

Final report

Project Constructive Public Participation: The scientific basis for an improved interaction



1.1 Project details

Project title	Constructive Public Participation: The scientific basis for an improved interaction
Project identification (program abbrev. and file)	Project no. 12130
Name of the programme which has funded the project	ForskEL
Project managing company/ institution (name and address)	Aalborg University Rendsburggade 14, room 4.313, 9000 Aalborg
Project partners	(None)
CVR (central business register)	29102384
Date for submission	15/7-2017

1.2 Short description of project objective and results

Citizens are seen as both a strength and a challenge in the development of energy systems. The purpose of this project has been to support an improved interaction between the public, developers and authorities in the planning and implementation of national infrastructure projects. The project has had focus on energy infrastructure and is conducted in collaboration with Energinet.dk and other national infrastructure actors within sectors such as road and rail infrastructures. The project has proposed new methods to public participation based on a series of scientific investigations and action research projects, which among others have increased the understanding of citizens' sense-making, institutional change, and factors with importance for the effectiveness of public participation.

Borgere er set som både en styrke og en udfordring i udviklingen af energisystemet. Dette projekt har haft til formål at understøtte en forbedret interaktion mellem offentligheden, bygherre og myndigheder i planlægningen og gennemførelsen af nationale infrastrukturprojekter. Projektet har haft fokus på energiinfrastruktur og er gennemført i tæt samarbejde med Energinet.dk og andre nationale infrastruktur-aktører såsom Vejdirektoratet, BaneDanmark, Styrelsen for Vand og Naturforvaltning, m.fl. Projektet har anvist nye metoder til borgerinddragelse på baggrund af en række videnskabelige undersøgelser og aktionsforskningsprojekter, der blandt andet har øget forståelsen for borgeres meningsgæbelse, institutionelle ændringer og faktorer med betydning for effektiviteten af borgerinddragelsen.

1.3 Executive summary

Scientific knowledge about public participation in relation to national linear infrastructure development has until 2012 been fragmented and limited, especially in a Danish context. This made it difficult to navigate for developers and authorities e.g. in terms of what methods to use to match the special characteristics of national linear infrastructure projects.

The applied research project "Constructive Public Participation: The scientific basis for an improved interaction" has during the project period 2013-2017 provided a considerable scientific insight and documentation on several aspects of public participation practice related to national infrastructures. The most prominent scientific achievements are:

- An overview of Danish public participation practice based on a nation-wide survey and review of existing literature. This has led to an overview of what methodological and contextual elements that, in a Danish context, are prerequisites for an public participation practice in which the public contributes to substantial improvements in the planning process.
- Insight into how citizens understand and react to infrastructure development. This has led to insight into what motivates citizens to engage in planning processes with special focus on the highly engaged citizens that often receives much attention by developers and in media. It has also lead to a documentation of the socio-psychological processes of how people make sense of information about the infrastructures and creates meaning by relating the information to their everyday practices.
- Insight in the social interaction between citizens in public participation practices and e.g. showed how citizens influence each other's reactions in the planning process.

Based on scientific insight the project has collaborated with Energinet.dk on developing and testing new public participation methods for linear infrastructure development. One of these methods was awarded an international prize as best practice on public participation in electricity infrastructure development in Europe.

The project also met a demand among national infrastructure developers for a framework that could guide authorities and developers in choosing the "right" public participation model in a specific context. This framework supplements national and international guidelines by outlining a dialogue-based process for choosing relevant methods for specific areas.

The contributions is based on a strong combination of a post doc fellow focusing on an authority perspective on public participation and a PhD fellow focusing on a citizen perspective on public participation. This has allowed an interesting dynamics in discussions about developing public participation practice and strengthened the quality of the contributions.

In conclusion this project has fulfilled its objectives on a scientific basis for better interaction in public participation processes, but it has also identified needs for fur-

ther collaboration on the development of public participation practice on infrastructure developments. Practice has taken a considerable step towards good practice, but there are more steps to climb.

1.4 Project objectives

Objectives

The main objective of the project is to support an improved interaction between authorities, developers and the public. The objective is gained through a series of scientific investigations that aims at a better understanding of what elements in public participation process are good and bad, how citizens view consultation processes, and what is needed for obtaining a better process.

The key objectives are in the project description formulated as:

- Increased understanding of citizens' reaction and interaction in terms of energy infrastructure projects, hereunder how opposition arise and develop
- Development of generic models for what public participation methods are appropriate in what contexts.

Project implementation

The project evolved largely as planned in terms of the aims and activities. The time plan was, however, subject to changes due to maternity leaves for two project participants, but it did not impact the fulfilment of the project objectives. The milestones were, in agreement with the funding administrator, changed in accordance with the time periods of the maternity leaves.

In the end of the project the planned activities was supplemented with an investigation of the use of social media in agreement with the administrator of the project. Social media was not part of practice in infrastructure development, when the project description was developed, but since key national infrastructure actors now use social media, we managed to include this in the end of the project period.

The project description provided some openness in terms of international collaboration. This has been materialized as dialogues with the European collaboration platform on electricity infrastructure titled Renewable Grids Initiative (RGI), dialogues with the EU Horizon project INSPIRE-Grid, participation in EU COST action RELY, and a two-months stay for the PhD fellow at Exeter University (UK) by one of the leading scholars in the field, Patrick Devine-Wright. The latter has, besides significant scientific gains, resulted in an invitation to Energinet.dk on participating in a workshop with UK TSOs on citizens and cable projects.

The reference group worked well as dialogue partner on the development of the project. The scientific reference group was started, but the project did not achieve the interest to have frequent meetings. Therefore the scientific reference group was a more ad hoc activity.

The key risks associated with this project were at project start related to the interests among relevant actors to engage in the project, e.g. by testing out new techniques and approaches. There has been some resistance to new methods in the project period, but in the end some interesting techniques have been implemented in practice and the resistance has been part of the scientific investigation of the frames and barriers to improved interaction in public participation practice. In general, the national organisations have been very open and honest about their challenges and possibilities for developing their public participation practices.

1.5 Project results and dissemination of results

Realising project objectives

The project managed in a convincing manner to provide a scientific basis for an improved interaction. By providing significant insight in the premises and dynamics in which the public participation practices are developing and insight in methodologies and institutional aspects of public participation, the project has provided developers, authorities and to some extent the public with an insight that in many ways can help the actors develop a more constructive interaction.

The scientific investigations thus answered the problems stated in the project proposals about increased understanding of citizens' reactions and interaction in energy infrastructure development and about what models for public participation are appropriate in what context.

More detailed the project has included the following activities and results:

- Mapping of experiences among authorities and developers working with national infrastructures on public participation with focus on effectiveness and methodologies used. This is the first systematic mapping on national infrastructure and provides a better platform for cross-sectoral learning. Based on a questionnaire to practitioners, we show that other aspects such as political support are perceived to be of more importance than the type of methods applied. We therefore question whether practice has too much focus on methods.
- Identification of improvement potentials on public participation from a developer perspective based on longitudinal investigations of practice in Energinet.dk. This has clarified practices and institutional boundaries to public participation and provided ways to develop the thinking on public participation.
- Theoretical and empirical exploration of how citizens make sense of infrastructure development and what leads citizens to organize in groups in planning processes. This has provided a point of departure for designing public participation methods that to a higher extent take the socio-psychological processes into account (this does not mean manipulating the citizens, but preferably using the insight to a more constructive interaction).
- Exploration of the situational orders that citizens create among themselves in planning processes. This exploration is based on the identification of a gap be-

tween focus on structural aspects in formal planning processes and focus on individual citizens' actions.

- Facilitation of development of new methods and techniques for public participation on infrastructure development in cooperation with Energinet.dk. As an example is an innovative citizen-oriented routing of electricity infrastructure that was awarded the Renewable Grid Initiative (an EU consortium) 2016 Best Practice on public participation.
- Testing and evaluation of methods and techniques in cooperation with Energinet.dk.

As an addition to the problems described in the project description, the project has – with approval from Energinet.dk – increased the focus on social media. The study involved questionnaires and interviews with national infrastructure developers.

The applicability, quality and relevance of the scientific basis for an improve interaction has been enhanced through reference group meetings with participants from the organisations developing national infrastructure: Energinet.dk, Vejdirektoratet, BaneDanmark, Metroselskabet, etc. These meetings have been characterized by open and qualified discussions, and they have helped shaping the scientific content in a way that improves the results and dissemination activities.

With the continuous cooperation and ownership among national infrastructure developers in the project, the results of the project are expected to benefit and improve public participation practices in the years to come. Energinet.dk has during the project adopted some of the suggestions for improvement. As an example it is likely that the mapping of significant differences in the organisations' approach to social media will raise debates among the organisations, since they most likely will benefit from a common approach to the citizens (citizens might expect similar use of e.g. Facebook).

Environmental effects and political climate-energy objectives

The project has had very limited negative environmental impacts constituted by a few flight travels, however, it has had an indirect positive environmental impact in making the transition to a greener energy system smoother. This indirect impact is, of course, impossible to measure, although potential delays of the green transition has noticeable environmental consequences.

The project could have had an environmental dimension in the impacts of public participation (travels to consultation meetings, paper resources used, etc.), however, these impacts were assessed negligible compared to the environmental impacts of the energy system.

Turnover, exports, employment

The project has not directly resulted in turnover, exports or employment. Indirectly, the project may have had a slight contribution to improved turnover and employ-

ment from better development of infrastructures in the energy sector and other sectors. Indirectly, the project may also have provided actors with the capacity to export public participation insight. The market for this insight exists, since the project has been invited to Germany and Belgium to present Danish practices with a keen interest in why Danish public participation seems to work well.

Dissemination

The project results have been disseminated through presentations at seminars, meetings with relevant stakeholders, international conferences and scientific journals.

A range of dissemination activities in Denmark have been conducted. Among these are oral presentation at seminars for authorities and practitioners, reference group meetings, etc. and some written publications:

- Presentations and workshops on public participation practices at Energinet.dk, 2013-2015
- Reference group meetings I, II and III conducted in 2013, 2014 and 2016.
- *Afrapportering af alternative borgerinddragelsesmetoder*. Evaluation report to Energinet.dk
- Scientific reference group meeting, 2014
- *Dialogværktøj til udvælgelse af borgerinddragelsesmetoder til en specifik situation*. 2016, Published at [AAU](#) (also in English)
- *Borgerinddragelse i Danmark: Resultater fra en spørgeskemaundersøgelse blandt praktikere i Danmark i 2013*. Published at [AAU](#)
- *Potentielt depot for radioaktivt affald - Spørgeundersøgelse til borgere i de berørte områder: Anbefalinger og Resultater*. Published at www.dcea.dk
- Presentation on public participation at Rebild Municipality, 2014
- Seminar on public participation for the Danish Regions, 2014

Project results have been communicated at international conferences and workshops, which at the same time has provided inspiration for methods and investigations in the Danish context:

- *Erfahrungen zu Bürgerbeteiligung bei Energieprojekten und beim Stromnetzausbau in Dänemark*. Germanwatch workshop "Bürgerbeteiligung und Stromnetzausbau"2012.
- *Where does controversy come from? The role of the formal participation process in citizens' sensemaking*. [Conference: IAIA15](#)
- *Danish state of the art on engagement: Focus on circumstances, public worries and co-routing*. Inspire Grid Conference on Public Participation: State of the art approaches to stakeholder engagement in electricity infrastructure projects. 2017
- *Public Participation in EIA. Trends in Denmark*. Session: Governance and public participation in EIA (I): An international overview. Conference: IAIA17

- *The most engaged citizens and mobilisation in IA*. Session: Contention, social movements and the politics of impact assessment. Conference: IAIA17

Publications in scientific journals and publishers have served as a means for quality assurance on the scientific quality of the research conducted. The double-blind peer-review has strengthened e.g. the methodological framework and the conclusions made.

- *Beyond public opposition to energy infrastructure: How citizens make sense and form reactions by enacting networks of entities in infrastructure development*. Published in [Energy Policy](#), 2016.
- *What Determines Influence of Public Participation? An Investigation of Planners' Views on Participation Practice in Denmark*. Published in "[Planning Practice and Research](#)", 2016.
- *Citizen self-mobilisation, motivational factors and the group of most engaged citizens: The case of a radioactive waste repository in Denmark*. Submitted to Land Use Policy, July 2017.
- *An interactional approach to public participation: Exploring the significance of situated orders for citizen action in designed spaces of public participation*. Submitted June 2017.
- *Confronting institutional boundaries to public participation: a case of the Danish energy sector*. Submitted to Planning Practice and Research June 2017.
- *Social Media in national infrastructure development*. To be submitted during summer, 2017.
- *Social impact assessment in Europe? A study of social impacts in three Danish cases*. Published in [Journal of Environmental Assessment Policy and Management](#), 2016.
- *Environmental Assessment as Acceptance and Legality Planning: The Instrumentalisation of Public Inclusion*. Published in [Journal of Environmental Policy and Planning](#), 2017.
- *Recovering Multiple Rationalities for Public Deliberation within the EU Water Framework Directive*. Book chapter published by [Routledge](#)
- *Understanding citizen action in public participation processes*. PhD thesis by Sara Bjørn Aaen, submitted April 2017.

Public media dissemination

- *Borgerne bliver tidligt inddraget i processen*, Morsø Folkeblad, 2014
- *Nye veje for borgerinddragelse under lup*. Teknik & Miljø, 2013
- *Forskere vil vende protester til konstruktiv dialog*. Jyllands-Posten, 2013

1.6 Utilization of project results

There are no patents, business plans or commercial outputs of the project. Rather, the project has aimed at contributing to a common pool of knowledge between involved actors that can improve the transition of the energy system as a more constructive process.

The project results have during the project period been utilised among the involved national infrastructure developers. As the most prominent organisation in this respect, Energinet.dk has tested and implemented new practices on public participation. Other organisations such as the Road Directorate have used the results as inspiration to their internal continuous development of public participation practice.

At the university, the results are used for further research on public participation and infrastructure development. This has materialised in research project proposals and teaching activities for planning and energy students and professionals by the post doc and PhD fellows that are now employed at assistant professors at AAU. The research group The Danish Centre for Environmental Assessment has made public participation one of the key topics in its research strategy.

Besides national infrastructure development, the project results are relevant for a many other fields of application: The generic understanding of citizens' sensemaking and motivation can be applied in planning processes on e.g. energy consumer management, wind farm projects, photovoltaic projects, etc.

1.7 Project conclusion and perspective

With significant results on the scientific basis for a better interaction in public participation processes related to infrastructure development, this project has provided an opportunity for national infrastructure developers to bring public participation practice to another level. The results have been widely communicated and some of it has already been adopted. Concurrent with the project, infrastructure organisations such as Energinet.dk has invested in capacity building on public participation and there have been some good synergies to the research project.

In a research perspective, the project has provided an upgrading on research public participation on infrastructures that very well may lead to new collaborations between research and practice. The [VVMplus](#) project is to some extent inspired by the research in the project and other public participation projects are being developed.

Internationally, the research project has confirmed Denmark's international reputation of being a country with interesting practices and developments on public participation. This position may create new possibilities for international collaboration on the subject.

With societal developments towards a postmodern and highly networked society, public participation faces new challenges and opportunities. It is therefore likely that developers, authorities, NGOs and researchers will continue developing activities to promote better public participation practice. The documented scientific results on constructive public participation can be a stepping stone for many of these activities as it has provided a stronger scientific basis than ever before in that sector.

The project has identified other needs for collaborative research and development initiatives on public participation within Danish national infrastructure developments. As an example, less resources allocated to public participation among key authorities generates a need for documenting the value of extra efforts within public participation (socio-economic value, project economic value, democratic value, etc.). This has not been within the scope of the project, but the need has been pointed at several times.

Annex

The AAU project web site with reference to many of the project activities including dissemination and publications is found here:

[http://vbn.aau.dk/da/projects/konstruktiv-borgerinddragelse-det-videnskabelige-grundlag-for-en-forbedret-interaktion\(714b8bc7-79e9-4092-ad4a-e11c35da33e4\).html](http://vbn.aau.dk/da/projects/konstruktiv-borgerinddragelse-det-videnskabelige-grundlag-for-en-forbedret-interaktion(714b8bc7-79e9-4092-ad4a-e11c35da33e4).html)

(Direct links to publications are inserted in the overview of dissemination activities)