2009 to EUR 33 m in 2012, while the occasions where a re-dispatch was necessary have increased fivefold and the costs for these measures have risen from EUR 48 m in 2010 to 194 m in 2012 (<http://dip21.bundestag.de/dip21/btd/18/007/1800798.pdf>; see also http://www.bundesnetzagentur.de/SharedDocs/Downloads/EN/BNetzA/PressSection/ReportsPublications/2013/MonitoringReport2013.pdf?__blob=publicationFile&v=10).
- **Saying “yes” to renewables and “no” to discrimination:** Sometimes developers of transmission projects are accused that they are really developing grids for dirty fossil power production, i.e. coal and lignite, and not for clean renewables. To a limited extent, this is true insofar as new grid lines do not discriminate between the sources of the electrical power they transmit. However, in many specific cases grid development is indeed driven by the need to absorb peak load power production from renewables, e.g. when the sun shines and the wind blows at the same time. Naturally, energy stemming from traditional sources will need to be transmitted whenever insufficient energy is produced by renewables in order to satisfy energy demand. Consequently, project developers in many instances can and should credibly demonstrate that the real need for grid development comes from increased power production by renewable energy sources – and thereby make their case more convincing.

The link between the need for more power grid development and the expansion of power generation from renewable energy sources is an important message that needs to be well-communicated and well explained in many countries across Europe – and at the European

level against the backdrop of Europe's overall goals of energy policy. Several stakeholders should join the TSOs as the implementers of grid projects in communicating this link: First, European, national and regional policy makers should stress their ownership and authorship of energy policy and emphasize that grid development – and any specific project that serves this purpose – directly works to implement the renewables integration policies that they have been elected to design. Second, NGOs should join TSOs in stressing the need for power grid development in order to connect renewables and thus ultimately help achieve climate goals. The Renewables Grid Initiative (RGI) is a good practice example for how TSOs and NGOs can jointly pick up this point. At the national and regional level, several instances for TSO-NGO cooperation regarding this specific needs-based message are well established.

iii) WHY GRIDS? – Strengthening System Stability and Maintaining Security of Supply

A reliable electricity supply is as important as an affordable and clean supply of power for all citizens. The **permanent availability of electricity** is an asset that is frequently taken for granted, but may face – under certain circumstances – a precarious future. Even if the ultimate threat of a blackout may not lie around the corner in Europe, (re-)investment in system security is always mandated and stakeholders should never gamble with the risk of power outages.

Renewables require greater capacity in the grid in order to maintain system stability and sufficient **absorption capabilities during peak times as well as during times of low energy production from renewables**. Moreover, they pose a challenge to existing grids by requiring a more far-reaching interconnected and thus more variable network. Notwithstanding the power mix, the electricity grid needs regular investment in its elements so that it stays in good shape and can fulfil its primary function of a network that brings together different power sources and consumers in every corner of Europe. The development of our grid, through connecting our renewables, interconnecting markets and reinforcing our infrastructure, empowers us to meet the demand for electricity now and in the future.

Major shifts at either end of the transmission link – i.e. power production or power consumption – inevitably cause necessary changes in the link between the two – especially the (extra-)high-voltage transmission grid. Some of these changes thus stem from the expansion of power production from renewable energy sources, because the **spatial distance between power supply and demand has to be bridged**.

Telling the story of system stability and security of supply

At the level of each specific grid project, four considerations and related messages in this context are particularly important:

- **Mitigating imbalances between supply and demand:** In this context, it is important that the expansion of transmission links can balance the power system between centres of renewable power production and centres of large-scale power consumption. Unlike the days when all power was produced in plants fuelled by fossil, non-renewable resources, power is no longer consumed where it is produced. Imbalances can hence occur between too much power production in one region, and insufficient power availability in another. In order to keep supply and demand well-connected in the future, further grid development – often across large distances – is indispensable.

- **Upgrading our ageing grids:** Another aspect of system stability and security of supply is the ageing of many grid sections across Europe. Europe's ageing grid is, overall, becoming less adapted to the current energy mix, which contains a much higher share of renewables than in the past. The old infrastructure itself puts secure power supplies at risk, since risks of line failure are higher and since transmission losses in the electricity grid increase. Our European transmission grid requires constant refurbishments to maintain the stability and guarantee the security of supply that we enjoy today. In Germany, for example, the entire high voltage grid system has an average age of over 30 years.
- **Withstanding breakdowns of individual links:** Guaranteeing true security of supply requires a power transmission system that is able to supply power reliably under all conditions. Moreover, it needs to be able to withstand the loss of a linkage in the network, e.g. in case an overhead power line collapses during a severe storm. The so-called "N-1 criterion" expresses the ability of the transmission system to lose a linkage without causing a failure in the supply of energy to the consumers. In some regions across Europe, like the area around Gerona in Catalonia, Spain, people have indeed experienced blackouts and power outages in recent years due to the apparent vulnerability of the grid to system shocks. In the Europe of the 21st century, power outages should no longer be a realistic threat – and our power grids should be well equipped enough to avoid any interruptions of permanent power supply.
- **And it doesn't always have to be a blackout:** The constant development of our transmission grid is indispensable for guaranteeing maximum security of power supply. However, system stability means more than contemplating the ultimate worst-case scenarios of blackouts. Instead, a more nuanced and toned-down way of illustrating a power network under stress is appropriate. Metaphorically speaking, imagine a glass of water at the edge of a table – placed in a position so that a bit of the glass's bottom protrudes over the edge of the table. Almost any observer immediately feels inclined to move the glass back to middle of the table – and not that much physical strength is needed to keep the glass from falling off the table. The system dynamics of an overused power transmission grid are quite comparable – actual blackout might not be around the corner and the transmission might continue for a long time without disruptions, but unexpected events, for example stemming from extreme weather conditions, might easily have strong detrimental impact on the security of supply.

Policy makers, industrial power consumers and especially regulatory authorities should join and support the TSO in communicating the message about the need for grid development and specific grid projects against the backdrop of securing the stability of the transmission network and guaranteeing power supply at all times. Regulators in particular represent a "neutral" standpoint as a non-elected part of the executive branch of government that should be widely trusted. Given their role as a general oversight body, regulators should both explain and justify the need for a project in a particular context.

iv) WHY GRIDS? – Fostering economic development through industrial growth

In the European grid story of the 21st century, the need for grid development to maintain maximum security of supply is closely linked to the significant economic benefits that come along with a reliable and dense high-voltage transmission network. Economic development is fostered by a top-notch high-voltage transmission system in several ways, for example by guaranteeing reliable and affordable power supply to energy-intensive businesses such as

the production of steel, cars and chemical products. Ultimately, an area supplied with high-voltage power is a more attractive target region for investment in industrial production where electricity availability and affordability are key to the business case.

Telling the story of economic development through industrial growth

At the level of each specific grid project, three considerations and related messages in this context are particularly important:

- **Creating jobs from project implementation:** First, the project brings some jobs to the communities that are affected by the grid development project during the construction of the overhead power line or the implementation of the underground cable. Local construction companies may to some extent benefit from contracts to carry out basic construction works (like excavation).
- **Creating jobs in upstream power production:** Second, in several contexts of specific grid projects across Europe, the refurbishment of old power lines or the construction of new connections helps guarantee the connection of power plants – whether based on conventional or renewable energy sources. These power plants and their supply chains employ a large amount of people whose jobs can be secured with the help of improved grid development.
- **Creating jobs in power consuming businesses downstream:** Third, the transmission grid is one major infrastructure element that makes up the very core of our European economy, most importantly its industrial base. It is essential for all industries to have a secure and reliable electricity supply to carry out their business effectively. In the context of any power grid project across Europe, it is usually possible to pinpoint specific businesses and the jobs they retain that are positively affected by the project. In addition, Europe's ability to attract investment strongly depends on whether a reliable electricity grid is in place. Attracting new industries will also in turn lead to new jobs being created.

Local businesses and their associations, especially those representing energy-intensive industries, should be important co-messengers of TSOs in supporting the message of economic development through and with grid transmission. In the end, these businesses guarantee regional employment, and secure high-voltage power connection is an important factor in determining the attractiveness of a business environment and investment location.

Shift from a technical language to a language of economic growth: TSOs and other project proponents (especially policy makers at various levels) should wherever possible communicate direct economic benefits to communities both along the planned line and particularly towards its receiving end. Socio-economic benefits (tangible, understandable) should accompany technological necessities (often complicated, technical, and less intuitive) in any developer's messaging. The message-component of direct economic benefits should especially focus on job creation and securing local employment, but also highlight opportunities for investment, growth potential for small and medium enterprises, local economic development etc. TSOs should explore opportunities to contextualise specific power projects with specific indicators of economic development. They could cooperate with economics institutes to determine how concrete socio-economic cases for grid projects (e.g. how many jobs a power line secures and how many it creates). Moreover, they could build specific socio-economic scenarios of local economic development with and without the new

project to point out opportunity costs for local stakeholders – which deserve to hear a specific case for local economic development. A study conducted in 2013 by the Institute of Energy Economics at the University of Cologne (EWI) calculated the costs of power interruptions in Germany. They found that a systemic outage costs an average amount of EUR 430 m per hour – albeit with significant sectoral and regional differences (http://www.ewi.uni-koeln.de/fileadmin/user_upload/Publikationen/Working_Paper/EWI_WP_13-07_Costs_of_Power_Interruptions_in_Germany.pdf).

Previous studies focussed on the so called “Value of Lost Load (VoLL)”, which describes the opportunity costs of 1 kWh that could not reach the consumer and yet could not be used for production etc. For Austria the calculated VoLL averaged EUR 8.60 per kWh (www.carinthia.ihs.ac.at/studien/Discussion%20paper_Kosten%20Stromausfall.pdf), for Spain EUR 6.35 per kWh (www.eforenergy.org/docpublicaciones/documentos-de-trabajo/WPFA05-2012.pdf) and for the Netherlands EUR 8.56 per kWh (www.sciencedirect.com/science/article/pii/S0140988306000740). Using such data could be used to calculate the economic opportunity costs caused by a power cut in a specific region.

c) What kind of grids do we develop?

The need to upgrade and expand our European transmission grid is strong and the arguments to take action are compelling. Nevertheless, it is crucial to answer the question of what kind of grids we build and how we keep our transmission network in good shape.

This question primarily concerns the choice of technology and the choice of building overhead lines or putting cables underground. The technologies available for power transmission today are remarkably enhanced and may seem very complex. In general however, any transmission project can potentially be implemented in high-voltage direct current (HVDC) or in alternating current (AC).

The choice of technology and the choice of overhead vs. underground are distinct for every project and there is no “one-size-fits-all” or even “one best” solution for any grid project in question. One central premise however holds true in the context of every project technology: Every project proponent – be it a policy maker, a TSO or a regulatory agency – needs to explain and present the decision making for determining the project technology. Alternatives have to be duly considered, judgements and decisions have to be traceable.

- It has to be fully transparent and comprehensible for all stakeholders **which criteria** are considered in the process of deciding on either “overhead” or “underground” – and on either AC or HVDC.
- Moreover, it has to be fully transparent **how different decision criteria are weighted** while considering the respective interests of all stakeholders concerned.
- The decision for a technology and design has to be **backed up with data and evidence** (if possible from independent, scientific sources). These are to be presented in a non-complex, comprehensible and visual way.
- Different project proponents should **share the responsibility of communicating** the rationale behind the choice of a technology for a project – especially in terms of the associated cost of undergrounding a line. Policy makers and Regulators should join the

TSO in explaining the legal framework for technology choice, e.g. by describing the grid fee legislation in place and/or the Regulator's mandate to keep the overall cost of electricity for consumers in check.

A "take-it-or-leave-it" approach to communicating the choice of grid technology and design doesn't do justice to the legitimate concerns of the public. As more and more people in Europe are beginning to inform themselves about grid development – especially in areas that have been directly affected – and as trust among stakeholders can only be built through transparency, the choice of technology should not come out of nowhere. It has to be explained in a clear, understandable way.

Telling the story about technology and design

The following decision criteria need to be considered when explaining the decision making process behind grid technology and design:

- **Costs:** Both the costs of construction and operation of grids are strongly affected by the choice of a specific technology and design. The construction of overhead grid lines is typically much less expensive than the construction of underground lines. Similarly, maintenance is typically less costly for overhead lines than for underground lines. While underground lines are less prone to being affected by adverse weather conditions, repairing them once problems occur is significantly more difficult, time-consuming and costly than overhead lines. The decision for AC or for HVDC also has direct impact on the overall costs of a grid project. HVDC is typically more expensive when it comes to the construction costs, since electrical power is usually produced in the form of AC and hence converters need to be built to transform it into HVDC (the actual difference in construction costs varies by source). However, HVDC typically incurs fewer transmission losses and thus its attractiveness for energy transmission rises, particularly in the case of transmission over long distances. When it comes to the cost difference between different types of lines, the Energy Networks Association, for example, has calculated a ratio of 20:1 in comparing 400kV overhead and underground lines, while the ratio becomes lower for lower voltage lines: http://www.energynetworks.org/modx/assets/files/electricity/she/environment/briefing_notes/ENV2TransportingElectricity.pdf. The German TSO 50Hertz, to the contrary, has calculated a ratio ranging from 4:1 to 16:1, depending on the landscape: <http://www.50hertz.com/de/file/Erdkabel-Freileitung.pdf>. According to Eurocable and RGI, average investment costs for undergrounding are about 5 - 10 times higher than those for overhead lines: (http://renewables-grid.eu/fileadmin/user_upload/Files_RGI/Underground_cables_Factsheet_Costs_20130725.pdf).

Legislation regarding cost bearing differs significantly across EU Member States. In some countries, TSOs are guaranteed a return on their investment by the government. This means that all costs have to be ultimately borne by the taxpayers. In addition, some Member States allow TSOs to directly add the costs they have incurred to grid fees. In this case, power consumers ultimately bear the costs of grid development.

When discussing the cost of grid projects in general, as well as the cost advantages and disadvantages of different technologies in particular, it is important that TSOs stress their dependence on and limited discretion to manoeuvre in a given legal and regulatory environment. For example, this concerns grid fees that are often kept in check for

economic or political reasons (as the ENTSO-E overview of transmission tariffs in Europe shows, the tariffs vary widely by country and are continuously subject to change. Their calculation follows a very complex procedure: <https://www.entsoe.eu/about-entso-e/market/transmission-tariffs>). As this legal and regulatory environment is set by elected policy makers and implemented by regulating agencies, it is paramount for TSOs to call upon both policy makers and regulators to join them in communicating the cost dimensions of grid development projects.

- **Health issues:** A point that is often brought up especially by local affected stakeholders is the potential health impact of grid lines, especially of the electric and magnetic fields created by them. The connection between electric and magnetic fields of grid lines and negative consequences for human health cannot be described as settled science yet. The fact that both types of fields do have an effect on the human body is relatively undisputed, but research regarding negative health impacts has not produced clear affirmative results. As precautionary measures, European countries have legally prescribed maximum permissible levels of EMF in the context of transmission projects.

The strength of electric fields depends on the voltage with which electrical energy is transported while the strength of the magnetic field depends on the current flows in the grid line. While no general statement can be made as to which grid technology has less effect on the human body than the other, for specific grid projects, it is recommendable to invite independent experts to measure the strength of the electric and magnetic fields in order to provide a neutral standpoint. General information is for example available from WHO, e.g. http://www.who.int/peh-emf/standards/EMF_standards_framework%5B1%5D.pdf and www.who.int/peh-emf/publications/en/EMF_Risk_ALL.pdf?ua=1).

Worries about health issues might also have an impact on property values in the area surrounding a grid project. As this effect is in many cases a pressing issue, it is recommendable to introduce Compensation measures that help affected property owners in a targeted manner if legally feasible.

- **Visual impact:** Local stakeholders are also often concerned about the visual impact that is caused by grid lines. Here, the decision of whether to construct overhead lines or underground lines is of high importance. On the one hand, overhead lines, especially extra-high-voltage lines, are visible over a long distance. On the other hand, while underground lines indeed have some visual impact – for example, swaths have to be cut through forests for them – their visual impact is typically much less significant than that of overhead lines.

Worries that property values might decrease due to grid lines are also based on the visual impact these lines have. These worries should be addressed actively as described above. For example, Compensation measures for people whose property is not directly, but indirectly affected – either at community or even household level – should thus be actively contemplated against the backdrop of the applicable national legislation.

Another promising way to reduce the visual impact of overhead lines is a change in the design of pylons. Many TSOs are already conducting design studies and technical tests to develop new pylon concepts. TenneT, for example, is currently introducing their new pylon concept “Wintrack” (www.tennet.eu/de/index.php?id=396&L=2). The Wintrack

pylons significantly reduce EMFs and are often perceived as more aesthetic than traditional pylons (e.g. more than 80% of a LCI in Paderborn, Germany, preferred the Wintrack design over the traditional ones: http://www.quickborn-gegen-riesenmasten.de/index.php/rundmails-leser/items/no-47-wir-berichten-ueber-unsere-informationsveranstaltung-vom-14032011-in-der-comeniusschule.html?file=tl_files/themes/quickborn-gegen-riesenmasten/rundmails/No.%2047-3-2011-03-14%20Umfrageergebnisse-pdf-Logo.pdf).

While Wintrack is already used on test lines, there are currently many other promising concepts of “pretty pylons” in development. The Royal Institute of British Architects organised a contest on pylon concepts, in which more than 250 designers and engineers took part (www.bbc.co.uk/news/uk-15293918). The entries were rated on design quality, functionality, and technical viability, while taking into account the public response to the designs and the teams' abilities to create them. The British TSO National Grid has already announced that they would like to work together with the Danish prize winner Bystrup as well as with two other participants. Only 20 months after the contest, the T-pylon concept, developed by Bystrup, is now used for a pilot project in Somerset (www2.nationalgrid.com/Media/UK-Press-releases/2013/New-T-pylon-offered-for-electricity-transmission-connection-in-the-UK-for-the-first-time/).

Other studies and contests have also attracted public attention and stirred up curiosity, including for example the prize-winning “Land of Giants” concept by Choi+Shine Architects, which won a pylon design competition run by Iceland’s TSO Landsnet (www.choishine.com/port_projects/landsnet/landsnet.html).

Entire blogs are even dedicated to discussing innovative pylon designs (e.g. www.gondolaproject.com/2012/05/30/beautiful-tower-and-pylon-infrastructure or www.designdepot.ru/ru/papers/?id=234).

The positive reactions that these projects, contests and studies receive show that the public interest for new pylon designs is very high as they have potential to reduce EMFs and are perceived as more visually appealing. Therefore, introducing new pylon concepts to projects could be a good way to find a compromise between usual overhead and underground lines.

However, before a new pylon concept can be applied, it needs to be approved for general use, which can be a very lengthy procedure as a number of tests need to be passed and several requirements need to be conformed to. Moreover, the pylon concept used for a certain line is decided separately for each specific project during the Permitting stage.

While TSOs should promote the development of new concepts, it is the responsibility of Policy makers and Permitting Authorities to work hand in hand with TSOs in order to get the concepts ready to be used in projects, where this could contribute significantly to fostering public acceptance of grid development projects.

- **Environmental impact:** Grid lines have a variety of effects on the environment. For both overhead lines and underground lines swaths have to be cut through existing forests, affecting the habitats of the animals in this area. In addition, overhead lines

typically also have an effect on birds and their habitats that should be taken into consideration. Underground lines, in contrast, have a strong effect on the ground where they are placed since, for example, moors that they cut through have to be dried up to allow for the lines.

Here, TSOs should call upon Environmental NGOs to openly discuss the merits of different technologies regarding environmental impact. This discourse should be fact-based and constructive.

- **System stability and security of power supply:** An important *raison d'être* for new grid lines is their contribution to increased security of supply and overall stability of the electricity system. With regards to this aspect, overhead and underground lines show different features. On the one hand, overhead lines are more vulnerable to extreme weather conditions since they can, for example, topple over in storms. However, these effects can usually be resolved quickly and easily. On the other hand, underground lines are typically less prone to weather impact but once a problem with the line has materialised, they are very difficult to repair and thus typically take a lot of time. While the typical downtime of an overhead line averages a few days, the repair of underground cables can easily take over a month, as in the case of those recently installed in tunnels under Berlin (<http://pro-erdkabel-nrw.npage.de/technik-im-vergleich.html>). Hence, where no alternative grid line exists, an overhead line is more likely to produce a power outage than an underground line, but this outage is likely to last for a shorter time.

The regulatory agency that is tasked with overseeing the overall stability of the transmission network should join the TSO in explaining the choice of a technology from a system-security perspective. The TSO on the other hand should point to and call upon the regulator to clarify and juxtapose the differences.

d) WHERE do we develop new power grids?

The need for grid development may be clear and the choice of technology may be well explained. Yet every project developer ultimately has to decide in dialogue with other stakeholders **where exactly the grid project will be built** – i.e. the route that the power transmission link will take to get from its starting to its end point.

The simple consideration to take the most direct route from start to finish should rarely dominate the choice of routing. Instead, important aspects in the location of grid projects are **synergies with existing infrastructure routes** (such as existing power lines or motorways), **population centres and natural habitats worth protecting**.

The precise location of a power grid project is typically defined in several steps over the course of the grid project cycle. It is **paramount to clearly explain and communicate this process of route concretisation** in the context of any particular process – and this process will apply in any grid project under development: First, the need for a grid project from point A to point B is determined. Second, broad corridors for potential routes are defined during the Project preparation stage. During Spatial planning, route alternatives within a preferred corridor are explored to choose the most agreeable route for all stakeholders. This route is submitted to the authorities for the permitting process before construction can begin.

Throughout the project cycle, one message has been clear: **early information, honest dialogue** and **joint decision making** need to be the guiding principles for involving each and every affected stakeholder group from the very beginning of any grid project.

This is the very essence of the Grid Communications toolkit that is featured here.

It is meant to contribute to the entire process of stakeholder empowerment from the determination of any project's need until the first kilowatt-hour of electricity flows through the transmission link – with full transparency throughout the process. If the collective effort to upgrade our European transmission network is to become a reality, then each project itself has to be a collective effort in and of itself. In the end, this multi-stakeholder effort can create a sense of joint project ownership for every stakeholder involved: **It's our power transmission system, it's our project.** So let's get involved and shape the power grid of our future, to the benefit of our entire community and especially to the benefit of those communities that are directly affected by new power transmission lines.

8. User guides

The “User guides” provided as part of this toolkit are manuals for different stakeholder groups on using the toolkit, e.g. initiating and participating in stakeholder involvement measures.

Beyond that, the User guide for TSOs also contains an annex dealing with possible Communication Risks when communicating on highly controversial issues. This separate part describes the nature and origin of these risks and how TSOs can address them properly in order not to jeopardise but to increase public acceptance of their projects.

User guide Local stakeholders

What’s in the toolkit for you?

Will a grid development project potentially affect you directly, your city, your community or your region? Many people are concerned about being impacted by a grid development project. Actually, it is a real advantage that you are not the first one to be influenced by a grid development project because there are a lot of lessons learnt about how concerns of affected local stakeholders – e.g. citizens, Land owners and local politicians – can be involved in the whole process of a grid development project and how your input can be included in order to establish a constructive and cooperative communication between all stakeholders throughout all project stages.

If you are occupying yourself with grid development projects for the first time, you are probably interested in understanding the whole process of grid development, the possibilities to participate in it and address your concerns. This toolkit helps you to do so and this User guide is especially written to introduce Local Stakeholders to the toolkit that will tell you how you can make best use of it. Also, for Local Stakeholders with experience in grid development projects this toolkit most likely contains useful information.

In a nutshell, this the toolkit helps you to gather important information about grid development projects in Europe and how you as a local stakeholder can participate in all relevant dialogues to safeguard your interests and rights. The aim of this toolkit is to lead to a constructive communication and cooperation among all stakeholders; including you.

How does the toolkit work?

The toolkit is structured along categories of communication and participation elements in the context of power grid projects. These include the different Stakeholders involved, the Project Stages, the communication Channels, the communication Formats and the Contents conveyed. Each of these categories contains several profiles specifying, for example, the different types of stakeholders or the different project stages. These profiles do not only provide a thorough description but also link the profiles to one another showing how communication elements in the context of grid projects work together. The descriptions are accompanied by questions that help to identify where further, project-specific information is needed. In addition, the toolkit provides several Practice Examples showing how different toolkit elements have proven to work in the frame of real-life grid projects.

How do you make the toolkit work for you?

There are two recommended ways for using this toolkit: First, you can directly go to the Adjacent communities profile where you will find a summary of all aspects related to communication on grid lines, e.g. other stakeholders, channels or contents, which are relevant for you. Second, you can follow the more detailed explanation below which describes all relevant aspects along the different stages of a grid development project.

Using the toolkit along the project stages

In the following, the toolkit functioning is explained in detail taking the point of view of a local stakeholder so that you can make full use of it. The explanation is structured along the different stages of a grid development project. This allows you to identify the project stage that is of most interest to you and directly dive deeper into the respective content.

If you are unsure what project stages are relevant for the project currently affecting you, the profiles within this toolkit explaining the different project stages will help you to identify the right stage. Further information on the current stage of different grid development projects are usually published on the Project websites or on the website of the TSO in charge of the project.

For each project stage, the explanation shall give you hands-on advice on which toolkit elements are potentially most important to you and how you can make best use of the information provided by this toolkit. The idea is to encourage local stakeholders to participate in the process of grid development from an early stage on. This toolkit provides you with the knowledge you need to take part in relevant debates and helps you to gather more information about the project you are specifically interested in.

This introduction to the toolkit will, however, not only state which elements are most important but also tie the elements to one another enhancing the user-friendliness of the toolkit. In the end, this explanation aims to give you as user a detailed suggestion of which elements are best to inform yourself about a specific project, all other important stakeholders involved and how you personally can be heard and your knowledge and ideas be considered by the project developers.

Phase 1: Determination of need

At the stage of the Determination of need the necessity for building grid lines is assessed and defined. If you are particularly interested in the procedure of the Determination of need, it makes sense to inform yourself on the ongoing debates and developments and use the possibilities to get involved in the national and European planning procedures. However, the specific locations of grid lines are not yet defined at this stage and thus the impact of grid development on your region might not yet be clear. Therefore, unless you are not intrinsically interested in the issue as such, getting involved as a local stakeholder at this project stage is not necessary. If TSOs, Regulators and Permitting authorities agree on a grid development project that could affect your area, the policy maker will ensure that you have enough time to inform yourself, voice your concerns and provide input in the following project stages Project preparation, Spatial planning and Permitting.

Either now or in the stage of Project preparation, TSOs and Permitting authorities may get in touch which Local elected officials to invite them to participate in the early consultation

procedures, in order to establish a sustainable and transparent dialogue at an early stage. If you are contacted through a TSO in your role as a Mayor, local council or other local politician you should take the chance to get involved at this early stage, provide input about local particularities that could be important to consider in the further planning process and learn about the possibilities to involve the local interests of your citizens at the upcoming project stages. You should also be aware of your role as a multiplier which means that (in case your area will be affected by the project) you will be an important intermediate between project developers and the affected local citizens you are representing.

Commonly, leaders of farmers' and forest owners' associations are also invited in the debates at this early stage to represent the interests of Land owners. Their participation and ongoing role as intermediate between the future project developers and the associations' members is very important.

Members of possible Local citizens' initiatives (LCIs) within potential project areas that have been established because of past grid development projects might provide helpful input during this and the upcoming project stages. If approached by the decision makers and planners of the upcoming projects, LCIs should be aware of this chance to establish a constructive and cooperative dialogue and try to ignore potential conflicts of past projects while looking ahead. In many countries, changes in legislation have created a better environment for early and ongoing participation of all kinds of stakeholders, enabling TSOs and Public Authorities to involve LCIs and other stakeholders earlier and more constructively; a good reason make use of it and take part in a constructive dialogue.

Phase 2: Project preparation

TSOs are legally bound to implement the grid development projects that have been decided at the stage Determination of need. At the Project preparation stage, they will start involving relevant stakeholders in the process of routing that will last until the final permission is granted at the end of the stage of Permitting.

To find out if your region might be affected by a grid development project in the upcoming years, you can access the homepage of either your national Regulator or the TSO in charge of your country respectively your region. If your village or city is part of the planning area, this does not mean that the new grid line is going to run through there. In fact, only the starting and ending point of the line are defined at this stage and the grid line could run anywhere through the broad planning corridor. The route is, however, continuously narrowed down, considering local landmarks such as natural reserves and settlements.

If you are a land-owner or a citizen living within the planning corridor, the stage of the Determination of need is the best time to inform yourself about the possibilities to get involved in the project at the later stages. When the corridor is narrowed down in the upcoming stages of Project preparation, Spatial planning and Permitting, the planning TSO and Permitting authorities will provide opportunities to inform yourself about the project and to participate and voice potential concerns (e.g. Public space events, Citizens helpline, Project information office, Town hall meeting, Roundtable or Field visit). The Project website as well as reports in the Media will keep you updated about upcoming events, their progress in the planning procedure and any other relevant news about the project.

In case public road shows and/or other public events are held at this stage to start the important dialogue between locals and project developers at this very early point, all invited

citizens that are interested in the project should take this chance, bearing in mind that the information provided regarding the location of the project will remain abstract as concrete information is not yet elaborated. Participating in events is, however, a good opportunity to learn more about the processes of grid development, the ideas and reasons behind it and to get to know other stakeholders involved and understand their concerns.

If you are a Local elected official, your participation in the above mentioned events is even more important. Having a good rapport with the project developers is crucial as Local elected officials are often approached by their citizens to ask for information about the project and the consequences the Adjacent communities might have to face. Knowing the facts and being able to place local concerns at an early stage – simply staying in touch with the project developers and holding the constructive dialogue upright – is increasingly important. Accordingly, the same holds true for representatives of farmers' and forest owners' associations who play a comparable role to Local elected officials.

Phase 3: Spatial planning

At the end of the project stage of Spatial planning, a final route corridor with a limited width (e.g. 500 - 1,000 metres in Germany) will be identified which completes the application documents for the final Permitting stage. The most suitable route corridor is usually chosen out of two or three options.

Commonly, print media will tell you if your local area is affected by one of the corridor options. Additional information is provided by the Project website or sometimes even the Social media pages of the project developers.

For receiving the newest information first-hand and to ask your own questions, it is worth taking part in the public events that are commonly organised by TSOs and/or Permitting authorities at this stage all around the planning area. These events are typically announced via relevant local Media and the Project website. If you want to take part in public events like Public space events, Town hall meetings, Roundtables or Field visits, this toolkit provides you with the relevant background to know what to expect of these events and prepare you to make full use of the possibilities to participate in the project. More specific information (such as the Project location/map, the Project timetable, Technical details of the project, Information on project developers and Compensation measures) is commonly accessible through the project homepage or available at the Project information office and should be requested by the local stakeholders if not automatically provided by the project developers.

If you do not have the time to take part in public events but you still have personal questions or concerns, you can make use of the Citizens helpline or Project information offices if those are offered by the project developers. Also the Project website might give you the possibility to get in touch with the project developers.

You should keep in mind that "general" discussions such as the need of a project and the reasons behind are principally important but neither are the project developers singularly responsible for these decisions nor can the latter be withdrawn at this stage. In many countries, the decision on the grid line technology (e.g. underground cable vs. overhead line) has also already been made earlier and is no subject of change through the TSOs.

In order to keep the debates as constructive and cooperative as possible, it is recommendable to concentrate on subjects that can be influenced by the project developers

at this stage. If you have profound knowledge of the local area that can influence the decision for one or the other route corridor option, project developers will most likely be glad to hear about it.

Other important debates worth starting at this point are about potential Compensation measures, possibilities for minor adjustments to the routing once a corridor is chosen, ways to reduce the visual impact of the power lines, as well as all other potential impacts the grid development project might have during Construction and Operation stages. When discussing your concerns, you should be aware that other stakeholders might have other interests than you as a citizen of a potentially Adjacent community. It is in the nature of things that for example Environmental NGOs are more concerned about direct effects for the environment than they are concerned about visual impacts for the Adjacent communities and Land owners. Compromises can only be found through constructive dialogues.

It can be helpful to establish a Local citizens' initiative (LCI) to channel the local interests and represent the local stakeholders in the important discussions and dialogues. It is the responsibility of the founders of an LCI to make sure that the aims of their initiative follow the principles for a constructive and cooperative dialogue as mentioned above and are deeply supported by a broad majority of the citizens the LCI seeks to represent. LCIs unconstructively blocking the project through unrealisable and inexplicable postulations with members unwilling to constructively communicate with project developers are harming the whole stakeholder dialogue and can hinder all local stakeholders not supporting such an LCI from establishing a constructive dialogue with the project developers on relevant (as still influenceable) issues. Before establishing, joining or supporting a LCI, you should inform yourself about the LCI's goals and deciding if you feel represented by them or not.

As already pointed out in the description of the previous stages Determination of need and Project preparation, Local elected officials and representatives of farmers' or forest owners' associations are important intermediates and multipliers at this project stage now that local individuals become more and more involved in the project themselves.

Phase 4: Permitting

Having identified the final narrowed route corridor in the Spatial planning stage, the application documents are ready to be handed in by the TSO. Depending on regulations specific to each Member State, Permitting authorities or Regulators will start a consultation or a public application conference before or after the application is handed in. At the end of this stage, the decision makers define a precise route plan of where the newly developed grid line should be built.

The detailed information on the overall communication process stated in the previous paragraph of Phase 3: Spatial planning holds true for the Permitting stage as well. If you want to find out how to get in touch with the project developers, gather information on the project, place your questions, voice your concerns and how to interact with other relevant stakeholders, please read the previous paragraph and stay updated through following local Media reports and the Project website.

If a final public consultation or a public application conference is held, this can be the last chance for you to voice qualified objection to the route plan. Local elected official and representatives of farmers' or forest owners' associations are once again requested to make use of their representative and arbitrating role.

If you are a Land owner within the future grid line corridor you are probably automatically approached by the TSO to agree on Compensation measures before the Construction stage. You can actively call for such agreements as soon as your land can be identified as part of the Project location.

Phase 5: Construction

As a Land owner and/or part or Local elected official of an Adjacent community, the constructing TSO should inform you early about the further Project timetable, i.e. the precise construction schedule and related activities. Make sure that applicable and decided Compensation measures for inconveniences through the placement of the grid line as well as the construction process are paid in time. It is recommendable to stay in touch with the TSO until agreements are fulfilled satisfyingly. Local elected officials and representatives of farmers' or forest owners' associations are once again very important intermediates in case of any conflicts.

Phase 6: Operation

You may, after all, be interested how the new grid line in your neighbourhood is of use for the European grid network. Websites of TSOs and their European network ENTSO-E as well as websites of Regulators and their European Agency ACER provide interesting information about the usage of each high voltage line and beyond.

User guide

Environmental NGOs

What's in the toolkit for you?

As an Environmental NGO, you have an active role to play in all stages of a grid development project, from the earliest stages of high-level need determination and grid planning through the Operation stage. The toolkit will guide you through some of the ways in which you may contribute your thematic and technical expertise, raise awareness about environmental impacts, play an active role in discussions with other stakeholders and serve as a key multiplier to keep the public informed about important aspects of the project. The toolkit will demonstrate some of the ways in which a TSO as the main project developer – or other stakeholders – may inform you about the project or solicit your input; however, it also serves to encourage you to proactively seek out opportunities for information and exchange if these are not initiated by the TSO.

How does the toolkit work?

The toolkit is structured along categories of communication and participation elements in the context of electricity grid projects, for example different stakeholders involved, the project stages, the communication channels, the communication formats and the content conveyed. Each of these categories contains several profiles specifying, for example, the different types of stakeholders or the different project stages. These profiles do not only provide a thorough description but also link the profiles to one another showing how the different elements work together in the context of grid projects. The descriptions are accompanied by questions that help to identify where further, project-specific information is needed. In addition, the toolkit provides several Practice Examples showing how different toolkit elements haven proven to work in the frame of real-life grid projects.

How do you make the toolkit work for you?

There are two recommended ways for using this toolkit: First, you can directly go to the Environmental NGOs profile where you will find a summary of all aspects related to communication on grid lines, e.g. other stakeholders, channels or contents, which are relevant for your organization. Second, you can follow the more detailed explanation below which describes all relevant aspects along the different stages of a grid development project.

Using the toolkit along the project stages

The following part will walk you through the different stages of a typical grid project, providing an overview of your potential role at different points. Further, it provides links to various elements of the toolkit – other stakeholders who may be involved in each project stage and with whom you may wish to establish a dialogue; communication channels used by TSOs and other stakeholders, which you may find to be of particular interest; project information which you may encourage the TSO to share or may further diffuse yourself, and so on. The guide places particular emphasis on those toolkit elements which are of relevance to you and

your role in the project, and ties them together into a single NGO-specific way of thinking. This approach is designed to make it easier for you to navigate the toolkit in a logical way.

Phase 1: Determination of need

During the Determination of need stage, decisions are being made on high-level grid plans and no concrete location decisions have been made yet. It is therefore the national or regional-level branch of the NGO which will tend to be most involved at this stage.

Environmental NGOs can collaborate with other high-level stakeholders, and can contribute their environmental expertise and raise any key concerns during this early stage. NGOs can also participate in general Strategic Environmental Assessments (SEAs) if appropriate at this stage (depending on country-specific requirements), for example by providing feedback on associated scoping documents. NGOs should ideally be invited by other stakeholders to provide their comments, but should also actively seek out collaboration and involvement in the need determination process. Early participation by Environmental NGOs can raise the chances that key environmental issues are taken into account in preparing the national grid plan or selecting priority projects. NGOs can also join the public in raising questions about the need for particular projects.

The toolkit provides you with some ideas of other key stakeholders involved in the need determination stage, including TSOs and National / Regional policy makers. In order to provide effective input, you may wish to contribute to official consultations, but also to organise or attend Closed-door meetings with other stakeholders involved in the decision-making process. You may also call for a structure under which you would have a chance to more regularly collaborate with other key stakeholders throughout the duration of a project or beyond. One proven option is to establish a Roundtable dedicated to environmental issues, in which you can play a key role. In some cases, a permanent Roundtable or expert group may be established to continuously explore options for reducing environmental impacts of grids through optimal routing or technology choices.

Establishing early collaboration with other stakeholders, and particularly TSOs, can ensure a more fruitful and trusting relationship throughout a specific project, and can raise each party's awareness of the other's key concerns.

In this stage you may also serve as an important multiplier of information to the general public, including Private consumers and Land owners. This is particularly true as you may well be regarded as more "legitimate" than TSOs or national officials. You may therefore wish to take on an active role in disseminating information on the environmental implications of need determination and grid plan decisions. You may choose to disseminate this information to the general public via a number of channels, including your Website, Social media or traditional Media.

Phase 2: Project preparation

In the Project preparation stage, work is launched on a specific project and various options for routing and other key choices are being evaluated.

NGOs can provide early input to the project, by highlighting key environmental considerations and by providing feedback to, for example, scoping documents created in the course of an SEA during this stage. This is the opportunity for TSOs to identify key NGOs

who will be active during the development of the project. While an NGO will likely be conducting its own stakeholder mapping to identify key actors, an NGO may want to proactively approach the TSO to establish contact.

At this stage the TSO may begin to launch public consultations and meetings (e.g. Town hall meetings or Public space events) in regions potentially affected by the project. You may find it useful to have a presence at these early events in order to establish yourself as a key involved stakeholder. In parallel, you should continue to exchange in discussions with TSOs and other actors (e.g. Regional officials) via smaller Closed-door meetings and Roundtables.

The role of different stakeholders in later project stages is often determined during the Project preparation stage; it is therefore essential to initiate collaboration on a more local scale at this early stage.

At the same time, beginning in this stage and continuing throughout the project, you could pay attention to the TSO's own communication on the project, in order to ensure that it is accurate and transparent. The toolkit provides ideas of key communication channels and formats which can be used by TSOs for wider dissemination, such as traditional Media, a Project website, Social media, TSO-produced Brochures/Flyers/Leaflets/Fact sheets and Exhibitions. As an entity with thematic expertise, you may call on the TSO to accurately represent environmental impacts of the project and any mitigation measures it may propose. In general, NGOs play an important role in upholding standards for environmental protection, public participation and transparency.

Phase 3: Spatial planning

The project takes on a more concrete form during the Spatial planning phase. Specific route options are being considered, and by the end of this stage, a more or less final decision has been made, with the affected local community determined.

During this stage, as different routes and other project aspects are being considered, NGOs can provide valuable input with regards to potential environmental issues arising from poor route choices. Specifically, they may contribute consultations or to scoping documents and project-specific SEAs occurring during this stage, in order to help define an optimal route.

During Spatial planning, you will likely continue your active participation in various public events. Indeed, you may want to consider taking a more active role in these events, for example by co-organising an event or participating as a speaker or panellist. You may also continue to participate in smaller meetings or Roundtables to provide your expertise. Once an affected community has been determined, you may also participate in – or co-organise – Field visits to other project sites, arranged by the TSO to grant members of the community hands-on exposure to the site.

You may also wish to further disseminate your position amongst the potential affected communities or the wider public in order to raise awareness around key environmental issues in the context of the project. The toolkit provides ideas of print and online mediums for spreading the word, for example by authoring an opinion article in a newspaper or on a Website, actively spreading and collecting information via Social media or creating Brochures/Flyers/Leaflets/Fact sheets for distribution in the community. You may want to take your dissemination activities a step further and build up a network of supporters who

could help you draw attention to environmental issues. This can be done in person via Doorstep visits or Public events, or online via Social media.

Finally, you can continue to ensure that the TSO is keeping other stakeholders and the public about the decision making process and any decisions made. The toolkit provides examples of typical content which should be communicated by the TSO as the details of a project are being worked out, including Project location, Timetable or Technical details. Further, the TSO should make sure to inform the public about relevant Events. As a key multiplier of information, you may take on an active role in encouraging the TSO to be transparent in its communication, but also in helping to spread the word on project details and events yourself.

Phase 4: Permitting

The Permitting stage may be one of the most intense project stages, as final decisions have been made on routing and affected communities have been defined. Public interest in the project is therefore likely to peak at this time. Land owners and Adjacent communities, LCIs are likely to participate increasingly actively in discussions on the project. As a key multiplier and a representative for environmental issues, local NGOs should continue to be actively involved in the project's development.

Certain aspects of NGO-TSO collaboration may be challenging at this stage, as disagreements may arise with respect to specifics with significant local impacts. Nonetheless, an effort should be made on the part of both stakeholders to engage in constructive rather than conflict-driven exchange.

You may, for example, continue to take an active part in Town hall meetings, public consultations and Public space events, which will include both TSOs and various local groups. You may also participate in – or arrange jointly with TSOs – Field visits to other project sites, in order to grant members of the community hands-on exposure to the site.

Aside from attending large events, you may also choose to participate in smaller Closed-door meetings or ongoing Roundtables with TSOs and other stakeholders (for example, Local elected officials or LCIs) in order to provide your input on various environmental issues to be considered at this stage.

In your role as a key multiplier of information, you may communicate via a range of other channels besides the in-person ones described above. Social media or Traditional media, for example, can be useful to quickly reach a broader audience.

As an expert on environmental issues, you may also provide contributions to an Environmental Impact Assessments (EIA), which is generally conducted during this stage in consultation with different stakeholders. In this stage NGOs may also be approached by Media, Academia/experts who would like to know their opinions on the project's Permitting stage.

Finally, you may play a role in proposing and negotiating potential Compensation measures, particularly those that involve compensation for or mitigation of environmental impacts.

The inputs of various stakeholders involved in this stage will ultimately affect the decision made by Permitting authorities.

Phase 5: Construction

During the Construction stage, Environmental NGOs have more of a monitoring role to play, in order to ensure that no unanticipated environmental impacts result from construction works. During this time, you could act as a sort of liaison between local communities (such as Local elected officials, Land owners, Adjacent communities, LCIs or even Private consumers) and the TSO. They could follow the day-to-day evolution of construction works and possibly report to other stakeholders.

Moreover, should unforeseen events occur with potential impacts on the environment, NGOs would have a leading role to play in identifying these impacts and pointing them out to the TSO. You should be prepared to collaborate with the TSO on potential solutions to unforeseen events.

If serious unplanned environmental disruptions are occurring due to construction, the NGO or may insist that the NGO communicate on this information via the various communication channels described in the toolkit, or may alert the Media, LCIs, Local elected officials or other stakeholders.

A potential hurdle in monitoring construction may be a lack of information, as all documentation on the construction works is likely to be owned by the TSO, with access given only to select stakeholders (e.g. Regulators). You may encourage the TSO to be transparent about the status and impacts of construction works. This may be particularly successful if you already have an established working relationship with the TSO, with mutual trust.

Phase 6: Operation

One of the NGOs' major roles during the Operation stage would be to make sure that any promise made has been fulfilled by the TSO. If a TSO fails to meet its commitment (for example in terms of environmental or other Compensation measures), you may approach the TSO or eventually alert the Media.

During Operation, an NGO may also continue monitoring for unanticipated environmental impacts arising from the constructed infrastructure and its Operation.

During this stage, you may also wish to use interactive communication channels (like Social media or Project website) to broadcast regular information and updates on the project.

Furthermore, if any impact assessment has been planned a certain number of years after the grid infrastructure has been put into service, Environmental NGOs can play a role in the fulfilment of the study.

User guide

National and regional policy makers

What's in the toolkit for you?

As a National or regional policy maker, this toolkit helps you to better engage with your constituents and other stakeholders involved in activities related to grid development projects. As a policy maker, you may be involved in setting the high-level policy decisions that establish the need for grid projects and set their overall direction. Furthermore, given the challenges that different stakeholders may encounter in communicating during a grid development project, you may be able to play an important role in bridging the gap between local groups affected by the development of the grid, and the broader interest in developing the grid. This toolkit can help you identify specific opportunities to engage in the discussion around a specific grid development project, or around grid development projects in general. You can also identify different communications elements that you may encourage other Stakeholders to use, for example encouraging the relevant TSO to hold a Closed-door meeting with a group of engaged local citizens. Grid development projects require effective communication and dialogue among the different Stakeholders to be undertaken effectively. As a national or regional policy maker, you may be particularly well-placed to ensure that that communication and Stakeholder dialogue takes place, and this toolkit is here to support you.

How does the toolkit work?

The toolkit is structured along categories of communication and participation elements in the context of power grid projects. These include the different Stakeholders involved, the Project Stages, the communication Channels, the communication Formats and the Content types conveyed. Each of these categories contains several profiles specifying, for example, the different types of Stakeholders or the different project stages. These profiles do not only provide a thorough description but also link the profiles to one another showing how communication elements in the context of grid projects work together. The descriptions are accompanied by questions that help to identify where further, project-specific information is needed. In addition, the toolkit provides several Practice Examples showing how different toolkit elements have proven to work in the frame of real-life grid projects.

How do you make the toolkit work for you?

There are two recommended ways for using the toolkit: First, you can directly go to the National/Regional policy makers profile where you will find a summary of all aspects related to communication on grid lines, e.g. other Stakeholders, channels or contents, which are relevant for you. Second, you can follow the more detailed explanation below which describes all relevant aspects along the different stages of a grid development project.

Using the toolkit along the project stages

In the following, the toolkit functioning is explained in detail taking the point of view of a national or regional policy maker so that you can make full use of it. The explanation is

structured along the different stages of a grid development project. This allows you to identify the project stage that is of most interest to you and directly dive deeper into the respective content. Given that you represent a broad and geographically diverse population, your involvement is likely concentrated in the earlier stages of any one project, when the specific route is still being defined, and before the discussion takes a highly local orientation.

For each project stage, this explanation shall give you hands-on advice on which toolkit elements are potentially most important to you and can best inform your communication activities surrounding grid projects. This brief “walk” through the toolkit will, however, not only state which elements are most important but also tie the elements to one another enhancing the user-friendliness of the toolkit. In the end, this explanation aims to give you as user a detailed suggestion of which communication elements are most important regarding your approach to engaging in the discussion around grid projects and how these elements are interlinked.

Phase 1: Determination of need

National and regional policy makers have a particularly important role to play at the stage Determination of need, when the need for building grid lines is being assessed and defined at the EU-level as well as on the level of the different Member States. You may be directly involved in the deliberations, taking an active role in the hearings and negotiations on the EU-wide Ten Year Network Development Plan (TYNDP) and on the national Network Development Plan that affects your constituency. At the end of the national stages for the Determination of need, the number of grid projects that are to be carried out is fixed and starting and ending points of new grid lines are defined.

Moreover, your role will be to explain, defend and represent large-scale policy decisions that precipitate major extension programs for transmission grid, e.g. such as your country’s shift towards power generation from conventional to renewable energy sources.

National and regional policy makers have a crucial role to play at this stage in building a climate of transparency and trust. You could, for example, seek to bring together high-level Stakeholders such as TSOs, Environmental NGOs, Permitting authorities, Regulators and Power producers to take part in a Roundtable or conferences on the overarching need for grid development projects. You may also consider proactively involving the Media at this stage, as a means to reach your constituents and to explain the need for the future projects.

Phase 2: Project preparation

During the Project preparation phase, the first plans for specific project are being developed and various options for routing and other key choices are being evaluated. At the end of this stage typically several routing alternatives have been developed for the specific grid lines that need to be build according to the results from the Determination of need stage.

This stage will typically determine which of your constituents will be most strongly impacted by the proposed project as potential corridors for the grid project are defined. That said, as it is not sure which specific route the project will take, it is important to strike a balance between engaging with those constituents who may be impacted in the future, and alarming unnecessarily those who will not ultimately be affected.

Phase 3: Spatial planning

At the Spatial planning stage out of the various concrete route alternatives, one appropriate route in the preferred corridor for the specific grid line is being developed. The procedure for the Spatial planning stage can differ significantly depending on the legislations of the respective Member State. Usually, the TSO needs to propose corridor alternatives to the competent Permitting authorities who then have to decide whether one of the alternatives can be chosen.

The definition of specific corridor alternatives at the end of the Project preparation stage usually brings with it a stark increase in public attention to the project. For the first time, the grid lines become a tangible reality to non-expert Stakeholders and local Adjacent communities, their Local policy makers and Land owners who find themselves in one of the corridor alternatives see that there is likelihood that they are directly affected by the grid projects. This is also the stage when any form of citizen action groups (LCIs) are often founded who then become active as opponents to specific grid lines.

At this stage, national and regional policy makers can help ensure productive dialogue by linking the specific project and its associated impacts, back to the broader and shared interest of grid development. This can mean participating in Town hall meetings, Roundtables, and Closed-door meetings to ensure that this link is clearly and efficiently made. Moreover, it is still important for you to constantly explain and represent the policy decisions that necessitated the project in the first place.

Phase 4: Permitting

At the Permitting stage, the procedure for the approval of the concrete project plan takes place. The goal of this process is to approve a precise route plan for where the newly developed grid line should be built. Depending on regulations specific to each Member State, Permitting authorities or Regulators will start a consultation or a public application conference before or after the application is handed in.

At this stage, the concerns become particularly local and, as such, the involvement of National and regional policy makers may not be necessary and could, in some situations, be counterproductive.

Phase 5: Construction

During the Construction stage, the grid line becomes visible to all Stakeholders. Similarly to the Permitting stage, the involvement of National and regional policy makers may not be necessary and could, in some situations, be counterproductive.

Phase 6: Operation

At the Operation stage, the newly developed grid line is operational and transmits electrical energy. The features of the grid line are not changeable anymore.

Depending on how the grid project went forward, it may be appropriate for the TSO to organising an opening ceremony, at which you could express gratitude to the local citizens and Adjacent communities for their contribution to the broader and shared public interest.

User guide

Transmission system operators (TSOs)

What's in the toolkit for you?

As representative of a TSO this toolkit helps you to identify relevant aspects for communication and stakeholder involvement activities surrounding grid development projects. While your company might already deal with several of these aspects, this toolkit can help you identify specific elements that your company might not have included yet in its communication strategy. You might, for example, find information on stakeholders or communication channels that so far have not been integrated in your company's communication strategy with regards to grid development projects. In addition, you will find several examples of communication activities throughout Europe that can inform and inspire your company's activities. This means, in a nutshell, that you can use this toolkit to check whether your company's communication activities can still be enhanced or amended in order to raise acceptance for grid projects.

How does the toolkit work?

The toolkit is structured along categories of communication and participation elements in the context of power grid projects. These include the different Stakeholders involved, the Project stages, the communication Channels, the communication Formats and the Contents conveyed. Each of these categories contains several profiles specifying, for example, the different types of stakeholders or the different project stages. These profiles do not only provide a thorough description but also link the profiles to one another showing how communication elements in the context of grid projects work together. The descriptions are accompanied by questions that help to identify where further, project-specific information is needed. In addition, the toolkit provides several Practice Examples showing how different toolkit elements have proven to work in the frame of real-life grid projects.

How do you make the toolkit work for you?

There are two recommended ways for using this toolkit: First, you can directly go to the TSO profile where you will find a summary of all aspects related to communication on grid lines, e.g. other stakeholders, channels or contents, which are relevant for your company. Second, you can follow the more detailed explanation below which describes all relevant aspects along the different stages of a grid development project including a part on communication risks that your company might face during a grid project.

Using the toolkit along the project stages

The following part gives you hands-on advice for each project stage with regards to which toolkit elements are potentially most important to you and can best inform your company's communication activities surrounding grid projects. Since your company is typically the main project developer of grid projects in the area it covers, in general all project stages are highly relevant. However, you might be interested in a specific projects stage since some of the grid projects your company is working on have already advanced to these stages. This "walk"

through the toolkit does, however, not only state which elements are most important but also tie the elements to one another enhancing the user-friendliness of the toolkit. In the end, this explanation aims to give you as user a detailed suggestion of which communication elements are most important regarding your company's strategy for raising public acceptance of grid projects and how these elements are interlinked. The annex provides you with insights on which aspects of your communication activities might entail risks and how you can mitigate these risks.

Phase 1: Determination of need

At the stage Determination of need, on the EU-level as well as on the level of the different Member States the necessity for building grid lines is assessed and defined. Your company typically takes an active role in the hearings and negotiations on the EU-wide Ten Year Network Development Plan (TYNDP) and on the national Network Development Plan that affects the area that your company covers. At the end of the national stages for the Determination of need, the number of grid projects that are to be carried out is fixed and starting and ending points of new grid lines are defined.

While during this stage, strong opposition to grid projects usually does not form yet, it is crucial to use it to develop a climate of transparency and trust. For the Ten Year Network Development Plan the EU-wide TSO business association ENTSO-E has already started to invite several stakeholders to contribute to the development plan. For example, ENTSO-E has started to institutionalise the dialogue among TSOs, Environmental NGOs, Permitting authorities, Regulators and Power producers in a Long-Term Network Development Stakeholders Group. Institutions such as this group offer your company the opportunity to build a cooperative relationship with the other stakeholders and receive detailed input on their concerns and interests. In addition, ENTSO-E invites all interested stakeholders to submit written comments to key documents such as the TYNDP.

Being as transparent as possible at this early stage is also highly recommendable for each single TSO. In the Determination of need profile you will find a list of stakeholders that should be actively involved when, for example, developing a national Network Development Plan. Those stakeholders for which individual contact persons can be identified, such as for Environmental NGOs, Permitting authorities, Regulators, Power producers, National/Regional policy makers, Experts/Academia, Industrial consumers or Private consumers, should be contacted via in-person channels, such as Roundtables or Closed-door meetings to be able to fully include their input and respond to doubts and questions. For some stakeholders, such as Environmental NGOs, this stage might be too early to give detailed input since concrete routes for the grid lines are not yet discussed and hence their environmental impact cannot be assessed. However, the input from these stakeholders can be included in a general way at this early stage, e.g. in the form of general environmental aspects that grid projects have to pay attention to.

In addition, it might be helpful for your company to set up a Project website for the consultation process which is open to the public and can also be accessed by non-experts including those who might later become affected locally by grid projects. While it might be difficult to attract much attention from non-experts at this stage, your company might think of proactively involving the Media, especially national and supranational media entities, who can spread information on the events happening at the Determination of need stage. All this

helps to build trust since other stakeholders do not get the impression of the TSO hiding information and ignoring the interests of other stakeholders.

At this stage, the content discussed is relatively abstract since the concrete locations of grid lines are not yet determined. Your company should therefore always properly communicate the project context, for example the connection between the need for grids and the integration of renewables. The Project website is an adequate channel for publishing relevant material in this regard. In addition, Project timetables, e.g. covering the schedule for meetings with stakeholders, should be made available to the public in order to enable transparency. Similarly important is conveying information on the role that your company is taking in the grid development process (Information on project developers) as well as disclosing which staff members are to be contacted for further inquiries.

Phase 2: Project preparation

During the Project preparation phase, the first plans for specific project are being developed and various options for routing and other key choices are being evaluated. At the end of this stage typically several routing alternatives have been developed for the specific grid lines that need to be build according to the results from the Determination of need stage.

Similar as for the previous stage, strong opposition to the grid projects has usually not evolved yet and public interest in them remains low-key. However, this stage bears the potential for your company to directly benefit from concrete input from other stakeholders, most importantly on the routing alternatives that are being discussed, and build strong alliances. This is especially the case for Environmental NGOs who can provide very useful information on the potential environmental impact of different routes and help determine feasible alternatives. In addition, if it can already be foreseen that concrete communities will be affected by the grid lines, it can be helpful to contact Regional policy makers and Local elected officials in order to find out about their concerns and suggestions regarding grid lines. While Local citizens' initiatives (LCIs) with a focus on the specific grid project usually do not exist yet, there might still exist some that have been formed with regards to other, previous (infrastructure) projects and are likely to become active again on the grid project. If these can be identified, they should also be contacted for input on the route alternatives. During the process of finding feasible routes, your company should also look for advice from Regulators, since they often have significant technical expertise and can help with their network.

At this stage, keeping an updated Project website is particularly useful to create transparency. You might also consider writing regular newsletters to stakeholders that subscribe to them. Since the group of people that is likely to be directly affected by the grid project becomes more concrete at this stage, events open to the public such as Public space events and Town hall meetings can be of added value in order to enter into dialogue with local stakeholders. In addition, when it comes to elaborating routing alternatives together with stakeholders, Closed-door meetings and Roundtables are highly appropriate. Furthermore, as for the previous stage, the Media can play a crucial role as distributor of information. In contrast to the first stage, however, it makes sense to also involve regional media entities in order to spread information in a more targeted way to those who might eventually become directly affected by grid projects.

In order to keep full transparency, you should always keep stakeholders informed about all Technical details on the project as far as they are already available and provide them with

updated Project timetables. As for all stages it is important to convey information on the role that your company is taking in the grid development process (Information on project developers).

Phase 3: Spatial planning

At the Spatial planning stage out of the various concrete route alternatives, one appropriate corridor for the specific grid line is being developed. This corridor typically still has a width of several hundred metres. The procedure for the Spatial planning stage can differ significantly depending on the legislations of the respective Member State. Usually, the TSO needs to propose corridor alternatives to the competent Permitting authorities who then have to decide whether one of the alternatives can be chosen.

The definition of specific corridor alternatives at the end of the Project preparation stage usually brings with it a stark increase in public attention to the project. For the first time, the grid lines become a tangible reality to non-expert stakeholders and local Adjacent communities, their Local elected officials and Land owners who find themselves in one of the corridor alternatives see that there is likelihood that they are directly affected by the grid projects. This is also the stage when any form of citizen action groups (LCIs) are often founded who then become active as opponents to specific grid lines. All this means that your company should actively try to reach out especially to the local stakeholders to ensure that their concerns are acknowledged properly and acceptance can be raised for the grid project. The concerns of local stakeholders typically surround aspects such as health issues, visual impact by the grid lines and loss in property value for property close to the grid lines. Similar as for the previous project stage, the expertise of Environmental NGOs can help your company to find the route that has the least environmental impact.

There are several channels that your company can make use of for reaching out to local stakeholders. Public space events and Town hall meetings can typically address a relatively high number of individuals and are appropriate for informing a significant share of entire Adjacent communities. At these events, other stakeholders can be invited also in their capacity as drivers of the grid project. This includes National/ regional politicians or Permitting authorities and Regulators. Especially Town hall meetings can be combined with channels that allow for more direct interaction, for example a World Café, allowing the local stakeholders to participate in the definition of corridors. If concrete people can already be identified that will likely be affected by the specific grid project, for example owners of large land parcels, your company should consider engaging in Doorstep visits to them since they might have important individual concerns and suggestions. If your company encounters strong opposition from the side of the local stakeholders, you might consider putting in place an independent Mediator who helps to resolve conflicts. Furthermore, for tapping the expertise of expert stakeholders such as Environmental NGOs, your company should consider channels allowing for direct interaction such as Roundtables and Closed-door meetings.

This project stage is typically the first one at which your company can meaningfully address Compensation measures since the potential recipients can be identified. They should be openly communicated to the local stakeholders, for example at Town hall meetings. In addition, the Grid Story can help your company to properly address the concerns of local stakeholders, e.g. when it comes to a discussion about different technologies such as the decision for underground cables versus overhead lines. Furthermore, the Project location,

i.e. the location of the proposed corridors should be disclosed as early as possible, i.e. by making use of Infographics on the Project website. As for other contents that need to be communicated such as Technical details, Timetables and Information on project developers the same applies as for the previous stage: You should carefully update the information that is published. In order to convey this content to other stakeholders, it also makes sense to put it into formats that can especially help to communicate with local stakeholders such as Presentations and Brochures/Flyers/Leaflets/Fact sheets. In addition, at this stage, local Media becomes increasingly important. Your company should try to make sure that essential content is always properly communicated to the local media entities, such as radio stations or newspapers in order to keep local stakeholders informed.

Phase 4: Permitting

At the Permitting stage, the procedure for the approval of the concrete project plan takes place. The goal of this process is to approve a precise route plan for where the newly developed grid line should be built. Depending on regulations specific to each Member State, Permitting authorities or Regulators will start a consultation or a public application conference before or after the application is handed in.

This stage is typically the most contested one on the local level. Local stakeholders such as Adjacent communities, Land owners and LCIs show most interest and are likely to voice most opposition during the permitting stage since concrete local individuals face being directly affected by the grid project. Local elected officials can also play a crucial role. If they are not generally opposed to the grid project, they can act as intermediary between the project developers such as your company and the local affected stakeholders. In addition, to the local stakeholders Environmental NGOs should be consulted to help identify all relevant environmental issues with the grid project.

Since the directly affected local stakeholders can now be identified precisely, your company should try to reach out to them in a way that their concerns can be addressed on the most individual level that is feasible for your company. Doorstep visits, Roundtables and Closed-door meetings can be appropriate channels since they allow for direct interaction between your company in the capacity as project developer and the affected local individuals. Similarly, Public space events can be an adequate means of communication and interaction and a way to find out about the concerns of the affected local stakeholders. Town hall meetings should only be used if not strong opposition has formed yet since otherwise your company might risk that the atmosphere at these events heats up and impedes constructive interaction. As for the Spatial planning stage, putting in place a Mediator can help to significantly mitigate conflicts. In addition, a Project website should continue accompanying the project.

The content that needs to be communicated at this stage is essentially the same as for the Spatial planning stage. It is crucial that your company discloses all relevant information with regards to Project location, Technical details, Timetables and Information on project developers to the other stakeholders and updates it on a regular basis. In addition, your company should proactively address Compensation measures. The formats that are to be used for this remain the same as for the Spatial planning stage as does the interaction with local Media.

Phase 5: Construction

During the Construction stage, the grid line becomes visible to all stakeholders. While typically only minor changes to the design and location of the grid are possible anymore, the communication activities of your company should continue in order not to lose acceptance for the grid project and offend the local stakeholders.

Interaction with Adjacent communities, LCIs, Local elected officials and Land owners should therefore still be actively pursued by your company. While they cannot be integrated into the planning for location, design and technology of the grid anymore since these aspects are fixed at this project stage, their concerns, for example with regards to health issues, might still not be fully resolved. Similarly, Environmental NGOs might want to monitor whether their demands and suggestions are fully included in the actual construction of the grid.

For all local stakeholders, Field visits can be a highly appropriate way of interaction. This means that your company can take groups of stakeholders to the construction sites and explain how their concerns were acknowledged in the actual construction of the grid. You might consider inviting independent Experts to these Field visits providing a non-biased view that is more likely to be accepted by the local stakeholders than a standpoint conveyed by your company. In addition, a Citizens' helpline and a Project office can help since they offer local stakeholders the opportunity to directly contact your company if they have specific concerns regarding the construction of the grid. The Project website should also keep stakeholders informed throughout this stage.

As for the previous project stages, it is absolutely necessary that you provide the local stakeholders with updated information on Technical details, Timetables and Information on project developers. The appropriate formats are the same as for the previous stages.

With regards to the content that needs to be communicated, your company should focus on the correct and timely delivery of the Compensation measures to both Land owners and communities at large that have been agreed on at previous stages. In addition, especially the health concerns can be addressed by providing detailed information Technical details, including the actual electromagnetic fields around the grid.

Phase 6: Operation

At the Operation stage, the newly developed grid line is operational and transmits electrical energy. The features of the grid line are not changeable anymore. Your company should focus on ensuring that operation is running smoothly, and that no unexpected technical or environmental issues arise. At the same time, your company should make sure that the concerns of the local stakeholders are still acknowledged.

The most important stakeholders that need to be addressed remain are the Adjacent communities and the Land owners. LCIs typically do not play an important role anymore since their main *raison d'être*, the opportunity to change aspects of the grid project, has disappeared.

When it comes to communication with local stakeholders, it might be useful to continue making use of Field visits, for example in order to show how the grid functions and how strong the electromagnetic fields are that it causes. As for the Construction stage, it can be

helpful to engage an independent expert for this. Specific, personal concerns can be addressed by keeping a Citizens' helpline (which might not be necessary for the specific project anymore but rather for the whole grid). Additionally, the Project website can keep stakeholders informed about the functioning of the grid, e.g. by tracing back the sources of the energy that is transmitted and showing that these include a significant share of renewables. In addition, given your company did not face extreme opposition from the side of the local stakeholders, your company might consider an opening ceremony to which local stakeholders as well other stakeholders that have contributed to the grid project, e.g. Environmental NGOs and National/Regional policy makers as well as Local elected officials, and communities at large can be invited.

ANNEX to User guide for TSOs: **Communication Risks**

Introduction

As a TSO, your company has a strong interest in the acceptance of grid projects by other stakeholders. Main reasons for this are that lacking acceptance can delay your grid projects, tie up your resources and impose costs on your company. However, when communicating on a highly controversial issue such as the construction of grid lines in order to raise acceptance, there are always risks that can lead to your communication efforts not achieving their goals.

This annex to the User guide for TSOs focuses on the risks that arise in communication campaigns. It identifies the risks that are most important to your company, provides a compilation of possible reasons for these risks as well as ways to address them and finally outlines how your company should react once risks have materialised to mitigate negative consequences. Besides desk-research this annex is to a large extent based on expert interviews with TSO representatives who kindly contributed with their experiences and their expertise.

What are possible risks for you regarding your communication efforts?

The major risk that your company should consider while planning for a communication campaign is the potential of encountering a situation that harms your company's interest with regards to your communication activities, i.e. instead of creating acceptance for a given grid project or grid projects in general, your communication efforts create opposition or exacerbate the opposition that a given project is facing. This can materialise in different ways. First, communication efforts can lead to the opposite emotions and positions they tried to induce, i.e. instead of a positive or at least neutral feeling on grid projects stakeholders have more negative feelings on the project than before your communication activities. This might also be induced by strong opponents hijacking your communication channels and turning your communication efforts against your company, e.g. by creating a storm of outrage on a Social media platform which creates negative publicity for your company and your grid projects. Second, a communication campaign might lead to your company losing the trust of the stakeholders which can strongly undermine future communication with them.

Which reasons might exist for your risks and how can you address them?

In this part, specific reasons are pinpointed that might entail the above-stated risks. For each reason, a brief description of the reason is given followed by insights on how to address them in order to prevent the risks and their materialization.

“Pushing too hard”

A commonly encountered risk in communication activities is the risk of over-doing and exaggerating certain communication efforts, i.e. pushing communication too hard onto an audience. Such risks can originate from a message that is repeated over and over again, but can also stem from a communication channel repeatedly used time and time again to send messages towards an audience. A strong example of a message that was pushed too hard were the repeated warnings of blackouts in Central and Northern Europe. Here some TSOs continuously stated the message that a major blackout was threatening power consumers if no grids were built soon. The audience largely felt that this threat was overstated since for the most part major blackouts had not appeared in decades and the TSOs could not credibly underscore their message with reliable data. This is not to say that the audience rejected the whole idea of security of supply but felt that less was at stake than what the TSOs inferred. Hence, the audience did not fully believe the message that the TSOs were delivering. This tended to undermine the trust the stakeholders had in the TSOs, which hindered future cooperation and communication between the TSOs and other stakeholders.

“Pushing too hard” can be avoided by making use of different tactics. Typically, it occurs when the concerns of the stakeholders are not well understood. In this case a TSO might assume that a stakeholder concern is more important than it actually is – just as it was the case with the concern about blackouts in Central and Northern Europe. Therefore, your company should carefully study what the main concerns of the affected stakeholders are before launching a campaign. In addition, “pushing too hard” can be avoided if alongside the communication campaign continuous polling is undertaken to find out what the effects of, for example, a certain message are. This helps to identify where your company might have been too pushy and adjust the campaign accordingly. Lastly, your company should always back up major arguments about the need for developing a specific grid project with convincing data, especially those statements where the audience might have doubts, for example regarding the severity of a blackout risk.

“Failure to listen”

When stakeholders express their discontent with a grid project or a TSO in general, one of the main criticisms usually is that they have not been listened to properly by the project developers, especially the TSO. In many cases this does not necessarily mean that their concerns have been ignored completely or that they feel neglected by the TSO but rather that they feel that a proper dialogue where they can express their concerns or contribute to the plans for the grid project has not happened. For example, Local citizens’ initiatives frequently state that they do not oppose grid projects in general, but simply want to be able to voice their concerns and ideas which are sometimes even of added-value to the TSO and its planning activities. However, they tend to feel ignored and complain that TSOs do not offer the right fora for exchange and do not listen to the concerns and ideas adequately which reduces their trust in the TSO.

To address the concerns of stakeholders appropriately, your company should be aware that two different types of action are required in this regard. On one hand, your company should aim to include the concerns and ideas voiced by stakeholders in their plans for constructing the grid projects. On the other hand, your company needs to make sure that stakeholders

also get the feeling that they are listened to and their concerns are taken seriously. This entails that your company should employ channels and fora through which direct interaction with stakeholders is possible. The channels provided in the toolkit can help to identify those channels that are most appropriate for a given project. These channels can be tailored to the needs of your project along the lines of the questions provided in the channel profiles. In addition, specific activities that directly address concerns can induce a positive feeling of being taken seriously with affected stakeholders. For example, some TSOs engage in measuring electromagnetic fields together with member of Adjacent communities. While these activities usually do not have an impact on the construction of a given grid line itself, it helps to build trust with the local stakeholders. There may also be very simple, but effective ways to certify the listening-aspect towards other stakeholders: You may, for example, consider providing stakeholders who participate in communication events voicing their concerns about a project with written confirmations, i.e. “receipts”, in order to verify that the project developers have duly noted and taken into account their opinion.

“Wrong channel or format”

For good reasons, TSOs usually carefully choose the channels and formats through which they communicate. This is especially the case since some channels bear severe risks for them, particularly in that they can be hijacked by strong, very principled opponents who can use weaknesses in the channel to create negative publicity for the TSO. This has the potential to also negatively influence the stakeholders’ opinion on the project or even on the TSO as a whole. Strong examples for channels that can be hijacked by strong opponents are Social media platforms such as Facebook or Twitter. Here opponents can start storms of outrage against the TSO or a specific project. Similarly, a public event held for raising acceptance for a grid project, for example a Town hall meeting, can be used by strong opponents to spread their opinions on the TSO or a specific project to a larger audience. Both types of channel hijacking have the potential to strongly influence the opinions of observing stakeholders as the TSO might be left simply reacting to a well-prepared opponent.

Your company can avoid wrong channels or channel misuse by carefully assessing the potential perils associated with them. The channel profiles of the toolkit can help you to identify these risks as they are form part of the descriptions. Especially channels that create extensive publicity and allow for public feedback such as Social media or Town hall meetings should only be applied if no strong opposition is in place to reduce the risk of channel hijacking. In addition, several companies have aggravated negative publicity by reacting unprofessionally or simply inappropriately to channel hijacking thereby creating ever more opposition. Therefore, you should only apply channels such as Social media or Town hall meetings if you have the capacities to properly moderate the discussion that might arise whether they take place online or at a physical public space.

“Bad timing”

Inappropriate or bad timing of communication activities can be another reason for risks. As the toolkit and the User guides show, not all communication elements are suitable for all project stages. While, for example, a national TV campaign that attempts to raise acceptance for grid projects amongst the broader public might be suitable for the Determination of need phase, it will most probably be too late for the Permitting stage at which stakeholders expect TSOs to tailor their communication efforts to the specific needs of the Adjacent communities and other local affected stakeholders. On the other hand, a stress on in-person

communication during the earliest project stages might result in the communication efforts not being able to trigger a national debate or leaving out important groups of potentially affected stakeholders.

Therefore, your company should carefully examine whether a specific communication activity, i.e. the dissemination of a certain content or message via a given channel and format to a specific stakeholder group, meets the concerns of this stakeholder group at the time you engage with them. The toolkit can help you identify the project stages at which specific communication elements are typically best suited and the User guide gives you an overview of appropriate activities along the different project stages. However, the requirements regarding communication activities projects can differ significantly depending on the specifics of a given grid project. Therefore, you should closely monitor the stakeholders you wish to address over time of a grid project and be ready to react to their needs as early as possible.

“Wrong message”

Another important source of risks is the delivery of a message that is not suitable for the stakeholders a TSO wishes to address. Messages typically try to address the concerns of the stakeholders proactively and try to induce a positive emotion with regards to grid projects. In order for them to be successful, the concerns of the stakeholders need to be clear to the TSO that is delivering the message. While, for example, messages focusing on the security of supply have proven to be difficult to be successfully delivered in countries that have never experienced a blackout (such as most countries in Central and Northern Europe), the same messages were successful in some countries in Southern and Eastern Europe where they met the concerns of the stakeholders. These examples show that inappropriate messages can result in the TSO losing some of the other stakeholders' trust since they might not feel that their concerns are taken seriously. In some cases inappropriate messages might even induce negative emotions where positive emotions are intended. For example, in Eastern Europe, where traditional power production based on coal and lignite is prevailing, messages focusing on the integration of renewables might cause people to fear job losses, especially if they work in the power production industry. In contrast, messages surrounding the integration of renewables yielded success in countries with high shares of renewable energy production such as in Central and Northern Europe where also a significant amount of people work in the renewable energy industry.

To avoid using “wrong messages”, your company should assess the concerns of the stakeholder to which you are planning to deliver your messages as thoroughly as possible. Based on this assessment you can choose the message that fits best to the concerns. In the toolkit you can find a compilation of messages as well as a description of what they typically contain. This compilation can help you to tailor your messages to the specific needs of your grid projects.

“Wrong audience”

An additional source of risk is the choice of the wrong audience when engaging in communication activities. A TSO's communication efforts will typically only yield success if those stakeholders are addressed that indeed have the strongest concerns with regards to grid projects, are most directly affected or can best contribute to the communication campaign itself. For example, major opinion leaders can be forgotten or at least not acknowledged in their importance in a campaign. These opinion leaders might in some areas be church authorities, local politicians or local activist groups. Not addressing these potential

opinion leaders and their concerns might result in them opposing the project which can unfold strong impact on other stakeholders. In addition, while a specific communication element, for example a specific set of messages might be appropriate for a project or a region in general, it might not be applicable to all stakeholders. For example, Adjacent communities are typically more concerned about health issues or property values than about environmental protection. Therefore, communication activities that focus on environmental protection issues with regards to the construction of a given grid line might not have a positive affect among Adjacent communities. At the same time, Environmental NGOs whose main *raison d'être* is environmental and climate protection might be won as supporters for grid projects if their environmental concerns are taken into account for the specific grid project. However, addressing the wrong audience with communication elements such as messages that are generally suitable for a project might cause the respective stakeholders to feel that their concerns are not taken seriously and to turn against the project.

The problem of addressing the wrong audience is best addressed by your company by closely studying which people and groups of people potentially have a stake in your grid projects. The User guide helps you to identify the most important categories of stakeholders and especially the questions that accompany the stakeholder descriptions can help you to pinpoint the specific stakeholders that you need to address. To keep track of the stakeholders that have been contacted and include their concerns and interests it helps to keep a log, e.g. a CRM tool, of them as it is done by some TSOs, for example in Scotland. In order to not target the wrong audience with communication elements that are generally suitable for a given project, the concerns of the different stakeholders have to be thoroughly studied by your company and addressed accordingly.

“Overall process overload”

A potential risk arising for TSOs (and also other project proponents) in the context of communication and stakeholder involvement measures concerns the overall overload of the grid planning and development process through such communication and stakeholder involvement measures – with various implications for public acceptance and trust in the TSO as well as the time required to complete the project cycle. This risk hence refers to scenarios in which too much communication and stakeholder integration measures burden the project cycle overall – or at least in selected phases – with two main negative consequences: First, the overload may jeopardise attaining the ultimate and implicit goal of raising public acceptance, i.e. accelerated project implementation, as TSOs may encounter *diminishing returns* of further communication events and stakeholder involvement measures, especially when they are concentrated at specific project stages. Second, too many events concentrated at specific project stages might ask for too much input from other stakeholders and ultimately seem too exhausting, e.g. for local stakeholders to participate.

Germany provides a valuable example for how this risk can materialise. In recent years, the laws and regulations governing the German grid development process have been reformed with regard to permitting procedures, means of compensation to local stakeholders – and also stakeholder communication, consultation and participation in general. While this reform clearly enhances the project cycle from a stakeholder-involvement point of view (for example with regular consultation events at the very outset of the need of projects), several German TSOs reported a growing lack of interest from other stakeholders (especially local stakeholders) as more and more consultation events were organised by the Regulator and the TSOs at the outset of the grid network planning process. TSOs concluded that it is crucial not to engage in communication for its own sake, but never lose sight of the ultimate goal of

raising public acceptance for grid projects – i.e. accelerated and more agreeable implementation.

Your company can best avoid the risk of overall process overload by communication and stakeholder involvement procedures though peer learning and benchmarking with other TSOs (e.g. through ENTSO-E), i.e. regularly exchanging information about ongoing communication activities and the best balance to strike between too much and too little stakeholder engagement. Other than that, this best balance will very likely be a cautiously applied interval learning process of trial-and-error – where your company will gain more insights from project to project.

How can you mitigate the negative consequences of risks?

There are several ways for your company to mitigate negative consequences once a risk has materialised. This can include situations in which you face strong opposition due to communication activities that were not successful, in which you experience a loss of trust or in which your communication channels are hijacked by strong opponents. These situations need to be distinguished from those situations in which opposition arises solely due to the grid project itself, i.e. there might on the one hand be a risk of opposition caused by the mere existence of a grid project and on the other hand there might be a risk of opposition, an aggravation of opposition or a loss of trust due to flaws in the communication activities such as those stated above. Due to the specific focus of the toolkit on communication activities, this annex exclusively looks at the latter type of risk. Two general types of reactions to the materialization of risks are most important and should be applied jointly. First, you need to react to the opposition or lack of trust that has already materialised and second, you should to identify the causes for the opposition or loss of trust and intercept them.

With regards to the first type of reaction by your company it is crucial that you interact proactively with the stakeholders that voice opposition or have lost trust in your company. In order to avoid a heated atmosphere it might be helpful or even necessary to engage in Closed-door meetings with representatives from the stakeholders that have voiced their discontent. At the same time, you should make sure that as much transparency as possible is guaranteed while mitigating the effects of a risk that has materialised. This entails announcing planned meetings early enough for all participating stakeholders to prepare appropriately and keeping minutes of the meetings that can also be disclosed to stakeholders that did not participate in the meetings themselves. Especially if you experience a situation in which the risk of losing the stakeholders' trust has materialised you might need to think about employing a mediator that brings your company back to the table with the stakeholders. As described in the toolkit, Mediation can help to renew dialogue and enable a constructive search for solutions together with the stakeholders. If the mediator is trusted by the stakeholders and the Mediation meets the expectations of the stakeholders your company might be able to regain the trust it has lost with the stakeholders. It goes without saying that your company should only commit to solutions that it can properly implement. Few things would be more detrimental to trust and constructive cooperation than your company being perceived as not fulfilling the obligations it committed to. Therefore, you should aim to openly reveal to the stakeholders the constraints your company is facing -- such as, for example, binding legal or regulatory stipulations -- in order to show what the boundaries for a compromise are.

With regards to the second type of reaction by your company, i.e. identifying and mitigating an action or behaviour that has entailed a risk, you should carefully scrutinise your

communication activities for potential reasons. The list stated above – though not meant to be completely exhaustive – helps you to identify shortcomings of your communication campaign. Here, it is helpful to directly ask the stakeholders for their feedback regarding your communication campaign. They might be able to clearly name which specific behaviour from your company negatively affected their stance on the grid project or your company or harmed their trust in your company. Where a source has been identified you can follow the recommendations stated above regarding how to address it. A special case is the hijacking of channels such as a storm of outrage on a Social media platform initiated by strong opponents. For this case it is necessary that your company professionally moderates the negative reactions. Simply closing a Social media thread or ignoring the opposition voiced can invite even more negative reactions. Rather, it is recommended that you try to identify the actual concerns that are voiced and address them in a targeted and transparent manner by providing well-grounded factual statements.

Conclusion

In this annex, two main risks entailed by flawed communication activities were named that can harm your grid project, first, the arising or aggravation of opposition and second, the loss of trust for your company due to shortcomings in communication which endangers constructive cooperation with the stakeholders. Several communication shortcomings were identified that potentially entail these risks and can lead to their materialization. For these communication mistakes concrete measures were presented as to how they can be adjusted and their potential of leading to risk materialization can be reduced. Lastly, a set of measures that are designed to help your company to mitigate the effects of the risks once they have materialised is provided. With these measures your company should be prepared to meet the challenges arising from communication risks.

Next steps for your company

- Screen your current communication activities for aspects that might entail risks (the above-stated list can serve as guidance)
- Adjust your communication activities to mitigate the risks that they might entail.
- Define clear competencies for dealing with materialised communication risks in your company
- Set in place efficient and effective processes for dealing with communication risks in your company
- Develop a crisis manual with guidelines for all staff members that deal with communication issues

D. Toolkit testing

In this chapter we explain the background and objectives of the event (1.) as well as document the testing takeaways (2.).

1. Background and objectives of the test events

The test events took place in the frame of two Town hall meetings, which were jointly organised with the host TSO in March 2014. In principle, these events were part of an ongoing communication plan for a high-voltage grid project in Europe.

The testing approach was based on our knowledge from public sources, our coordination meeting with the hosting TSO as well as on our numerous planning and alignment calls over the past weeks leading up to the two events. The test results and takeaways are based on the first-hand experience we made in preparing and implementing the event as a temporary part of the TSO's communication team, on informal interviews with participants as well as two debriefing rounds (workshops) with the organising communication team.

2. Key takeaways

This section summarises the key takeaways we learnt from and during our intensive testing and the debrief sessions with the organisation team. Our results and learnings have been fully integrated in the final version of the toolkit.

- **Town hall meetings are good information and dialogue formats at very early project stages:** The overall concept of a Town hall meeting has been proven to be an efficient and useful device for communication and stakeholder outreach that is very well suited to be employed at very early project stages, (e.g. Project preparation) **before** official planning, permitting and consultation procedures begin.
- **Low-key formats should complement large-audience settings:** A crucial success factor of an event such as a Town hall meeting is the use of low-key formats such as small group workshops. Participants feel much less intimidated to speak and freely voice their opinions and concerns. Also, it is much easier in smaller groups than in big plenary sessions to start a constructive dialogue and get a discussion going on rather specific topics. During the workshops, participants engaged in very constructive, issue-oriented debates about specific aspects of the current state of planning – e.g. by working together on maps illustrating the corridor alternatives under consideration. That way, the TSO took away several very specific and useful hints about concrete concerns and sensitivities in the area at a very early stage of the project that can now be considered in the further planning.
- **Messages focusing on a project's need have to be tailored to the project-specific (regional) environment to make them most compelling:** In the information part of the event, it became clear that information contents directly related to the region and the project are the most important elements to make the Presentation appealing and interesting but also to make people understand how and why the project is planned in their specific region. In particular, we validated our assertion that the need for a certain project is much better understood and accepted if it is explained with specific arguments that relate to the situation of the region and documentation material that make the need

for the specific grid development project obvious. This concerns for example the two arguments of grid development due to the expansion of RES as well as grid development in the context of system stability. Visualisations, e.g. an Infographic showing critical loads of existing grid lines are a very helpful and very powerful tool. A good preparation of “localized” communication contents is therefore vital.

- **At early stages, invitations for information and dialogue should be sent out via as many channels as possible:** Announcements for all kind of project events but also about the project progress should always be spread as broadly as possible to reach all citizens. This holds especially true at early project stages when people do not feel personally affected by a project yet. Newspapers, local radios and the internet are a good starting point but it is for example also worthwhile and publicly appreciated to approach official journals of the municipalities.
- **When communicating the cost of power grids (e.g. overhead lines vs. underground cables), a TSO needs argumentative backing from Regulators and policy makers:** It should not only be the job of a TSO to communicate cost-related decisions, such as economic reasoning for or against underground cables. It is moreover also the role of policy makers and Regulators to explain their assessment of grid fees as part of the power price and their decision to establish the political opportunity of undergrounding. It should be clear from their side as well that the TSO has – primarily – a role as an “enabler” and “implementer” of energy policy decisions within a given legal framework.
- **The language of primarily “technical” stakeholders (TSOs, Regulators, Permitting authorities etc.) needs to be made less technical for the purpose of addressing a general audience:** We have experienced more positive audience reactions to the communication of a project’s need, the technology in question as well as the legal steps in the planning and permitting process – whenever they were communicated in a mostly non-technical way. This concerns for example the use of technical and legal terms which sound very foreign to non-expert stakeholders, but holds true as well for expressions which are not in the native language.
- **Modular, standardized and good-practice approaches to stakeholder integration and project communication have their limits:** The limitations of a modular approach to stakeholder integration and project communication became obvious during the test events. Every project and every event is – naturally – different and features different participants with different needs, concerns and characters. Having a professional and experienced team on board, which is trained to present in front of a bigger audience and can radiate their charisma even in delicate situations are therefore at least as important as a waterproof preparation and the choice of the right communication tools. It essentially vindicates our toolkit approach that has at a higher level of abstraction to allow for project-specific concretisation of stakeholder integration and project communication measures.
- **Early communication events allow for inter-stakeholder networking:** Events such as a Town hall meeting are not only very helpful in establishing a dialogue between TSO and stakeholders, but they can also be a starting point for a discussion between other stakeholders – for the benefit of the project.