Beyond Public Opposition

Lessons Learned across Europe

Renewables Grid Initiative

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Haydnstraße 1
12203 Berlin
Germany

Managing Director: Antonella Battaglini

Jurisdiction: AG Charlottenburg / HR 141989 B

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Introduction

With the adoption of its 20-20-20 targets and the objective of a largely decarbonised power sector by 2050, the European Union has set the stage for a significant increase in the use of renewable energy. In order to realise the energy transformation and to maintain energy security, we need to modernise a grid in Europe that is capable of integrating renewable energy sources from large-scale as well as distributed generation. However, the crucial question of how to do so in an efficient and sustainable way is yet to be sufficiently solved. This huge task can only be achieved if actors across sectors join forces, agree on common goals, work together and develop narratives on how the future may look like.

From opposition to cooperation

The Renewables-Grid-Initiative (RGI) is a unique platform which brings together two groups that have often been – and sometimes still are – opposing parties in grid development projects: transmission system operators (TSOs) and non-governmental organisations (NGOs). Under the guidance of RGI, a coalition of Europe's 29 largest environmental NGOs and grid operators pledged to work in partnership to ensure that the goals of grid modernisation and environmental protection can be achieved side by side. The 'European Grid Declaration on Electricity Network Development and Nature Conservation in Europe' (EGD) was publicly signed in 2011 in Brussels and handed over to EU Energy Commissioner Oettinger on 10 November 2011. The document provides a set of guiding principles to build up the necessary grid with full respect for environmental regulations and objectives. In 2012, RGI has published a second part of the EGD covering transparency and public participation.

Exchanging knowledge across Europe

Many of the principles and ideas covered by both parts of the EGD are already being considered and tested by RGI members. This brochure presents findings from a project on best practices that RGI conducted in 2012 and 2013. It gives an overview of the challenges met during the planning and permitting of grid development projects and the lessons that have been learned by members of RGI. Examples show practical steps taken to make grid development quicker, more socially acceptable, and increasingly environmentally sound.

For more information on challenges, lessons learned, and a full collection of cases from eight different countries, visit our website where you can find a database as well as the full European Grid Report showcasing all collected examples.

This brochure is divided into two main sections, according to the two parts of the EGD:

a) Transparency and Participation (sections 1- 4) and
b) Environment and Nature Conservation (sections 5 – 6)

Need Discussion

The question about the "need for grids" is fundamental to all grid development processes. Even though the general need to adapt the existing grid for the integration of renewables is recognised, there are widespread doubts with respect to specific projects. Often, NGOs and the public are unified in asking for evidence that confirms the need for individual lines. For many stakeholders, the source of electricity that will be transmitted is crucial, with support more likely if the line is needed for expansion of renewable energy supplies.

Challenges

- The need for greater capacity is identified by the TSOs before any new lines are planned, but this stage of the process is often without public involvement. As a result, people usually only get to know about the plans for a new line after the need has already been determined.
- Concerns can thus arise about whether alternatives to grid expansion have been sufficiently considered or whether the line is needed for transmitting electricity generated from renewables.
- Discussions whether TSOs are the right bodies to define the scope and methodology of grid development plans sometimes emerge.

Lessons learned

- Early engagement with stakeholders on the need for grid expansion can reduce the likelihood of lengthy discussions about the need later in the process.
- Explaining the drivers and procedures behind the need is necessary throughout the process, since not all actors will have been involved from the beginning.
- Since the need for new grids is closely linked to decisions on energy policy, it helps if politicians and regulators play an active role in explaining the reasons.
- The contribution of NGOs in the need discussion brings wider perspectives and increased legitimacy to the process. If environmental NGOs support a specific grid project because it is a necessary building block towards more renewable energy, they may be well-placed and willing to play a significant role in explaining the need for grids.

Germany: Public involvement during grid development planning

NETZ ENTWICKLUNGS PLAN STROM

A new procedure for establishing the German Grid Development Plan was introduced in 2012. Participatory elements play a strong role, with three public consultations held in total. The first step is for the Regulator to organise a consultation about the generation and consumption scenarios. On this basis, the four TSOs annually produce a plan, which is up for consultation. It shows all measures required for optimising, enhancing and expanding the grid for four scenarios. All comments given by the public are checked by the TSOs in order to revise the plan. In a third step, the Regulator assesses the revised plan and puts it – together with an environmental report – up for a third and final public consultation. On the basis of the plan, a law is drafted by the government and approved by the Parliament. Alongside the procedure, both TSOs and the Regulator carry out a number of public information and dialogue activities including a series of public events, dedicated websites, and regional information days. In addition, TSOs have initiated a continuous dialogue process with expert stakeholders, such as NGOs. In 2013, discussions also encompassed the analysis of sensitivities, to get a better understanding about the impact of certain parameters (e.g. capping renewable production peaks) on the grid development need.

Contact persons: *Marius Strecker, marius.strecker@tennet.eu,*
Olivier Feix, olivier.feix@50herz.com
More information: *www.netzentwicklungsplan.de/*
www.netzausbau.de

Stakeholder discussions about the need

Statnett

In November 2011, Statnett has presented a report identifying the need for an upgrade of the existing grid in Oslo. Since then, Statnett has worked together with the government to continuously involve stakeholders. For example, stakeholder feedback has been used for an alternative analysis. For the analysis launch event, representatives from parliament, environmental organisations and industry were invited in order to discuss issues on environmental impacts and energy efficiency. Morover, key stakeholders have been invited to provide feedback during a three-months period, as they represent crucial areas for further discussion during the next phases of the project.

Contact person: *Anders Grønstvedt, anders.gronstvedt@statnett.no*
More information: http://storoslo.statnett.no/

Other TSOs have met challenges during the need discussion by for example

- Establishing a committee in which consumers, NGOs and authorities discuss relevant details around the question of need (RTE).
- Explaining the context and consequences of political decisions on the need for grids (National Grid).

(Early) Engagement with Stakeholders

Early stakeholder engagement is a useful way to obtain relevant input at a stage in the process where it can have an impact on the outcome of the decision-making process. Stakeholders highly appreciate being invited to provide input prior to key decisions being made in the planning and permitting process. Ongoing stakeholder engagement, regular consultation and easy availability of information throughout the process help to reduce conflicts and are an important precondition to increase the acceptability of the project.

Challenges

Each target group for consultation (NGOs, authorities, broader public, and politicians) poses specific challenges:

- A lack of resources can impede the engagement of both authorities and NGOs.
- Engaging the general public at a very early stage can be challenging since interest can be low if people don't feel affected. However, interest normally increases after major decisions have been taken. At this point comments are harder to take into account as the TSOs are further advanced in the planning process.
- The support of politicians can be unstable and dependent on public opinion. Uncertainty normally increases before elections.

Lessons learned

- To ensure that important concerns are sufficiently discussed in time it is important to approach the public proactively before major decisions are taken.
- Through early consultation with the public, local communities and other stakeholders, important local information can be obtained.
- Formally agreeing with politicians on the rules of engagement and common objectives, for example through a written Memorandum of Understanding, can ease long-term relationships.

Broad cooperation for public involvement

In Schleswig-Holstein, a German region exporting large amounts of wind energy, TenneT is testing a new approach towards early stakeholder involvement. Two points in the newly introduced procedure are decisive: 1) key stakeholders (politics, industry, Distribution System Operators) come together at the very beginning to agree on common goals and rules; 2) they jointly involve the public early before the legal procedures by organising events, inviting media, and establishing an email system for public input. TenneT had a positive experience of presenting their ideas before any spatial decision had been taken. Moreover, the support of politicians to explain the relationship between the development of renewables and the need for grids has proven to be very helpful.

Contact person: Marius Strecker, marius.strecker@tennet.eu

Two formats for continuous stakeholder involvement

Good examples of how stakeholders can be involved in different steps of the project are National Grid's Community Forums and Thematic Groups which they establish at the pre-application consultation stage. Thematic Groups build a discussion forum on different topics, such as 'landscape and views', 'biodiversity' or 'historic environment' for relevant stakeholders, e.g. NGOs or statutory agencies. Community Forums consist of local representatives, such as citizen action groups, politicians, or industry associations. These groups serve both the information flow from National Grid to stakeholders and the other way around. National Grid describes these groups as useful to thoroughly understand local and environmental matters when planning grid expansions.

Contact person: Roseanne Battye, roseanne.battye@nationalgrid.com

Other formats to involve different stakeholder groups are, for example

- "Citizen conferences" which RTE is testing in some projects. A dedicated number of citizens are involved very early in the process.
- Round table talks by Terna in which cooperation with regional and local authorities throughout the spatial planning process is organised.
- A guidance group established by Elia in order to continuously inform the administration of the current status of the Stevin project.

Transparent Process and Decision

Transparency is a prerequisite to achieve public acceptance of grid projects. Any feeling of "behind-the-scenes" decision-making fuels mistrust from both the public and NGOs. Only if the public and other stakeholders can comprehend and retrace different planning steps, is it possible for them to accept the final solution as legitimate.

Challenges

- Knowledge on decision-making criteria and legal procedures is low.
- There is also a lack of clarity on how public input is taken into account, which can lead to frustration for stakeholders who have taken the effort to engage with a project.
- When TSOs cooperate with authorities and politicians, an appearance of "behind-the-scene" decision-making can arise if details of the discussions are not made available.
- The legal framework can impede full data transparency.

Lessons learned

- Processes and criteria have to be continuously communicated to both the general public and other stakeholders.
- It is very important to show in a credible way how stakeholder involvement is taken into consideration within the concerned project.
- Continuous and transparent information about interaction with authorities and politicians minimises the risk of negative rumours.
- TSOs should explain to what extent data transparency is possible within the legal framework. Communication support from public authorities increases credibility here.
- TSOs should challenge consolidated behaviours and explore new approaches to data transparency and information sharing.

Personalised feedback letters

The authorities in cooperation with TenneT responded to comments on a new grid development project with personal letters. In these letters, each respondant received a personal number. These personal numbers where then used as references within the overall feedback report, so that individuals could see where their comments fitted in the general feedback picture. It was found that this approch struck a good balance between general feedback transparency and the demand for personalised feedback.

Contact person: Camiel Masselink, camiel.masselink@tennet.eu

Study on public acceptance

Germanwatch conducted a study on the public acceptance of grid expansion projects using the example of a transmission line in Thuringia. They used media, documents and interview analyses to put together a 50 page report focusing on the successes and limitation of the public involvement in this particular project. The report gives a transparent overview of the procedure, stakeholder interactions and different interests. Germanwatch thus contributed important information to the discussion on how public and stakeholder involvement can be improved in planning and permitting procedures. It furthermore confirms that an early (starting at the discussions about the need for this power line) and continous involvement of the public is a necessary precondition for the acceptability of the project.

Contact person: Katja Rottman, rottmann@germanwatch.org

More information: http://germanwatch.org/en/download/4135.pdf

Other experiences how to improve transparency are, for example:

- National Grid puts minutes of stakeholder meetings on their website.
- Swissgrid published meta-study on characteristics of overhead lines and underground cabling.
- In a brochure on their "Approach to the design and routing of new electricity transmission lines", National Grid explains in detail their multi-criteria analysis which forms the basis for major planning decisions.

Providing Credible and Understandable Information

To enable productive engagement by the public and NGOs, it is vital to provide credible information. While this is challenging on many levels, it is key to making discussions constructive and fruitful as well as building trust between the actors involved.

Challenges

- Frustration is likely to arise if information is unavailable or hard to find.
- The independence of information provided by TSOs is sometimes questioned, particularly on controversial topics such as electromagnetic fields (EMF) or undergrounding.
- There can be criticism of information material which is designed for a non-expert audience for being "commercial material" or "glossy brochures without content".
- It is often hard to find the right balance in information provided between a sufficient level of detail and accessibility to readers.

Lessons learned

- It is highly beneficial to provide information proactively from the beginning of a project, especially on critical topics such as EMF.
- References to external information sources can increase the credibility of information on critical topics.
- A useful strategy is to provide information in different formats for different target groups and information needs.

Information and learning exhibitions in schools: learning about the energy transition

Together with the Independent Institute for Environmental Issues, 50Hertz organises educational events at primary schools every year. Pupils and their parents are informed on the energy transition, for example, and can discuss this topic with representatives from politics, authorities, and industry.

In an interactive exhibition that was designed for children to join in and gain their own experience, pupils can change the energy landscape themselves on the "Energy Transition Carpet". They discover various aspects of the energy transition and discuss its different aspects in five related learning stations.

Contact person: Olivier Feix, olivier.feix@50hertz.com

Innovative event format (Swissgrid)

In summer 2013 Swissgrid organized the first information events concerning the first expansion project with partial cabling of 380 kV in Switzerland. Following a decision by the Federal Supreme Court the line Beznau-Birr will be realized including approximately 1.2 km of cabling.

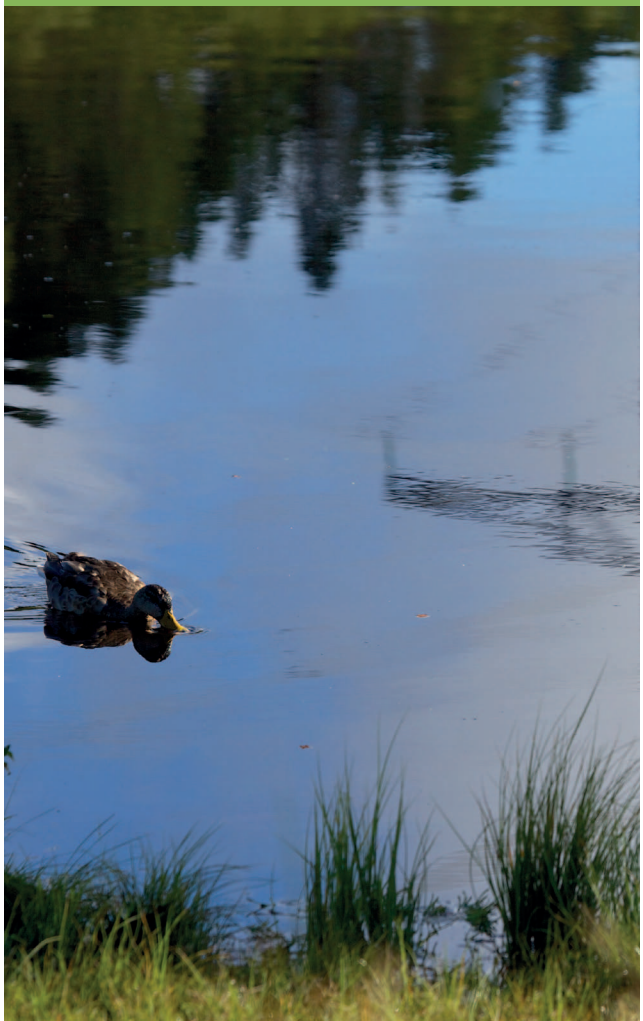
In collaboration with all partners of the project, Swissgrid had the opportunity to present the details of the project to local, regional and national authorities, the media, local population, and other stakeholders. Different stands were spread throughout the venue that displayed information on various topics. The approx. 100 participants had the opportunity to receive comprehensive information pose their questions directly to the people responsible for planning and implementation of the line.

Contact persons: Fabio Bongulielmi, fabio.bongulielmi@swissgrid.ch

Other examples of how information can be provided in an understandable and credible way:

- Use of external sources to strengthen credibility of information on electromagnetic fields (RTE, National Grid).
- 3D visualisation for information on spatial decisions (Statnett, TenneT NL).
- Road show with information about, and measurements of, electromagnetic fields (50Hertz).
- Augmented reality app to show impact on landscape (Swissgrid).
- Use of new media channels both for corporate and for project communication (RTE).

Environmental Assessments and Reducing Environmental Impacts



The EU Directives and guidelines on Strategic Environmental Assessments (SEA) and Environmental Impact Assessments (EIA) provide frameworks for how environmental impacts can be systematically and thoroughly considered within the grid development process. SEA is the environmental assessment of 'plans and programmes', as opposed to EIA which deals with the individual projects implemented after such planning. In addition to undertaking these assessments and implementing their findings, many TSOs are working on innovative ways to limit the environmental impact of grids.

Challenges

- The capacity of environmental authorities plays an important role for environmental assessments. If they are overstretched, proper scrutiny and high quality assessments cannot be guaranteed.
- The interpretation of requirements related to SEAs differs substantially from country to country.
- If the EIA is the only option for stakeholder input, it might be relatively late in the process since major (spatial) decisions have already been taken. This can be avoided through rigorous application of SEAs, to ensure those higher-level spatial decisions are environmentally sound.

Lessons learned

- The SEA can have positive impacts on the planning of grid expansions. If done well, SEAs can be a time-saving investment for later stages.
- The exchange of data used for projects can enhance both assessments and working relations with authorities.
- Spatial planning techniques and the use of sensitivity maps can help to minimise environmental impacts.
- Going beyond the minimum requirements of SEAs and EIAs and implementing additional measures can be highly beneficial for the environment and for stakeholder relations.

ERPA criteria and information exchange

In order to find the corridor that has the highest degree of environmental compatibility and sustainability, siting criteria are applied by Terna. The criteria are determined by a National SEA Group which consists of relevant national Ministry representatives. They cover technical, economic, social, environmental and territorial aspects. Together with the National SEA Group and the regions, Terna agreed on a system in which the application of the criteria leads to a characterisation of the territory in one of four categories: Exclusion, Repulsion, Problematic and Attraction (ERPA). To be able to work with this scheme, Terna established an extensive database of cartographic information, which is exceptional in Italy. Cartographic information is collected from authorities and with the help of field trips. In addition, the field trips serve to establish good working relationships with the local authorities.

Contact person: Adel Motawi, adel.motawi@terna.it

Co-operation and risk mapping to reduce bird electrocutions in Hungary

Birds with large wing spans, such as storks and some birds of prey, can be at risk of electrocution on poorly-designed medium voltage power lines. Initiatives to reduce the risks in Hungary began in the 1980s. In 2008, with the lead of the Ministry of Environment and Water, all of the three electric utility companies, the Hungarian Transmission System Operator, private business companies (designers and suppliers) and MME/BirdLife Hungary signed the 'Accessible Sky' agreement to address this problem. Under this agreement, MME developed a 'bird electrocution conflict map', showing the risks across Hungary for the most affected bird species. New measures to make power lines safe for birds are now prioritised more effectively. These measures are being part-financed by utilities with support from the EU LIFE+ programme and the European Regional and Development Fund (ERDF).

This example shows the positive impact of enhanced cooperation between industry and NGOs for minimising bird mortality on electricity infrastructure. Better solutions are reached where stakeholders come together to share their expertise, and to prioritise and plan improvement works.

Contact person: Marton Horvath, horvath.marton@mme.hu

Other good examples of how high-quality assessments can be achieved and impacts on the environment reduced include:

- Elia and RTE initiated a project to enhance the restoration of wildlife corridors under overhead lines (funded by LIFE+, http://www.life-elia.eu/en/).
- TenneT NL developed a pylon ("Wintrack") which has reduced electromagnetic fields and has less intrusive impacts on landscape.
- 50Hertz commissioned a study on aisle management to find solutions for less intrusive corridors under electricity grids.

Continuous Cooperation with Environmental NGOs

On-going and constructive cooperation between TSOs and NGOs is highly beneficial to both parties, contributing both to improving environmental planning and to timely grid expansion. However, there are still factors which can impede cooperation, especially concerning a lack of resources among NGOs combined with a need to maintain their independence and credibility.

Challenges

- There is often a lack of resources and as a consequence less in-depth expertise on the NGO-side for dealing with grid issues.
- Complex internal structures in both NGOs and TSOs can sometimes make cooperation difficult.
- The perceived independence and credibility of NGOs can be at stake when working closely with TSOs, in particular if environmental concerns, public participation and transparency are not sufficiently and systematically considered.

Lessons learned

- A structured approach to cooperation can help to deepen relationships.
- Taking environmental concerns sufficiently into account in the planning process creates an opportunity for productive cooperation.
- It is of great importance for the TSOs to understand the NGOs' need for independence.

Funding NGO supervised employee

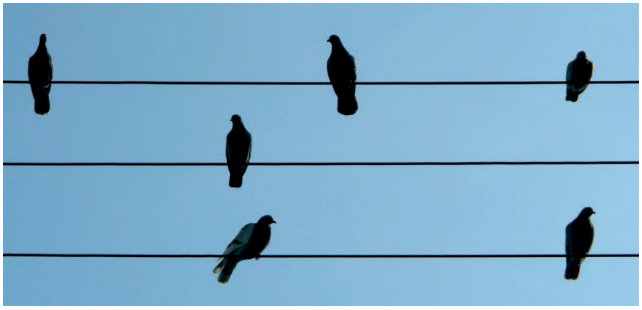
RTE together with two environmental NGOs and the French Distribution System Operator, ERDF, established the National Committee on Bird Protection in 2004. The committee identifies good practices on bird protection measures, promotes them nationwide, and mediates conflicts that arise locally on specific grid lines. In order for NGOs to have the capacity to deliver input, RTE and ERDF are financing a full-time employee who is working independently and under an NGO supervisor. He is working exclusively on resolving issues regarding birdlife and RTE/ERDF infrastructure. The contract is limited to three years, but will be prolonged if the experiment proves to be successful.

Contact person: Aude Laruens, aude.laurens@rte-france.com

Commissioning and utilising NGO report

Elia has commissioned a study "Reducing bird mortality with high and very high voltage power lines in Belgium" from Aves-Natagora, a partner in the BirdLife Europe network of NGOs focusing on the protection of birds and nature. The goal of the study is to look for priorities among the mitigation measures that can be taken to decrease grid-related bird mortality. Already during the course of the study, the preliminary results have led to the use of bird spirals in a project where a pylon at the edge of a Special Protection Area needed to be enlarged. At the same time, working together on the report has helped to strengthen the relationship between Elia and Aves-Natagora.

Contact person: Gaëlle Vervack, gaelle.vervack@elia.be



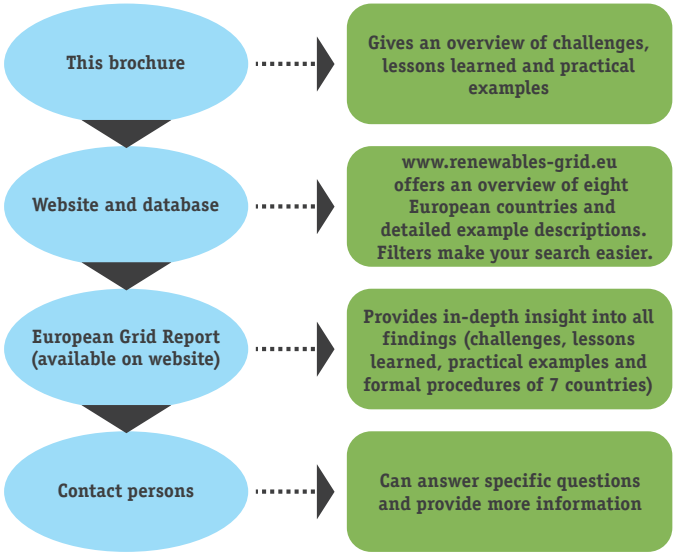
Cooperation between NGOs and TSOs is enhanced, for example by:

- Joint field trips to show NGOs and authorities their environmental work (50 Hertz).
- Dedication of resources for grid issues from NGOs (Germanwatch, RSPB).
- Long-term contracts for the realisation of joint projects (Terna and WWF Italy).

Concluding Remarks

The project on best practices in 2012 has shown that all TSO partners of RGI have started introducing new approaches that follow the principles of both parts of the European Grid Declaration. However, a lot of TSOs are only at the beginning of reshaping planning procedures, introducing new methods to reduce impacts on environment or use external stakeholder knowledge throughout the process. The need for, and the value of, further knowledge exchange among TSOs and with NGOs has become evident. Thus, in 2013, RGI has updated the findings of 2012. New examples have been collected and published in a summarising document (available on our website). This effort will continue in the coming months and years. Actors who want to participate in the exchange are very welcome to contact us.

If you would like to have more information....



About RGI

The Renewables-Grid-Initiative (RGI) promotes 100% integration of electricity produced from renewable energy sources. TSOs and NGOs join forces in RGI to support the build-up of a sufficient grid infrastructure in Europe for both decentralised and large-scale renewable energy sources. This grid development should be efficient, sustainable, timely, environmentally friendly, and socially acceptable to all stakeholders.

www.renewables-grid.eu

Contact: Theresa Schneider, theresa@renewables-grid.eu

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BirdLife Europe

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Design: info@trabucchi.de