POSITION PAPER

# Recommendations on Transparency and Public Participation in the Context of Electricity Transmission Lines

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#### **Brief Summary**

This position paper by Germanwatch develops specific recommendations to the issue of public participation in the context of electricity transmission power lines. Public participation has become more and more important in policy making during the past years. Policy makers have reacted to the urgent need to enhance public participation in the field of power grids. New laws in this context, for example in Germany or at the European level, demonstrate this approach.

Our recommendations on public participation in the context of power grids are addressed to policy makers, transmission system operators, public authorities and stakeholders alike. We propose a five-step approach to public participation that helps to develop tailor-made solutions for public participation at different levels.

This paper moreover provides an insight into grid planning and permitting in Germany following the legal reforms of summer 2011 in the context of the energy transition. It describes how public participation is implemented in the different phases of the permit granting procedure, offering specific recommendations on how to further improve it. This refers to both an adjustment of existing laws as well as informal means of public participation, which should be implemented in addition to legal requirements.

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## 1 Introduction

The transformation towards much higher shares of renewable energy requires an alternative power grid to an energy system with a high share of centralized fossil fuel power plants. Newly installed renewable energy power plants are often located in different places and need to be connected to the power grid. Furthermore, the power grid is an important source of flexibility, which helps to balance variable renewable energies such as wind and solar power. The better different regions are connected—at the local, regional, national or even European level—the better the variable renewable energy can be transported to where it is actually needed and the better variability in energy consumption and production can be balanced. Other flexibility options to balance variable renewable energies are available such as demand-side-management or storage. All of these flexibility options should be taken into account to develop an optimal and cost-efficient model for renewable energy integration. As grids are a relatively cheap flexibility option, their enhanced deployment is an important precondition for the transition towards high shares of renewable energies.

Even though the energy transition in Germany is supported by the broad majority of German citizens, local opposition to new power lines has often been vocal in past years. Various initiatives have been created at the national level (e.g. Forum Netzintegration) or at the European level (e.g. Renewables Grid Initiative) to discuss among a variety of stakeholders the challenge of power grids in the context of the transition towards higher shares of renewable energies and possible trade-offs. Many actors have come to the conclusion that the public needs to become more closely involved at an earlier stage in the planning of new power grids. Furthermore, it has been acknowledged that environmental standards must not be undermined when building new power lines. Such conclusions can be found in the "European Grid Declaration"<sup>1</sup>, signed by NGOs and Transmission System Operators (TSOs), and in "Plan N"<sup>2</sup> signed by a broad range of stakeholders in Germany.

These conclusions are—at least to a certain extent—also reflected in political decisions at the national and European level. In the context of the 2011 energy transition in Germany, the parliament passed a law to accelerate permit granting procedures while enhancing public participation at all planning stages. These stages range from the determination of how many new power lines are needed to the plan approval procedure (*Netzausbaubeschleunigungsgesetz* – Acceleration Act).<sup>3</sup> Similar ideas have been implemented in the EU regulation on trans-European energy infrastructures which contains provisions on enhanced transparency and obligatory consultations before the start of formal planning procedures.<sup>4</sup> Both legal provisions share the assumption that better and earlier involvement of the public may help to speed up permit granting procedures. Experiences made in other infrastructure projects have shown that a lack of public participation may lead to a considerable delay in these procedures.

Even though it is generally acknowledged that a well designed public participation may help to increase the acceptability of new power lines, there is still little clarity among the stakeholders concerning the *implementation* of earlier and better involvement. Different

<sup>&</sup>lt;sup>1</sup> European Grid Declaration:www.renewables-grid.eu/activities/european-grid-declaration.html

<sup>&</sup>lt;sup>2</sup> Plan N: www.forum-netzintegration.de/123/. A follow-up version of this document shall be published by the end of the year.

<sup>&</sup>lt;sup>3</sup> Netzausbaubeschleunigungsgesetz: www.gesetze-im-internet.de/bundesrecht/nabeg/gesamt.pdf
<sup>4</sup> Regulation on guidelines for trans-European energy infrastructures:

www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:115:0039:0075:EN:PDF

actors have a different understanding of how this can be put into practice and what constitutes a "good" participatory process. However, since the 1960s, many experiences have already been made in other sectors and in the context of different infrastructure projects. Many scientific articles and practical guidelines, manuals or recommendations reflect these experiences.

The two discourses on the extension of power grids and on public participation in general have not been brought together systematically in scientific research—with the exception of only a few publications. Some research projects have been started to bridge this gap, but no final conclusions have been drawn so far.<sup>5</sup>

This publication contributes to the discussion on public participation in the context of power grids and makes some practical recommendations from an NGO perspective. It is based on scientific literature and manuals on public participation that have been written in a broader sense or about other specific sectors (e.g. transport). It also refers to the experiences made by Germanwatch in the grid debate at the national and EU level during the past two years. In 2012, Germanwatch published a study on the case of a specific power line in Thuringia, undertaken with Heinrich-Böll-Stiftung Thüringen and DAKT e.V.<sup>6</sup> During the past two years, Germanwatch has also conducted three workshops with a variety of stakeholders (i.e. citizen action groups, NGOs, public authorities, TSOs, researchers) to get a better understanding of the different positions and views on the subject.<sup>7</sup> As a member of the Renewables Grid Initiative (RGI), Germanwatch was also involved in discussions with other RGI members (TSOs and NGOs) on public participation, and in the preparation of the "European Grid Declaration on Transparency and Public Participation" and the "European Grid Report".<sup>8</sup>

This position paper starts with a definition of public participation (chapter 2) and the opportunities and challenges of public participation in the context of power grids (chapter 3). It only refers to procedural public participation (i.e. how the public and stakeholders are involved in decision-making procedures) and not to any models of financial participation. The next sections develop some general practical recommendations from an NGO perspective on how to address the challenges that have been mentioned (chapter 4) and a proposal for an approach to the preparation and implementation of public participation at different stages of the permit granting procedures of power grids (chapter 5). The last section deals with the example of grid planning and permit-granting procedures in Germany and develops some specific recommendations for the German context. Some experiences made in the context of this debate might be interesting for other countries as well.

Germanwatch looks forward to discussing these recommendations with other actors in order to develop a common understanding and to refine its proposals. Any comments on our position paper are very welcome.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> Project "Demoenergie" by KWI and IASS: www.kwi-nrw.de/home/projekt-108.html and project "Akzeptanz Netzausbau" (Acceptance of power grid expansion) by IZES

www.fg-umwelt.de/index.php?id=179

<sup>&</sup>lt;sup>6</sup> Study by DAKT e.V., Heinrich-Böll-Stiftung Thüringen and Germanwatch e.V.: www.germanwatch.org/de/download/4135.pdf

<sup>&</sup>lt;sup>7</sup> Two of these workshops were conducted in cooperation with IZES.

<sup>&</sup>lt;sup>8</sup> Second part of the European Grid Declaration:

www.renewables-grid.eu/fileadmin/user\_upload/Files\_RGI/European\_Grid\_Declaration\_2nd\_Part.pdf and European Grid Report: http://renewables-grid.eu/documents/eu-grid-report.html

<sup>&</sup>lt;sup>9</sup> I would like to thank Theresa Schneider and Ivan Scrase for their thoughtful and valuable comments on an earlier draft of this paper.

## **2** What is Public Participation?

Before explaining what is meant by public participation, it makes sense to address the question of why this topic has become increasingly significant in the political debate. During the past years, political decisions concerning large infrastructure projects, among other subjects, have been ever more contested by the broader public (Walter 2013). Top-down decisions are no longer necessarily accepted by citizens. In Germany, this is exemplified by the protests against the project to rebuild the central train station in Stuttgart (known as "Stuttgart 21"). This debate can be seen in the broader context of the transformation of representative democracy that started in the 1950s and 1960s when new forms of citizen protest entered the political arena and added a new element to democratic governance (Nolte 2011).

More often than in the past, the legitimacy of political decisions is put into question. On the one hand, the public criticizes the *processes* through which decisions are made. This is what is meant when talking about a lack of *input legitimacy*. On the other hand, the results of such processes are also put into question, which is then a lack of *output legitimacy*.

Public participation may help to overcome some of this criticism by helping to increase the legitimacy of political decisions both at the procedural and at the substantive level. If the process has been conducted in a transparent manner and if the public has had a chance to raise their concerns in a way which is relevant for the process, they may conclude that the process has been fair. A substantive reason for public participation is the fact the final decision may be improved by taking public concerns or knowledge into account, or possibly undermined by disregarding their input. There is also an instrumental argument for public participation that is often found in the political discourse: more transparent processes and better political decisions may also help to increase the acceptability of these decisions and facilitate their implementation. Important in this regard is the *early* participation. It is much less likely that participation increases legitimacy if people have the impression that they are consulted after the relevant decisions are made.

It is also important to recall the ethical reasons for transparency and public participation. Citizens have a right to voice their concerns on decisions that will affect their environment and quality of life. This is the principle behind the Aarhus Convention, which was signed in 1998 and ratified by the EU and its member states.<sup>10</sup> It establishes a number of citizens' rights on access to information, public participation and access to justice with regard to the environment.

Last but not least, public participation may have positive impacts beyond single issues. It may help to build up public trust in decision-makers such as local politicians or company representatives, create a better understanding for different opinions and enable different stakeholders or the unaligned public to become involved in political decision-making processes. One has to keep in mind, however, that new participatory elements very often favour the influence of better educated and higher income citizens. It has been shown that lower income and socially disadvantaged people are less involved (Böhnke 2011), so the influence of these groups consequently remains limited. The legitimacy of a participatory process may be undermined if it does not reflect the interests of all actors in society.

<sup>&</sup>lt;sup>10</sup> Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf

Hence, it is all the more important to address this issue by developing approaches to involve those who are difficult to reach.

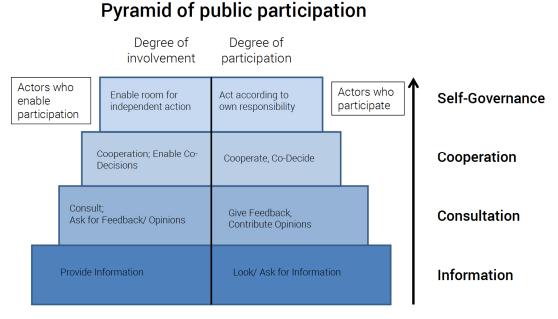
There are **various definitions of public participation**. These definitions refer to the following questions: *Who* participates? For *what kind of decision* does participation take place? What is the *influence* of those who participate?

Concerning the question of who participates, one can distinguish mainly between those who refer to the participation of citizens and hence the *unaligned public*, and those who refer to specific stakeholders such as environmental associations, unions, and so on (i.e. the *"organized public"*). In this position paper, we would like to refer to both groups: individual citizens and organized stakeholder groups.

Concerning the content of public participation, the majority of definitions refer to political decision-making processes and to (local, regional) planning decisions. We may differentiate between *formal* and *informal participation*. The former refers to those participatory processes that are legally required, whereas the latter refers to public participation that is not required by law and hence conducted on a voluntary basis. Both forms of public participation are often combined and closely linked. It is important, however, to link formal and informal methods so they may complement each other in a meaningful way.

In our *definition*, the term informal participation refers *only* to those processes that aim to involve the broader public in an organized and transparent process. It does not include all other kinds of influence that are inherent in political decision-making, such as lobbying by different stakeholders. This contribution to political decision-making can be characterized as informal as well. However, this form of political influence, which is very often more influential than broad participatory processes, goes beyond the scope of this paper and the discourse on public participation.

Many of these definitions differentiate between the level of influence by stakeholders or the unaligned public. One of the most famous classifications is Sherry Arnstein's ladder of participation (Arnstein 1969). According to Arnstein, the relevant criterion is the level of influence—she identifies eight different steps of the ladder ranging from non-participation to citizen control. On the basis of this approach, other models have been developed, among them the one by Lüttringhaus (2003) and Rau et al. (2012), which differentiates between four levels of participation, from information to consultation, cooperation and independent action or self-governance. Self-governance in this context means that the framework conditions may be set (e.g. by setting political targets), but that those who act in this context are free to implement measures to reach those targets. The model takes into consideration those actors who participate and those actors who enable participation.



#### Figure 1: Four levels of participation

Source: Rau et al (2012)

Many other authors differentiate between only **three levels of participation** ranging from *information* to *consultation* and *cooperation* (Bundeskanzleramt Österreich et al. 2011; Arbter 2005, Bundesministerium für Verkehr, Bau und Stadtentwicklung 2012).

The two forms of information and consultation can often be found in legal requirements on public participation with regards to the extension of the power grid (formal participation), for example, by certain transparency requirements or formal public consultations. It can be decided to go beyond formal legal requirements in terms of information and consultation (e.g. via additional information events, additional online information, additional consultations etc.) hence reaching the sphere of informal participation.

The level of cooperation in contrast mostly goes beyond the legal requirements of permit granting procedures for new transmission lines and hence refers mostly to informal participation.

Many authors state that participation only makes sense where there is a *certain degree for room to manoeuvre* (Nanz/Fritsche 2012). It is important that the concerns or suggestions of stakeholders are taken into account and addressed—either by changing the original decisions or certain details or by explaining why these concerns cannot be addressed. If there is no willingness to possibly change the outcome after a thorough analysis, it would make more sense to communicate the results of internal decisions. To conduct a participation process without any room for manoeuvre may create public opposition as people will give input and subsequently realize that their input had no added value or influence. It sends a clear signal that public opposition is not taken seriously. This easily leads to frustration and mistrust in those who conducted the process.

# **3 Opportunities and Challenges of Public Participation**

The opportunities and challenges of public participation have been described in many scientific articles and practical guidelines (e.g. Strategiegruppe Partizipation 2012, Nanz/Fritsche 2012). The general opportunities and challenges of public participation are similar for a variety of infrastructure projects, ranging from local projects, such as building a small windpark, to larger infrastructure projects such as new highways or grid infrastructure tures. At the same time, some specificities can be identified in the field of power grids which will be mentioned in this section.

## 3.1 **Opportunities**

What are the general opportunities and benefits of involving citizens or organized stakeholders at an early stage of project development? One may distinguish between substantive, instrumental and normative motivations for public participation (Stirling 2008: 268).

## 3.1.1 More Efficient, Creative and Feasible Solutions

Public participation may help decision-makers to increase their knowledge base and learn more about the local situation. Local stakeholders may have a better understanding of local circumstances and thus contribute new and innovative ideas. This may help to develop better solutions.

Both the Transmission System Operators (TSOs) and public authorities who take the decision about an application for a new transmission line may be provided with local and specific information on possible impacts of a new project. Local environmental NGOs very often have a good knowledge about the flora and fauna in the region. This knowledge can be invaluable in preparing the application file and the environmental impact assessment (EIA) for a project. Citizens from the region may also have innovative ideas about finding the optimal route for a new power line. Hence, public participation may help to generate more knowledge, especially at the local level, which could not be generated otherwise (e.g. by studying maps, etc.).

### 3.1.2 Solutions That Are Better Accepted

By using the various tools of public participation, decision-makers are provided with additional information about the values and preferences of the local stakeholders affected by a project. This may help to identify solutions that fit better to local preferences. Furthermore, obstacles for the implementation of a decision (e.g. building a new power line) may be identified beforehand and subsequently removed. If local citizens or NGOs have the chance to raise their concerns before a final decision has been taken and if their perspective is reflected, the chance of them accepting the final decision is much higher. At the same time, permit granting procedures may become faster and fewer complaints may be expected.

## 3.1.3 Solutions That Respect Citizens' Rights

Public participation may help to strengthen local democracy and the public's interest to become involved and play an active role instead of simply opposing new political projects.

A totally different situation arises when people have the opportunity to influence decisions that impact their living conditions.

Public participation, moreover, is a goal in itself. People have the right to information and to be involved in decisions that concern their environment. This rights-based approach is reflected in the Aarhus Convention and leads to specific requirements for involving the public in permit-granting procedures, strategic environmental assessments (SEA) or environmental impact assessments (EIA).

### 3.2 Challenges

There are also many challenges to be faced when implementing public participation. When these challenges are ignored, transparency and public participation may even raise the level of conflict instead of contributing to the identification of solutions that are more acceptable to the citizens concerned. This chapter names some of the challenges that may occur with regards to transmission grid projects. In order to minimize the challenges in the context of public participation, some success factors and practical recommendations to address these challenges are developed in chapter four.

#### 3.2.1 Lack of Trust and Transparency

In many earlier grid development projects, citizen action groups, local NGOs, public authorities and TSOs have stated that trustful working relations with each other were quite difficult. Once citizen action groups have the impression they cannot trust information given by the TSOs or public authority, further public participation is hindered. In the past, many decisions about new electricity lines have been taken behind closed doors in discussions between TSOs and public authorities. This has led to a high level of mistrust, which in many cases presents an obstacle to a meaningful process of public participation.

#### 3.2.2 Lack of Room to Manoeuvre

The frustration and opposition of local citizens may also be increased by a lack of flexibility in the results of a participatory process. If all decisions have been made already before public participation has started, this process will have no impact on the results. This leads necessarily to frustration. Hence, in this case it would be better to be transparent about this fact and to communicate the decisions and results that have been taken elsewhere to the local citizens and broader public. It would raise false expectations to set up a participative process and ask citizens for their opinion if decisions have already been made. Members of the public who have participated and invested their time to give input will not feel themselves taken seriously. Furthermore, it is quite probable that they will have no interest in participating again.

#### 3.2.3 Lack of Support by Internal/External Decision-Makers

Another fact that is relevant for the success of public participation is the support of decision-makers in this process. This does not just refer to public authorities or politicians, but rather to those who are making the decisions that are relevant to the participatory process. If this concerns an application by a TSO to a public authority, the relevant decisionmakers would be the top-level managers of this TSO. If this concerns the decision about an application that has been handed in, then the relevant decision-makers would be the top-level officials of the authority that makes the final decision on the application. If the decision-makers do not support the participative process and have not shown interest or willingness to take the results into account when making their decisions, then public participation will have no impact.

#### 3.2.4 People Do Not Get Involved

A general problem is that many people only become interested in a project once it has reached a high level of maturity and has become relatively concrete. At this stage, it is often more difficult to input and possibly change the plans as many decisions have already been made. When solutions have not been developed and planning procedures have not yet started, there is much more room to influence the outcome. At the same time, it is more difficult to motivate citizens to engage at a highly abstract stage. This has been described as the paradox of public participation (Universität Leipzig 2013).

high high low Problem Planning Decision Implementation Source: Universitiät Leipzig (2013; 60).

Figure 2: The paradox of public participation

This paradox can be identified in the field of grid planning. When the general need for grids is determined or during the spatial planning phase, local communities may not be directly affected by the grid plans. It is more difficult to reach out to the public and get feedback on these early plans. This issue has become relevant both in German grid planning and at the European level when a consultation about future projects of common interest (PCI) has been carried out.<sup>11</sup> Many citizens find it extremely difficult to contribute to this highly complex and abstract discussion. Furthermore, they do not understand what kind of information they can contribute and what exactly their influence could be. If they have the impression that their contribution has no influence or makes no difference, they will not be motivated to participate in a consultation.

<sup>&</sup>lt;sup>11</sup> These projects of Common Interest (PCI) are indentified in the framework of the EU regulation on Trans-European energy infrastructures, which was adopted in 2012. It aims at better connecting the electricity markets of EU member states by giving high priority to selected projects of European interest.

This challenge needs specific consideration. One idea could be to follow a two-way approach. On the one hand, planners could work with specialized stakeholder groups such as environmental NGOs or local authorities who are interested in becoming involved at a very early stage. These groups may also function as multipliers and provide links to the broader public. On the other hand, the broader public and "simple citizens" could also be addressed actively. It may be useful to focus on their specific knowledge and to elaborate the (non-technical) questions that they are able to answer.

#### 3.2.5 Lack of Preparation and Resources

In some cases, a process of public participation is undertaken because it is either required by law or because someone from the management of an organization sees this is a new trend to be tested. It may be unclear what to do with the results of such a process. It may also turn out that insufficient personnel has been allocated, or that the personnel is not experienced in public participation. An inadequately prepared process may lead to high levels of frustration, both in those who carry it out and those who participate.

The use of power grids is a highly technical issue. For this reason, many local citizens, NGOs and local authorities do not have the necessary knowledge to provide meaningful input when they are confronted with the topic. Very often, they lack the necessary resources (time, knowledge) to become involved. It is also clear that the public is not able to fully understand every detail of this highly complex matter, unlike the engineers who are experienced and have a very specific background.

Those responsible for executing the consultations need to find ways to address this complex issue in a non-technical way and should attempt to learn from the target group. In this way, they could identify underlying key questions or parameters that define the outcome of grid planning. There are ways of doing this that can lead to new and valuable insights. The public are the experts when it comes to knowing what is important to them and to their communities, knowing about their local environments, knowing who has local influence, and so on. The very technical aspects of grid planning, however, are less appropriate for public participation.

#### 3.2.6 Lack of Time

Both in Germany and at the EU level, policy-makers have restructured permit-granting procedures for the transmission grid. The aim of policy-makers was to speed up the decision-making process and at the same time to enhance public participation. It is assumed that if the public's concerns and opinions have been taken into account at an early stage, then this will help to speed up the later stages of the decision-making process. At the same time, this demand also presents a challenge because public participation requires additional resources, time being one of them. The literature often stresses, however, that additional time invested in public participation in the early phases of a project may well save lengthy discussions and delays during the implementation phase.

# 4 Success Factors and Practical Recommendations

The literature on public participation in different contexts has identified several preconditions that need to be in place in order to establish a successful process. Many practical cases have shown that disregarding these preconditions very often leads to a failure of public participation. Decisions taken may then create even more resistance. Frustration among decision-makers and citizens may grow.

This chapter provides a short overview about the most important success factors and applies these to the context of grid projects. Furthermore, it develops some practical recommendations for TSOs and public authorities.

### 4.1 Transparency

As shown in figure 1, transparency is a basic precondition for all forms of public participation. In the context of transmission grid projects, some challenges arise in terms of transparency: formal permit granting procedures do not always fulfil the information needs of citizens and other stakeholders. It is sometimes difficult to identify what kind of (additional) information is needed when and by whom to enable organized stakeholders to better understand the process and to participate in a meaningful way. Furthermore, both the permit granting procedures and the matter at hand—the transmission grid—are highly complex matters. Many citizens and local initiatives do not have the resources and time to read and understand complex and comprehensive material about grid projects. Thus, comprehensive, understandable and accessible information is needed to enable a high level of transparency.

If a high level of transparency is implemented, the public, stakeholders and independent experts are expected to be better facilitated to understand who makes key decisions and on what basis, and thus have access to the information and opportunities they need to make informed and effectively input and challenge those decisions. Furthermore, transparency helps to create trust and to establish a fair decision-making process.

Recommendations:

- Make information easily accessible, whenever possible on the Internet, and identify other suitable communication channels.
- Spread information proactively, for example, in newspapers, social media, and so on.
- Make the process transparent: provide an overview, announce consultations, events and so on well in advance (at least four to six weeks prior to the event).
- Provide transparency about the matter at hand: status of the project, costs (to whom), benefits (to whom), design choices, involved actors, and environmental, economic and health impacts.
- Provide full information on grid projects (full application with maps and tables, background studies, etc.) as well as understandable and comprehensive summaries, including maps and pictures.

- Provide differentiated information: different stakeholder groups have different information needs which should be addressed using different formats (short summaries but also full documentation for those who are interested).
- Provide full information about public participation in the context of the project: what kind of participation is foreseen, when can stakeholders become involved, what are the results of participation, what difference will participating make, why should one participate and what can be achieved by it?

### 4.2 Room to Manoeuvre and Early Involvement

As mentioned above, it is very important that there is a certain level of room to manoeuvre and that the relevant decisions have not already been taken.

In many cases, there is still some room for flexibility. It is important to state clearly what issues can still be discussed and what issues have already been decided. Stakeholders and the broader public sometimes have very high expectations concerning the level of their engagement that do not reflect the possibilities of participation. This could create frustration among those actors who have contributed to a participatory process and might also make a trustful and continuous cooperation difficult.

As mentioned in the previous chapter, it is difficult to motivate the public to give its input at an early stage when fewer issues are at stake because many people are not yet affected by these. The more concrete the planning for a new power line becomes, the more local populations are affected and interested in becoming involved. At the same time, some decisions may already have been taken beforehand that can no longer be changed at this stage. It is important therefore to think about how to get people involved at an early stage. An important motivation for citizens is to be able to voice their arguments and have them taken into account. Very often at the broader level, it is not clear to citizens if and how their input influences the high-level decisions. This lowers their willingness to become involved.

#### Recommendations:

- Involve stakeholders and the broader public at the earliest stage possible when their arguments can still be taken into account.
- Communicate clearly the room for manoeuvre. In which aspects can contributions be taken into account? Where exactly is there still room for flexibility? Which decisions have already been taken and by whom?
- Communicate clearly what can no longer be influenced so as to avoid raising false expectations.
- Develop strategies on how to gather feedback from the public on general questions where public outreach may be difficult.

### 4.3 Publicity

Publicity is closely linked to transparency. However, this refers more to the participation process than to the project or permit-granting procedures. It is important to make sure that the broader public is able to retrace what has been discussed with selected stake-holders and to understand the results of the process. This is especially important if public participation takes place in smaller working groups, but also applies to larger information events, where it is important that those who were unable to participate in such meetings are provided with an insight into what has been discussed or decided.

#### Recommendations:

- Make sure that the results of meetings of permanent working groups or expert meetings are made available to the broader public, for example, by putting presentations and minutes on the Internet and providing information about who took part in these discussions.
- Make sure that meetings held to address the broader public are announced well in advance and consider opportunities to broadcast these events via web stream.

## 4.4 Fairness and Inclusiveness

Mutual trust is an important precondition for public participation and this trust has to be built up through continuous dialogue and cooperation. An open-minded attitude of all participants is the most important factor. The principle of participation and fairness needs to be taken seriously. Once conflicts have already arisen, it may help to engage a professional facilitator or mediator who is able to ensure the process is managed in a fair and professional way.

Fairness also means that everyone who is affected by a decision has the chance to raise his/her concerns. For this reason, it is important to identify all relevant stakeholder groups and groups of the society who are usually less involved (hard-to-reach groups such as young families, migrants, etc.). Concepts should be developed on how to actively involve these groups and to enable their participation.

#### Recommendations:

- Make sure that all actors participate with an open mind and are willing to take the process and all partners involved seriously.
- Consult an independent moderator/facilitator if conflicts have already arisen.
- Stakeholder mapping.
- Enable the participation of all actors concerned, for example, by using a dedicated concept.

### 4.5 Continuous Dialogue and Feedback to Create Mutual Trust

In many cases, stakeholders or the affected local population may still have the impression that their views and positions have not been taken into account, despite the fact that they have participated in a public consultation or similar measure. In the same way, TSOs may not understand why the public do not agree to their plans, even when some of their suggestions have been taken into account. The different actors concerned may not fully understand each other's attitudes and motives. Without the opportunity for open and continuous dialogue, there is little chance of establishing mutual trust.

Hence, it is necessary to start a real dialogue between the different actors concerned and to create opportunities for their arguments and reasoning to be exchanged and discussed. Participants of public events (TSOs, authorities, stakeholders) would benefit greatly from opportunities to verify the information they receive and to attend follow-up meetings to continue discussions and eventually develop common solutions. Another idea to enable a continuous dialogue would be to create smaller expert groups who discuss specific topics in more detail and who later present the results to the broader public.

It is crucial to give feedback to those who provided an active input. Feedback can be given in many different forms, for example, in the context of public events, written statements or reports.

#### Recommendations:

- Set up additional meetings or hearings beyond the legal framework, which often does not foresee a dialogue between the actors concerned.
- Make use of different tools and formats that enable a continuous dialogue between different stakeholders.
- Consider setting up permanent working groups or similar structures (e.g. a series of stakeholder workshops) that enable a depended exchange of different views.
- Give feedback to stakeholders to show that all arguments and comments have been considered carefully before taking the final decision. Explain which points have been addressed and how, and which have not been addressed, and why.
- When organizing formal hearings or events, consider holding follow-up events where discussions can be continued and feedback given to participants, whether their arguments have been taken into account or not.

### 4.6 Professional Organization of Public Participation

There is no one-size-fits-all approach to public participation. Each case is individual and therefore needs a tailored approach. There is a big difference between involving the broader public in a specific project, for example, planning a 50 km power line, and the general need for new national or even European power lines (e.g. the Europe-wide Ten-Years-Network Development Plan developed by European TSOs every two years). To set up this kind of tailored process of public participation, thorough and early planning and the use of professional project management tools is required. This includes a roadmap about the timing of public participation in relation to the formal decision-making procedures. A carefully planned process should facilitate a smooth implementation of public participation and may help to reduce frustration levels, both for those who organize the process and for those who participate. A concrete proposal on how to implement public participation is developed in the next chapter.

It is clear that dedicated resources are needed to plan and implement public participation processes. Public authorities and TSOs need staff who are experienced in public participation. It is challenging to accelerate decision-making procedures and at the same time have sufficient time for public participation. However, it is assumed that such an investment will be beneficial at the end of the process.

#### Recommendations:

- Plan sufficient resources (personnel, time) for public participation.
- Develop a concept of public participation that specifies the aim, procedure, tools and timeline of the envisaged public participation and make this information accessible.

## 4.7 New Power Grid for the Future

It has turned out that the question of the need for grids is crucial in the context of many grid projects. Local citizens would like to know why new power lines are being planned and sometimes question the need for a new power line. Many local citizen groups or NGOs are only willing to support new power lines that enable the transformation towards more renewable energies. New power lines for conventional power plants that pose a risk to society are very often rejected (e.g. due to the climate change risks of new coal power plants or the nuclear risks of nuclear power plants). In general, the extension of the power grid should enable the integration of renewable energies. At the same time, due to ecological, environmental (e.g. impacts on landscapes) and economic reasons, extension of the grid should be limited to those lines that are absolutely necessary for balancing electricity production and consumption, especially with regards to variable renewable energies. In any case, transparency is needed concerning the purpose of new power lines.

#### Recommendations:

- Provide transparency about the reasons for new power lines (e.g. information about underlying energy scenarios, actual load flow data and forecasts, assumptions about the market design).
- Consult and involve the public during the process of determining the need for grids (e.g. consultation of underlying energy scenarios and grid development plans).

## **5** Five General Steps on How to Implement Public Participation

Many scientific articles and practitioners in public participation have stressed the fact that each case is unique. There is no one-size-fits-all solution. Some methods of public participation may help to increase the acceptability of a project in one case, but create opposition in another.

TSOs or public authorities aiming to involve the public must develop a tailored solution and choose from a broad range of different methods. In order to find the right methods and procedures, it helps to apply to following five steps.

One additional tool that might help to find adequate solutions and implement these five steps is a steering group. This group represents a microcosm of all relevant actors and helps to analyze the starting point, to develop a tailored concept of participation and may give guidance during the implementation of the measures chosen. Furthermore, this group already represents a form of participation in itself—many solutions that are developed within this steering group may be the basis for solutions supported by the broader range of stakeholders.

#### Step 1: Analyze the starting situation

The first step consists of a thorough analysis of the situation at hand. It forms the basis for defining the next steps and helps to find an adequate method of public participation.

It is very important to have clarity on the "room for manoeuvre" and purpose of participation. This should be known by TSOs, authorities and the public/ stakeholders in order to prevent unrealistic expectations. False expectations could lead to frustration and endanger the whole process.

It may be useful to present the preliminary results to the "Steering Group" mentioned above and ask for feedback in order to have additional input and carry out a reality check.

The following questions should be taken into account when analyzing the situation.

#### Aim of public participation

- What are the results of the process? How can they be taken into account? What is a valuable contribution by the public/ stakeholders?
- What is the "room for manoeuvre"? Which facts and figures are "non-negotiable"? Is there any flexibility, and if so, to which degree?
- How can the public/ stakeholders influence the process?
- o To what degree are the results of the participation binding for decision-makers?
- Who will make the final decision? And on what basis?
- Framework conditions of the project and public participation linked to it
  - What are the legal requirements in terms of transparency and public participation?
  - o Is there room for manoeuvre concerning additional (informal) participation?
  - What is the status of the project?

- What is the schedule? What are the deadlines for decisions? How and when could the results of participation be fed into the formal process?
- How much time is available for public participation?
- What kinds of resources are available: Time? Money? Personnel? Technical equipment, e.g. internet?
- Stakeholders who need to be addressed/ included in the process
  - Who are the relevant decision-makers? Who has influence on the project?
  - Who can foster or hinder a decision if he/she has not been consulted?
  - Who has been involved in similar processes in the past? Who has not been involved, but should be this time?
  - Who are the relevant experts/stakeholders (e.g. NGOs, scientists, authorities etc.) Who has knowledge of the project/issue?
  - Who are the people affected by a project?
  - Are there groups of people who are difficult to reach?

# **Step 2: Develop a tailored concept for transparency and public participation**

The next step consists of preparing a concept for public participation that answers the questions mentioned in step one and details how the aims of participation can be reached. This concept has different aims. As it specifies the purpose of participation, it is already a tool to communicate this purpose to policy-makers, stakeholders and the public. Hence, it should be considered whether to make this concept, or a summary of it, publicly available.

Without the support of decision-makers (i.e. hierarchy within TSOs, but also local, regional and national authorities), a participatory process might easily fail. It is very important to discuss the concept with decision-makers and to gain their support and commitment to taking the results of the participation into account.

These topics should be included in the concept for public participation:

- Which stakeholders should be addressed? The public? Key stakeholders? Specific target groups? Or a combination of some or all of these?
- Aim, framework conditions and resources (see step 1)?
- Intensity of participation: information, consultation, cooperation? Or a combination of different forms of participation?
- Methods of public participation.
- Timing.
- What is the link between formal and informal forms of public participation and how can these be brought together?

The concept of public participation should provide all the information necessary for a professional project management and process design, including resources, work packages, milestones and timing.

As mentioned, there are many different methods to involve the public. Many of them have been applied in different circumstances. This position paper provides a selection of some of these methods. There is an overlap between the different levels of participation and the methods applied. For example, a Citizen Assembly can be a pure "information event", but it could also be used to collect feedback and information from the audience and hence would be classified as "consultation event". These methods can be differentiated according to different criteria: how many people are involved (small or large groups of people?); how are the participants chosen and/or addressed (participation by chance or selected participants, broader public or specific stakeholder groups?), what resources are needed and what form of communication is taking place (listening, articulation of interests, negotiation, exchange of arguments, etc.)?

The method can also be differentiated according to the function it has and how much influence the results of participation have on the outcome of the decisions that need to be taken. Some tools for public participation are mentioned below, classified according to their function for information, consultation or cooperation. The annex provides links to useful websites with more information on these methods and how to implement them. The toolbox of the international association on public participation provides a good summary of these methods.<sup>12</sup>

#### Information

- Posting / Announcement
- o Mailing
- o Exhibition
- o Road-show
- o Citizens' assembly
- o Press conference
- Newspaper advertisement
- o Question time for local residents
- o Field office
- o Expert panel
- o Hotline

#### Consultation

- Written consultation (possibly online)
- o In-person surveys, personal interviews
- Question time for local residents
- o Citizens' assembly, Town Hall meeting
- Focus groups
- o Consensus conferences
- o World café
- Cooperation
  - Permanent working groups/ ongoing advisory groups
  - o Citizens' jury
  - o Wisdom-council

<sup>&</sup>lt;sup>12</sup> Toolbox on public participation by the International Association for Public Participation: www.iap2.org/associations/4748/files/06Dec\_Toolbox.pdf

- Consensus conference
- o Planning cell, citizens' report
- o Round table
- Focus groups

#### Step3: Implement the identified measures

The next step is the implementation of the concept of public participation. This is best carried out by professional project and process management. It is important to make sure that the resources needed are made available.

When it comes to highly controversial projects, but also when new methods and tools are tested, it might be helpful to engage a professional process facilitator. This person may guarantee a neutral approach and help to conduct difficult discussions.

In general, it is more difficult to carry out informal public participation because the rules of procedures, aims, and so on, are not defined by legal provisions. In this case, it is very important to agree on the mode of decision-making and on the rights and responsibilities of all participants. When implementing new tools and informal forms of public participation, a professional moderator familiar with these tools may prove helpful as well. When working with smaller groups, the broader public needs to be informed about the procedures and results.

#### **Step 4: Communicate results**

After public participation has been carried out, the results need to be communicated to the broader public. Feedback to all participants is very important. The results of a public participation could be communicated at a final conference or public event. Furthermore, they should be published on the Internet and communicated using other means (e.g. mailings). When explaining the final decision, it is constructive to also communicate how public input has influenced this decision. In this way, the broader public and those who participated are better able to understand the outcome.

### Step 5: Monitor and evaluate the process

An evaluation of the process is beneficial in that it enables future processes to be built on the experiences made. There are different forms of documentation: internal documentation, documentation by independent experts or documentation by participants of the process. Involving the participants of the process may help to create joint learning, and the lessons learned may be taken into account by all actors during the next public participation.

### Additional tool: permanent steering group

As mentioned above, it may be useful to create a steering group that accompanies the participatory process from start to . This may help to establish the concept for participation as well as to monitor and evaluate the process afterwards.

The steering group should consist of all relevant stakeholders. For grid development projects, this means representatives from TSOs, public authorities, NGOs, local action groups, non-organised representatives of the local communities affected by a project, scientists and/or dedicated experts, and possibly energy producers and consumers. This group of stakeholders may help to identify answers to key questions. What are the key issues? Whose opinion needs to be taken into account? Who has valuable knowledge? Who will be affected and therefore has rights? Who is a potential ally or opponent in the process? The pilot group provides the necessary expertise and thus supports the facilitator/moderator of a participatory process.

Different steering groups make sense in different settings. The selection of individuals for this group is an important and sensitive issue. In general, all the relevant interests should be represented at the table. The steering group is no substitute for public participation, but rather a means of making it more effective. Transparency of the steering group (who are the members and what has been discussed?) is also important to avoid public mistrust.

# 6 Case Study: Public Participation and Grid Planning in Germany

## 6.1 Legal Framework

Grid planning in Germany has been reformed in the context of the decisions made in summer 2011 on energy transition. Policy-makers were aware of the fact that the phaseout of nuclear power and the transition towards renewable energies would also require a transformation and extension of the power grid. They came to the conclusion that it was necessary to accelerate the power grid extension. However, as they were aware that new power lines could lead to public opposition, they proposed to enhance public participation and to get people involved much earlier than in the past.

In the past, permit granting of new high-voltage power lines was organized in two steps. First, the spatial planning procedure was undertaken to identify an appropriate corridor. Second, the plan approval procedure ("Planfeststellungsverfahren") was carried out and aimed at approving a precise plan of where the new power line should be built. A study by Germanwatch on a power line project in Thuringia (Germanwatch 2012) has shown that citizens criticized different aspects of the existing procedures: they did not feel they had access to all the relevant information (lack of transparency); they also felt they did not have the chance to express and discuss their views with the TSO (lack of continuous dialogue). It turned out that the formal permit granting procedures did not foresee a sufficient level of transparency and public participation, and many citizens and local politicians subsequently protested against this project. Another challenge was that the public questioned the need for the power line.

Some of these critical points were addressed in 2011 by the newly established legal framework. Public participation is initiated as soon as the need for grids is discussed, and is established by law. Enhanced public participation is also foreseen in the new spatial planning procedures (Federal Sector Planning – *Bundesfachplanung*) and plan approval procedures (*Planfeststellungsverfahren*). As described in figure 3, the newly established legal framework consists of five phases. These phases are explained in more detail in table 1 on page 28 where specific recommendations are developed as well.



Figure 3: Grid Expansion in Five Major Steps



The procedure to identify the need for grids is laid down in §12a-f of the German Energy Act (ENWG- *Energiewirtschaftsgesetz*). It starts with a draft of three future energy scenarios (the so-called **scenario framework** or **energy scenarios**) with a time frame of ten to twenty years, which are developed annually by the four German TSOs (**step 1**). These scenarios contain information about the forecasted installed capacity of fossil and renewable energy in Germany. The German regulator BNetzA carries out a public consultation before signing off the scenario framework. The first scenario framework was changed after the public consultation and a modified version was approved in December 2011. A new scenario framework is prepared, consulted and signed on an annual basis.

The next step (step 2) consists of developing the national network development plan. The four German TSOs have developed a new methodology to produce this plan. Based on the approved energy scenarios, TSOs localize both fossil and renewable generation capacity and carry out a market study, which results in the assumed amount of energy produced at each power generation unit. Based on this result, TSOs carry out different grid analyses with the intention to build a power grid with no bottlenecks. As a result, they identify which nodes of the power grid are overburdened and develop measures to address these shortcomings. Such measures might be the proposal to strengthen an existing power line, or to build a new power line between two nodes of the grid that have not been connected. The proposal for a national network development plan consists of a report that explains the methodology and general results, including maps containing information on where existing power lines need to be upgraded and where new power lines need to be built. A detailed annex contains further information on each single project envisaged. Both documents are published on the newly created website www.netzentwicklungsplan.de. The TSOs are obliged to carry out a public consultation of their draft network development plan. Afterwards, they adapt their plan and hand it over to the regulator who carries out a second public consultation and possibly changes the TSOs draft grid development plan before signing it. The first national network development plan was approved by the Bundesnetzagentur in December 2012.

The regulator carries out a Strategic Environmental Assessment (SEA) of the draft network development plan and prepares an environmental report. The draft environmental report is also part of the second consultation of the network development plan carried out by the Bundesnetzagentur.

As a next step (**step 3**), a formal law that establishes the need for grids for the coming ten years is prepared (*Bundesbedarfsplan-Gesetz*/**Federal Requirements Plan**). This law is based on the approved national network development plan. It is voted on by the German parliament. This happened for the first time in spring 2013. This law forms the basis of the permit granting procedures of single grid projects. TSOs do not have to prove the necessity for these projects within the permit-granting procedures as this has been evaluated through the procedure described so far.

The next two steps refer to the permit granting procedure of single projects of new transregional power lines. They are defined in the newly established Acceleration Act (NABEG-*Netzausbaubeschleunigungsgesetz*). This new law has shifted the responsibility for approval of new transregional power lines to the federal regulator (*Bundesnetzagentur* – BnetzA); it has also introduced fixed timelines for the permit-granting procedure and established new rules to increase transparency and enhance public participation.

Step 4 refers to spatial planning (Bundesfachplanung/Federal Sector Planning) and aims to define a preferred route corridor (width 500-1000m). The TSOs prepare an application which lays down their preferences as well as reasonable alternatives to this route corridor. Once their application has been received by the BNetzA, a public application conference is organized to discuss open questions. This conference is also the public scoping event for an SEA and carried out by the regulator. The event should be announced in the Internet as well as in public newspapers. Based on the results of the application conference, BNetzA specifies which additional documentation is needed by TSOs before the application can be considered final. Once all documents have been handed in, a public consultation is carried out on the application file (written consultation and hearing). The BNetzA must issue a final decision on the application within a 6-month period. Identification of the route corridor of a width of 500-1000m is compulsory for the next step: the plan approval procedure. Time limits apply once the application and the finalized application have been handed in by the TSO. Both the application conference and the public consultation must be carried out within a close time frame. Not much time is left to deal with conflictual questions or to involve the broader public to identify common solutions.

The last step consists of the plan approval procedure (**step 5** – *Planfeststellungsver-fahren*). The TSO hands in the proposal for the exact route of a grid project. Again, the regulator carries out a public application conference to determine the scope of the application. This conference is also considered as the scoping event for the EIA (which may only deal with issues that have not been dealt with in the previous SEA). Once the finalized application has been handed in by the TSO and additional documentation added, the BNetzA carries out a consultation of public authorities, associations and the population directly affected by the project (written procedure and hearing). The relevant documents are published on the Internet as well as at the main office of the BNetzA. The plan approval by BNetzA allows the TSO to start building the new grid development project.

An important challenge is rooted in the new laws. Decision-makers intended to speed up permit granting and enhance public participation at the same time. They introduced fixed timelines for some phases of the permit granting procedures. Hence, the time frame for formal public participation is quite short in some decisive phases of the procedure (i.e. the Federal Sector Planning). It might become very difficult to solve controversial discussions within the given timeframes. That is why it seems very important to carry out additional consultations and to involve citizens before the start of formal permit granting procedures. Formal public participation needs to be complemented by other forms of early and informal participation. Despite some promising elements of the new legal framework, it still remains to be seen how they will be implemented in practice and how the contradiction between fast procedures and enhanced public participation can be solved. A revision of the legal framework with regards to some of the time frames of specific phases (e.g. six months for the Federal Sector Planning) and more clarity on how to implement the public participation foreseen in NABEG seems reasonable.

### 6.2 Preliminary Conclusions from an NGO Perspective

The following conclusions from an NGO perspective are based on the experiences made by Germanwatch during the last two years when the new legislative framework was applied for the first time. They mainly refer to the process and public participation rather than to the content of this process. Germanwatch has actively provided input to the different consultations (on the scenario framework and on the national network development plans) and has actively participated in various public events. Germanwatch positions itself on the content of the scenario framework, and the network development plans can be found at our website.<sup>13</sup> This section deals with the two different phases of grid planning in Germany: need determination and the permit granting procedure (spatial planning and plan approval procedures).

#### **Need determination**

It is an important step forward that the broader public has already been consulted at such an early phase as need determination (scenario framework, network development plan, federal requirements plan). The regulator BNetzA and TSOs have published several documents and established two websites which increase the transparency of the current approach of grid planning in Germany.<sup>14</sup> Several consultations were carried out in this context as foreseen by the legal framework. Furthermore, both TSOs and the regulators have organized a series of workshops and information events in different regions beyond legal requirements in order to inform stakeholders and the broader public about grid development. Many stakeholders and citizens gave input to the different stages and documents such as the scenario framework and network development plans.

However, it was felt by many stakeholders that their concerns have not been taken into consideration properly. After the first round of consultations of the network development plan, the TSOs published a second draft which consisted of more or less the same approach and results. They explained why the different proposals could not be taken into account, but did not test the different approaches that reflected some of the most vocal concerns by stakeholders and the broader public. This may be explained by the fact that the time frame in which the TSOs reviewed their proposals was very short. But the public felt that their input did not have any impact, which led to frustration and may lead to unwillingness to contribute in the future. It might be helpful to extend the time frame from annual consultations to consultations every two years. In this case, a more thorough

<sup>&</sup>lt;sup>13</sup> www.germanwatch.org/de/6936 (Scenario Framework 2014), www.germanwatch.org/de/5105 (Network Development Plan 2013), https://germanwatch.org/de/5105 (Scenario Framework 2013), www.germanwatch.org/de/4762 (Network Development Plan 2012)

<sup>&</sup>lt;sup>14</sup> www.netzentwicklungsplan.de and www.netzausbau.de

analysis of suggestions by the public and new approaches should be tested by TSOs and BNetzA. A first step in this direction was a slight adaption of the methodology by BNetzA when it approved the first draft network development plan. Furthermore, more transparency is needed in terms of methodology and the market model that is used by TSOs.

#### Permit granting procedures (Federal Sector Planning and Plan Approval)

It is still too early to properly evaluate the new legal framework as it has not yet been implemented on the ground. The first project applications to define route corridors for single grid development projects are expected to be handed in by early 2014. In general, it can be concluded that the new legal framework (NABEG) provides more opportunities for public participation and enhances the transparency of the process. At the same time, given time frames will make a thorough public participation very difficult. BNetzA has to decide within six months about an application by a TSO. If the broader public or stakeholders have serious concerns and question the application, it may be very difficult to enter a process that helps to take their suggestions and proposals into consideration and possibly adapt the project proposal. Hence, it is all the more important to involve and inform the public sufficiently in advance before a project proposal is officially handed in so that enough time is available to deal with open questions and suggestions. This is all the more important as the results concerning the route corridor that are defined within the Federal Sector Planning are of a binding nature. The width of a route corridor of only 500-1000m leaves little room for alternatives and new options during the plan approval procedure. The Federal Sector Planning is a crucial phase as the plans for a project become very concrete and cannot be changed at a later stage.

It is important to develop additional forms of informal participation that go beyond legal requirements and to link them properly to the formal processes. The early preparation of a stakeholder consultation concept and roadmaps on public participation may be a very useful step. At the same time, the tools for public participation could be specified in NA-BEG (e.g. the right to speak for the broader public at the application conferences on which the law remains silent so far).

Table 1 contains more detailed information about each step and develops recommendations on how to improve public participation at each step by adding an element of informal participation to the formal participation required by law.

Phase	Legal Basis	Formal public participation: Legal requirements	Specific requirements on public participation	Additional recommendations by Germanwatch on addi- tional informal public participation
Need for grids				
Scenario Framework	§12a ENWG	Annually: TSOs develop draft of three energy scenarios for the next 10-20 years. Regulator carries out a public consultation on these scenarios. Regulator takes these sce- narios into account when giving final approval.	Announcement of public consultation on the Internet at: www.netzausbau.de The consultation period is 6 weeks [no time frame prescribed in ENWG].	<ul> <li>Regulator</li> <li>Perform stakeholder mapping to identify relevant stakeholders for discussions about scenario framework</li> <li>Maintain continuous dialogue with stakeholders and the public on assumptions, sensitivities, e.g. in the format of dedicated workshops.</li> <li>Consider permanent working group on methodology and assumptions in order to organize a continuous dialogue and to take societal concerns into account.</li> <li>TSOs</li> <li>Provide transparency about assumptions and methodology</li> <li>Perform stakeholder mapping to identify relevant stakeholders for discussions about scenario framework</li> <li>Conduct stakeholder workshops to get feedback/input on assumptions and methodology before draft proposal is developed</li> </ul>
National Net- work Develop- ment Plan	§12b ENWG	Annually: TSOs draft a joint network development plan on the basis of the energy scenar- ios and conduct a public consultation on this first draft, possibly amend it.	Announcement of consultation on the internet at: www.netzentwicklungsplan.de Consultation period: 6 weeks.	<ul> <li>TSOs</li> <li>Announce public consultation early in advance (i.e. 4-6 weeks)</li> <li>Carry out public information events to explain and inform about procedures and methodology</li> <li>Implement a series of expert workshops with stakeholders (experts, NGOs, DSOs, etc.) throughout the year to take further input and considerations into account</li> </ul>

#### Table 1: Formal and informal public participation in German grid planning procedures and additional recommendations

				<ul> <li>Consider to set up a permanent Steering Group (based on a thorough selection of stakeholders)</li> <li>Regulator/ legal framework</li> <li>Allow enough time between first and second NDP draft to allow for a thorough evaluation of contributions to the consultation, and possibly amend second NDP draft accordingly</li> </ul>
	§12c ENWG	Annually: Regulator carries out a second public consultation on the amended network development plan and its evaluation criteria and ap- proves network develop- ment plan after considera- tion.	Announcement of consultation on the Internet at: www.netzausbau.de Access to documents via Internet and in print at the main office of the regulator. Consultation period: 8 weeks.	<ul> <li>Regulator</li> <li>Announce public consultation early in advance (i.e. 4-6 weeks)</li> <li>Carry out public information events to explain and inform about procedures and methodology</li> <li>Implement a series of workshops with stakeholders (experts, NGOs, TSOs, etc.) throughout the year to take further input and considerations into account</li> <li>Consider set up of permanent Steering Group (based on thorough selection of stakeholders)</li> </ul>
SEA	§12c ENWG/ UVP-G	Regulator carries out a Strategic Environmental Assessment (SEA) for the Federal Requirements Plan (whenever such a plan shall be adopted – at least every three years). A parallel pub- lic consultation on the draft environmental report is carried out.	The relevant law leaves it open if scoping with public authorities and associations is carried out in writing or in a meeting. In 2012, a scoping conference was held for public authorities and associations. In 2013 a written procedure was conducted. The general public does not have access. Later the public is consulted about the draft environmental report. Access to documents via Internet and in print at the main office of the regulator. Consultation period: 8 weeks. Announcement of consultation on the Internet at: www.netzausbau.de	<ul> <li>Regulator:</li> <li>Hold a public scoping conference</li> <li>Announce public consultation early in advance (i.e. 4-6 weeks)</li> <li>Carry out public information events to explain and inform about procedures and methodology before consultation starts</li> <li>Implement a series of workshops with relevant stakeholders (experts, NGOs, TSOs, etc.) throughout the year to take further input and considerations into account</li> <li>Consider set up of permanent Steering Group (based on thorough selection of stakeholders)</li> </ul>

Phase	Legal Basis	Formal public participation: Legal requirements	Specific requirements on public participation	Additional recommendations by Germanwatch on addi- tional informal public participation
Federal Re- quirements Plan	§12e ENWG	At least every three years: On the basis of the ap- proved network develop- ment plan, the Ministry of Economics prepares a draft law on a federal require- ments plan. This law needs parliamentary approval.	/	Ministry of Economics carried out an informal participation of economic associations/TSOs. To increase transparency, however, such a consultation should be made in public. NGOs should be actively invited to provide feedback.
Spatial Planning: Route Corridors		Only refers to supra-regional projects		
Route Corridors		TSO prepares application for the route corridor (width: 500-1000m) in the frame- work of the federal sector planning procedure. Informal exchange between the governments of the German <i>Länder</i> , the regula- tor and TSOs.	No legal time frames. In 2012/2013, regulator has held a con- ference on methodologies for the federal sector planning with TSOs and represen- tatives of the federal states. The meth- odology shall help to define the route corridors. Based on these discussions, the regula- tor has issued guidelines on the Federal Sector Planning (see www.netzausbau.de). TSOs intend to carry out regional confer- ences with regional policy makers and stakeholders.	<ul> <li>No time frames or legal obligations for public participation exist for this phase, which is of vital importance, because fundamental decisions are made (which regions will be affected). Furthermore, the result will be a route corridor of only 500-1000m width so that not much flexibility is left for the plan approval procedure in the next step. Hence public participation and transparency on how criteria and methodology are developed, and involve additional stakeholders, such as NGOS</li> <li>Provide transparency regarding decisions made (by whom, when) and the criteria upon which these were based.</li> <li>Set up stakeholder working group/ steering group or organize workshops on criteria as well as spatial planning procedures</li> <li>Perform stakeholder mapping for route corridors</li> </ul>

			<ul> <li>TSOs</li> <li>Perform stakeholder mapping for route corridors</li> <li>Organise early information events about the project</li> <li>Set up a steering group for each route corridor to enable continuous dialogue.</li> <li>Prepare public participation concept, ask for feedback within steering group.</li> <li>Conduct planning workshops with the public to identify different alternatives before submitting application for route corridor</li> <li>Provide transparency regarding decisions made (by whom, when) and the criteria upon which these were based.</li> <li>Announce when application shall be handed in so that stakeholders can prepare for the consultation process (2-4 weeks in advance).</li> </ul>
Application	§6 NA- BEG	TSO hands in an application for a preferred route corri- dor to the regulator. It must also contain infor- mation about possible al- ternatives as well as explain the differences between these options regarding environmental effects and spatial planning.	<ul> <li>TSOs</li> <li>Publish content of application early in advance (i.e. 2-4 weeks) so that stakeholders/the public can prepare for application conference.</li> <li>Easy to understand application material including maps and a summary should be made available well in advance to the application conference (2-4 weeks in advance)</li> <li>Set up regional/mobile office, where information on project is available and easily accessible</li> <li>Regulator</li> <li>Evaluate if one ore more regional offices might be necessary, especially for long distance projects as the HVDC corridors</li> </ul>

Phase	Legal Basis	Formal public participation: Legal requirements	Specific requirements on public participation	Additional recommendations by Germanwatch on addi- tional informal public participation
Application Con- ference/ Scoping	§7 NA- BEG	The regulator holds an application conference, which is also the scoping event for the SEA.	Announcement of the application confer- ence on the Internet at www.netzausbau.de and local newspa- pers immediately after application has been handed in. Public application conference.	<ul> <li>Regulator</li> <li>Enable participation of all citizens concerned (e.g. by have the scoping conference at several places or via web streaming)</li> <li>Transparency on leeway: What has been decided and which alternatives are still open to decision?</li> <li>Broader public should have the right to speak – in addition to public authorities and associations</li> </ul>
	§8 NA- BEG	The regulator determines which studies and other documents are necessary for the SEA and must be submitted by TSO in order to finalize the application.	Time frame: 2 months	<ul> <li>Regulator</li> <li>Make transparent which documents are still missing and what the TSO must submit.</li> </ul>
	§8 NA- BEG	TSO submits the finalized application and environ- mental report for the SEA.	No time frame applies.	<ul> <li>The law does not mention any time frame for this period.</li> <li>This is crucial given that the application is being finalized with many important decisions to be made and additional studies to be carried out. It is crucial to involve the public at this stage.</li> <li>TSOs: <ul> <li>Continuous information about the project and its status, via the Internet and information events, hotline</li> <li>Round table events</li> <li>Planning workshops in affected regions</li> <li>Regional/mobile office where information on project is available and easily accessible</li> <li>Provide information when the finalized application will be submitted (e.g. 24 weeks in advance)</li> </ul> </li> </ul>

				<ul><li>Regulator</li><li>Information via Internet, hotline</li></ul>
SEA	§14 g UVPG	An SEA is carried out by the regulator based on the envi- ronmental report of the TSO.		<ul> <li>Regulator:</li> <li>Provide transparency about SEA: Which decision is taken why.</li> <li>Publish results on the Internet.</li> </ul>
Consultation	§9 NA- BEG	A written public consulta- tion on this finalized appli- cation is carried out by the regulator.	Time frame: Public consultation starts 2 weeks after finalized application has been submitted, and lasts for 2 months (for local public authorities up to 3 months). The application is accessible for the pub- lic for 1 month at the BNetzA headquar- ters and on the Internet. Announcement of the consultation on the Internet and in local newspapers at least one week in advance.	<ul> <li>Regulator</li> <li>Announce public consultation early in advance (i.e. 4-6 weeks) and encourage participation of stakeholders and broader public</li> <li>Actively inform the public that this will be the only public consultation. The consultation in the next step of the permit granting procedure (plan approval) will address only the directly affected parties.</li> <li>Carry out public information events to explain and inform about procedures and methodology</li> <li>Impact of consultation: Allow enough time to consider and evaluate the comments by stakeholders and the broader public, and also for possible changes or "reviews" to be conducted by the TSO</li> </ul>
Hearing	§10 NABEG	A hearing is organized by regulator for the people who have taken part in the con- sultation ("objectors").		<ul> <li>Regulator:</li> <li>Communicate the date of the hearing at least 2-4 weeks in advance.</li> <li>Open the hearing for the broader public who is interested to take part</li> <li>Make hearing and its outcome transparent (e.g. via webstreaming)</li> </ul>

Phase	Legal Basis	Formal public participation: Legal requirements	Specific requirements on public participation	Additional recommendations by Germanwatch on addi- tional informal public participation
	§12 NABEG	Regulator issues final deci- sion on application. The defined route corridor (width 500-1000m) is obligatory for permit grant- ing procedure.	This decision has to be issued at latest 6 months after the finalized application has been submitted by the TSO.	<ul> <li>Regulator:</li> <li>Provide transparency regarding the decision-making criteria and results</li> </ul>
Permit Granting: Final route		Only refers to supra-regional projects		
		TSO prepares the applica- tion defining the exact route of the power line.		<ul> <li>TSOs:</li> <li>Actively involve and inform stakeholders and broader public during the preparation of the application, e.g. in public planning workshops or at round tables</li> <li>Announce when application shall be submitted in advance (ca. 2-4 weeks) so that stakeholders can prepare for the consultation process.</li> </ul>
Application	§19 NABEG	TSO submits preferred route to the regulator. The application must con- tain information about pos- sible alternatives and ex- plain differences between these options regarding environmental effects.		<ul> <li>TSOs</li> <li>Implement a project website including a coherent description of the project and maps</li> <li>Provide contact details of responsible project managers</li> <li>Regional/mobile citizen office</li> <li>Regulator</li> <li>Regional/mobile citizen office</li> </ul>
Application Con- ference	§20 NABEG	The regulator holds a public application conference.	Announce application conference on the Internet and in local newspapers imme- diately after application has been submit- ted.	<ul> <li>Regulator</li> <li>Enable participation of all citizens concerned (e.g. several places or webstreaming)</li> <li>Transparency about leeways: What has been decided and</li> </ul>

			Application conference is a public event.	<ul> <li>which alternatives are still open for decision?</li> <li>Public must be entitled to have a say besides public authorities and associations</li> </ul>
	§20 NABEG	The regulator determines which studies and other documents have to be sub- mitted by TSO in order to finalize the application.		
	§21 NABEG	TSO submit finalized application.		<ul> <li>TSOs:</li> <li>Continuous information about the project and its status, via Internet and information events, hotline</li> <li>Round table events</li> <li>Planning workshops in affected regions</li> <li>Regional/mobile office where information on project is available and easily accessible</li> <li>Provide information when the finalized application will be submitted (e.g. 24 weeks in advance)</li> <li>Regulator</li> <li>Information via internet, hotline</li> </ul>
Consultation and Hearing	§22 NABEG	A written consultation on this finalized application is carried out by the regulator. It addresses public authori- ties, associations and those who are directly affected by the project. The hearing only addresses those actors who have taken part in the consulta- tion.	The regulator publishes the finalized application within 2 weeks on the Internet and at its main office for the duration of 4 weeks. Likewise announce start of the public consultation via local newspapers. Time frame of consultation: 6 weeks.	<ul> <li>Regulator:</li> <li>Actively provide information to the broader public about the consultation and hearing (content, outcome, etc.)</li> </ul>

Phase	Legal Basis	Formal public participation: Legal requirements	Specific requirements on public participation	Additional recommendations by Germanwatch on addi- tional informal public participation
EIA	§23 NABEG	EIA is carried out, but may be limited to aspects that have not been considered in the SEA which has been carried out previously.		
Final Decision	§24 NABEG	Regulator issues final decision on application.	No time frame applies as to when this decision must be issued except for PCI. Here the total permit-granting procedure may not exceed 3.5 years.	<ul> <li>Regulator:</li> <li>Ensure transparency about decision-making criteria and results</li> </ul>

## 7 Conclusions

Public participation in the context of power grids is a very relevant topic for the implementation of the energy transition towards a high share of renewable energies. In past years, local resistance against single grid projects has surfaced while general support for the energy transition persists. Public opposition to infrastructure projects in Germany has led to new approaches in the context of planning procedures. Enhanced public participation has been introduced in different contexts in order to overcome opposition and to increase acceptability.

New legal provisions on permit granting procedures have been implemented both at the German and EU levels. They foresee more transparency and a higher level of public participation. However, the implementation has just started and new approaches are being developed and tested.

Germanwatch has been actively involved in these discussions during the past two years. While implementation can not yet be judged, some preliminary conclusions can already be made. Germanwatch puts forward the following recommendations:

- Discussions and public participation in the context of the need for grids is very important for any subsequent steps. As this issue is a highly complex matter, it seems appropriate to identify the relevant stakeholders and to involve them in a continuous dialogue to discuss open questions and develop new approaches that reflect these discussions. Furthermore, the unaligned public shall be involved in a meaningful way in this context it is crucial that TSOs and BNetzA identify those (political or general) issues where the broader public can have a say beyond very technical comments, but rather about political directions.
- All the relevant stakeholders (NGOs, TSOs, public authorities, local citizen action groups) should be willing to have a positive attitude and work together constructively. The public participation process needs to be taken serious by both the decision-makers and those who take part in it.
- Public participation only makes sense if there is a **room for manoeuvre** with regards to the decisions to be taken. Otherwise participation becomes tokenism and may create frustration.
- To enable an **early and continuous** dialogue with stakeholders and the broader public, **informal participation** needs to be added to legal requirements (of formal participation). Formal and informal participation should be complementary.
- While enhanced public participation may help to shorten permit granting procedures in the long term because it helps to identify solutions that are more acceptable to a broader range of stakeholders, enough time should be foreseen for public participation. It still needs to be seen if timeframes have been set too tight. This seems to be the case for the Federal Sector Planning where the binding decision about a route corridor of 500–1000m is taken. Six months is too short to properly involve the public, especially in large projects of a length of 500 km and more. Once a revision of NABEG is carried out, this should be considered carefully. Furthermore, TSOs and authorities should use the time before an application is handed in formally to inform and consult the public.
- **Transparency** is the precondition for public participation. Information about the project as well as the procedures should be made available via different channels.

The newly established websites by TSOs and BNetzA are moving in the right direction.

- Public participation needs **professional planning**. This includes a concept of public participation, professional project management, including roadmaps, and resources. Staff must be trained. Professional mediators/facilitators may be helpful if conflicts have already arisen.
- It is important to develop an understanding of the **purpose of the public participation exercise** and what results are aimed at. The questions asked in consultations or other forms of public participation should be appropriate for the target group and refer to their experiences and expertise.

Germanwatch has developed a five-step approach, which shall help to implement these general recommendations and can be used at various planning stages and in different contexts. Comments on this approach or recommendations for this position paper are very welcome.

## **8** Acronyms and Glossary

- **BNetzA** Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway, commonly known as Bundesnetzagentur (=Federal Grid Agency). The BNetzA regulates transmission power grids. It has achieved many new competences in the context of energy transition and the new laws on grid development that have been decided in summer 2011. It is responsible for determining the need for grids (on the basis of assumptions and plans of TSOs) and also for the permit-granting procedures for trans-regional transmission power lines.
- **EIA** Environmental Impact Assessment. An EIA is required by EU law, and mandatory prior to the implementation of big infrastructure projects. EIAs assess the possible environmental impacts such a project may have, and make sure that decision makers are aware of them.
- **EnWG** Energiewirtschaftsgesetz (=Energy Industry Act). The EnWG is Federal Law, and establishes the general rules for energy supply and transportation in Germany. It was changed in 2011. Article 12 contains important provisions on grid planning in Germany in order to determine the need for grids.
- **HVDC** High-Voltage Direct Current. HVDC is a new technology allowing longdistance transmission of electricity with lower losses. The new German Network Development Plan first introduced HVDC technology in 2012. The current planning foresees four HVDC lines along three corridors from North to South Germany.
- **NABEG** Netzausbaubeschleunigungsgesetz (= Acceleration Act). The NABEG was decided by the German parliament in Summer 2011 and refers to intraregional electricity transmission lines. The aim is to accelerate grid planning and to enhance public participation. The BNetzA gained new competences in implementing the new permit-granting procedures.
- **NDP** Network Development Plan. The German Energy Industry Act requires German TSOs to develop a national network development plan on a yearly basis. The NDP must contain all the necessary new transmission lines that are necessary to ensure a safe and bottleneck free operation of the German power grid in 10-20 years.
- **PCI** Projects of Common Interest. PCIs are identified in the framework of the EU regulation on trans-European energy infrastructures, which has been adopted in 2012. The aim of this regulation is to better connect the electricity markets of EU member states by giving a high priority to selected projects of European interest.
- **SEA** Strategic Environmental Assessment. SEA is required by EU law. This is a process that does not refer to single projects but to policies, plans or programmes, and aims to support more effective and efficient decision-making, including enhanced public participation, for sustainable development. It is an important feature to identify less damaging alternatives of policies, plans or programmes.

TSO	Transmission System Operator. A TSO is responsible for the operation and development of the electricity transmission grid in a given area. Four TSOs are operating in Germany: the Dutch company TenneT, 50hertz in Eastern Germany, Amprion in Western Germany and Transnet BW in Southwest Germany.
TYNDP	Ten-Year Network Development Plan. The TYNDP is developed every two years by European TSOs. The aim is to identify the need for grids at European level in order to implement the European Energy market.
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**UVPG** Umweltverträglichkeitsprüfungs-Gesetz (=Law on Environmental Impact Assessments.). The UVPG implements two EU directives on EIA and SEA in Germany. It specifies how EIA and SEA in Germany must be implemented.

## **9 References and Further Reading**

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## 9.2 Links for Grid Development in Germany

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www.gesetze-im-internet.de/bundesrecht/nabeg/gesamt.pdf Netzausbaubeschleunigungsgesetz (Acceleration Act)

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