

Final EPSU opinion on
EREG Public Consultation Paper on Smart Grids
EREG REF: E09-EQS-30-03, 10 December 2009

The European Regulators Group for Electricity and Gas (EREG) launched a public consultation on its position paper on Smart Grids, 17 December 2009.¹ EREG requests the views of stakeholders on its position on the regulatory aspects of electricity networks and their future development.

Smart grids imply a “paradigm shift in the way electricity networks will be planned, operated and maintained.”

EPSU welcomes the consultation. The development of smart grids is important for the future of Europe’s energy policy. Our members support the development of smart grids whereas we are critical and more skeptical as to the benefits of smart meters for domestic households compared to the costs.²

General Observations:

1. Radical innovation requires more substantial regulatory treatment ensuring that users’ interests are protected. The cost-benefit analysis of the introduction of smart grids is not so clear: will domestic users have to carry the main burden of the costs while they will not be main beneficiaries – certainly not in the beginning. The regulators do not pay attention to this. Due to such neglect domestic and vulnerable users risk being exploited. *We recommend the regulators to commission research on this aspect and provide clarity as to the costs and benefits for domestic users of introducing smart grids.*
2. We deplore that the regulators continue to fail to see the *workers* in the industry as a stakeholder in what is not only their direct future, but also broader that of their families and the communities in which they live.³ *We recommend the regulators to main stream in their position papers the implications for workers in the industry and where relevant broader.* This is linked with the next point:
3. We remind the regulators that with the adoption of the Lisbon Treaty there is a general requirement, including for the European Agencies, to *mainstream the social issues and Public Service Values as contained in the Protocol.* From the Commission website on the Treaty: “**The Treaty of Lisbon contains a “social clause” whereby the social issues (promotion of a high level of employment, adequate social protection, fight against social exclusion, etc) must be taken into account when defining and implementing all policies.**” (article 9 of the Treaty on the functioning of the European Union). This is clearly not done in this paper. And the same is true with regard to taking account of the Public Service (Services of General Interest) Protocol (Protocol No 26 of the Lisbon Treaty). This Protocol states that “**The shared values of the Union in respect of**

¹ http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/OPEN%20PUBLIC%20CONSULTATIONS/Smart%20Grids/CD/E09-EQS-30-04_SmartGrids_10%20Dec%202009.pdf

² EPSU contribution to an EREG working paper on smart meters (state of play).
http://www.epsu.org/IMG/pdf/EPSU_Comments_smart_meters.pdf

³ The paragraph on p.10 which refers to stakeholders “Regulators are not...to be successful” mentioned almost about every conceivable interest group, accept the workers and their unions.

services of general economic interest within the meaning of Article 14 of the Treaty on the Functioning of the European Union include in particular:

- **the essential role and the wide discretion of national, regional and local authorities in providing, commissioning and organising services of general economic interest as closely as possible to the needs of the users;**
- **the diversity between various services of general economic interest and the differences in the needs and preferences of users that may result from different geographical, social or cultural situations;**
- **a high level of quality, safety and affordability, equal treatment and the promotion of universal access and of user rights.**

We miss in particular the reference to this last point. *We recommend the regulators to make clear in their position papers and regulations how these relate to the provisions horizontal social clause and the Services of General Interest Protocol in the Treaty.*

4. Lacking in the approach of the regulators is how regulators will deal with *cross-border network companies*. While National Grid (UK) expanded into the US and acquired several assets, there is now a European crossborder merger between TENNET (Netherlands) and German company Transpower (former EON's high voltage network operator ⁴). Belgian network company ELIA has confirmed that it is bidding for the network operations (Transmission) from Vattenfall Europe in Germany, together with an Australian investment fund. EPSU welcomes cooperation between grid companies (and with workers' participation, information and consultation and negotiating rights applying) but we are opposed to the take-overs, mergers and privatization of the transmission networks. This is a particular domain where risks should be avoided and security comes at a premium. One day of a network not functioning, wipes out the benefits to society of many years of so-called synergies and which are questionable in the first place. The Dutch municipalities have refused to borrow money to TeNNet. They were not ready to finance its risky adventures. The possible cooperation between ELIA and investment funds likewise introduces risk and short-termism. If banks would be such great long term investors we would not have had the financial and economic crisis millions of workers and their families are experiencing currently. We can not see the advantages to users and especially domestic households of such take-overs which are costly and which need to be financed. The risk is very high that this will be done through extra charges for the use of the networks. EPSU advocates public ownership of infrastructure that is essential to the functioning of societies. We favour cooperation between transmission network operators and owners and which would facilitate the creation of European (super-)grids and cross-border connections and at the same time embody the creation of a European electricity market. Trade unions need to be involved in these developments and the regulators should also include the promotion of social dialogue and information and consultation rights in their rules.

We recommend the regulators:

- To express themselves clearly that profit maximizing motives have no place in the European networks.*
- To indicate the implications of such cross-border mergers for regulations*

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http://www.tennet.org/english/investor_relations/news/tennetcreatesfirstcrossbordereuropeantransmissiongridwithacquisitionofgermangridoperatortranspower.aspx

- c. *To consider which alternative model of developing European grid companies is possible other than through take-overs and mergers.*

Other points that are missing:

The regulators pay no attention to the *jobs and skills* required to construct the smart networks of the future. EPSU is concerned that the highly skilled and qualified staff will not be available in time to match the ambitions and could be a potential bottleneck and constraint on future development. *We recommend that the regulators should ensure that the companies invest in (joint) training, apprenticeship schemes and jobs. We recommend that European Investment plans (of ENTSO-E) are accompanied by a labourmarket analysis and an overview of national education and training plans how the industry, public authorities and the companies and trade unions (through collective and other agreements – also of a transnational nature) are stimulating training, education and upskilling. This will contribute to the implementation of Smart Grid European Technology Platform recommendation 10.*

There should be rewards for the companies that agree (as employers) with the trade unions such schemes. Leaving it to the vagaries of the market risks not bringing the timely investment in jobs or be more expensive when companies recruit skilled workers elsewhere at a bonus. *The regulators should further encourage the network companies to do research as to the specific jobs and skills required.*

The regulators mention on a few occasions that it is their view that smart grids will assist recovery after faults, fault analysis, contribute to improved accuracy of maintenance, maintain and improve the existing services efficiently and even improve the existing high levels of system reliability, quality and security of supply. This is not referenced and no indications are provided of the possible (positive or negative) job impacts and skills requirements. *We recommend the regulators to provide more clarity on these implications.*

We recommend that ENTSO-E issues guidance to the TSOs to ensure they have qualified and skilled staff including for maintenance and repairs. TSOs should have staff to deal with maintenance, repairs and emergencies.

We recommend that ENTSO-E explores how emergency crews can be created that assist other TSOs in case of problems. This should be done in consultation and cooperation with the unions concerned.

Certification and Verification

The development of smart grids and smart meters needs to be accompanied with a clear policy regarding *certification and verification* of the companies which work on electricity related issues. Networks become more complex and with smart grids, smart meters and distributed generation it is important that safety, security, reliability and quality are spread and monitored throughout the value chain of the sector. EPSU affiliated unions note the on-going process of outsourcing, sub-contracting and sub-sub-contracting. Companies from several European countries can be involved. The European consideration of licensing of companies that are competent to work on grids and including smart grids (around which a whole industry of appliances and services is likely to develop) is possibly also key to get more acceptance of smart technologies. Important are issue of privacy – citizens need to understand what kind of companies they do business with.

This is also task of the regulators (and maybe ENTSO-E as TSOs play a role as they interact with such companies and will have to ensure to work with certified and verified companies. This could be developed in the *Operational Handbook*⁵.

As trade unions we regard the negotiating and signing of collective agreements a key benchmark of verifying if a company is bona-fide or not. Companies that do not sign and negotiate collective agreements usually do not have good practices of information and consultation and social dialogue and seek to escape parts of their obligations, for example contributions to industry funds for training, to meet pension obligations, to pay sector wages etc.

Companies developing the networks or participating in TEN-E or recovery projects and thus receiving funding from the EU should be of high reputation and respect CSR principles.⁶ Funding should be conditional on being certified and verified. Part of the verification is to consult with the trade unions on company social behavior.⁷

We recommend that Regulators develop a policy of certification and verification to assist an appropriate implementation of Network Development Plans. Elements we suggest of such a policy for companies:

- *Having sufficient staff with the appropriate training and skills to accomplish the tasks*
- *Verifiable health and safety procedures in line with industry best practice*
- *Good level of social dialogue, including information and consultation practice*
- *Respecting collective agreements*
- *Contribution to industry training courses and funds*
- *Respecting Corporate Social Responsibility principles⁸*
- *Register of certified companies, and an accompanying register of companies that do not respect the high level standards*

Missing is further a thorough analysis of the implications of introducing smart grid technology for vulnerable users and a rigorous analysis of cost and benefits, and who will pay for that investment.

Questions

Do you consider that networks, transmission and distribution are facing new challenges that will require significant innovation in the near future ?

⁵ <http://www.entsoe.eu/index.php?id=57>

⁶ Eurelectric has signed a European agreement on CSR with the European trade unions. It lays down key principles including for CSR reporting. <http://www.epsu.org/a/5343> The European companies have also accepted the Global Reporting Initiative and the Electric Utilities Sector Supplement. A forthcoming report by EPSU will demonstrate that more can be done to prevent CSR from becoming a whitewash operation though. <http://www.epsu.org/a/6018>

⁷ Experience of EPSU and members is that having CSR policies is not a guarantee that they are implemented.

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Yes. Innovation and the investment to realize the innovation are required. Investment is also needed in jobs and skilled workers. Companies should be encouraged to be innovative also in this domain through apprenticeships, training agreements with the unions and cross-border training and further education programmes that allows the sharing of knowledge.

We do understand the networks to be the backbone of the public service in the electricity sector. We do NOT share the view that networks should be run on a competitive basis or for profit.

Do you agree with ERGEG's understanding of a smart grid ?

Yes. It is similar to that of other organizations. We appreciate that ERGER makes the distinction between smart grids and smart meters. Smart grids are set to bring benefits for society, including domestic users. EPSU is skeptical of the benefits of smart meters for domestic households compared to the costs. (See: EPSU contribution to an ERGEG working paper on smart meters (state of play).

http://www.epsu.org/IMG/pdf/EPSU_Comments_smart_meters.pdf

Do you agree that objectives of reducing energy consumption impose the need for decoupling regulated companies' profit from the volume of energy supplied ? How can this be implemented ?

We are concerned with the reference to profits in the question. EPSU does not support the view that networks should be a source of profits and hence profit-maximization . A fair and regulated rate of return can be supported.

EPSU supports the idea of decoupling. The way in which this can be done is to learn from the experience of Negawatts, or demand response approaches.

Do you agree with the drives of change identified in the consultation document ? If not, please offer comments and additional ones.

The drivers for change have been well identified. What is not identified, is what can be possible hindrances to the future development of the networks and deployment of innovative solutions. (see below) One of these hindrances is *the availability of jobs and skilled and trained workers*. This is not identified.

Another hindrance to future development can be *unclear value chain relationships* through a variety of outsourcing and other arrangements. The future regulations should make very clear who is ultimately responsible including for such issues as training and health and safety for example.

The experience of trade unions is that the internal market has given rise to a fragmentation of the industry. This fragmentation is sought and encouraged by the European Commission and the Regulators. The fragmentation does not stop though with mere unbundling of networkers from generation companies. It continues throughout the value chain of the electricity (and gas) sector. Many companies have outsourced what we used to call "core business." The regulators should be very clear in their regulations what they expect the companies that own and/or operate the networks to be responsible for.

The regulators often do not have enough resources to oversee this multitude of companies arising. We predict that this lack of oversight, monitoring and control will cause an increase in

accidents and problems with the operation of the networks. The paper of the regulators does indicate that with smart grids the complexity will increase. We are not convinced that the regulators are already prepared for this future of complexity.

One particular domain we draw attention to is with regard to maintenance and repairs. It is often repeated and included in different directives such as on Security of Supply. So far the regulators have paid no attention (as far as we are aware) to how the maintenance is organized and regulated. This neglect can cause problems in the future (non-licensed operators in sub-sub contracting for example). *We recommend that the regulators issue more guidance on this challenge.*

Do you agree that a user-centric approach should be adopted when considering the deployment of smart grids ?

While it is tempting to say yes (of course the deployment of smart grids should be linked to the needs of users) it not so clear what this implies? That everything goes and a free market approach should be used ? The deployment of smartgrids will also have to be linked to what requirements society sets such as ensuring safety, access of all and especially vulnerable users, integrating renewables or security of supply, and even more important the security of the networks. These collective interests are issues of public policy that override more individual user needs. We consider public interest regulation more important and valuable than regulation just for competitive purposes.

How should energy suppliers and energy service companies act in the process of deploying smart grids solutions ?

The regulators should set out the public policy principles and criteria. These include that the companies will invest in training and respect Information and Consultation obligations (introduction of new technologies !) The regulators might want to seek to ensure that companies apply principles of Corporate Social Responsibility as for example defined by the trade unions together with Eurelectric. Certification and verification of standards will become more important, see our earlier comments

http://www.epsu.org/IMG/pdf/Joint_Position_CSR_22_June_2009-2.pdf

Do you think that the current and future needs of network users have been properly identified ?

While the paper indicates a whole range of needs, more emphasis could have been placed on Security of supply, the implications for vulnerable users, what affordable price and a just rate of return imply in the case of deploying smart grids.

Do you think that the main future network challenges and possible solutions have been identified ?

As we have argued above a major challenge not identified concerns:

- Ensuring that qualified staff are available. Encouraging training is not mentioned. We recommend that the regulators monitor what the network companies do in this regard: what solutions are found, what agreements reached between the social partners etc.
- The relation between the complexity and fragmentation of the industry, outsourcing and the implications for regulatory oversight, control and monitoring are not made.

- Privacy issues will be more important also when developing the smart grids. The Regulators should address this head on and stop developments that do not take this into account

Do you expect smart grid solutions to be essential and/or lower costs than conventional solutions in the next few year.

We have no evidence to support the statement either way. Some skepticism is required to those who would claim smart grid solutions will be low cost in the forthcoming years. EPSU would like to understand the job implications for example for maintenance activities of networks, for the operation of networks etc. Some of the new technologies might focus on reducing maintenance for example and thus have an impact on jobs. More ICT will require more staff to deal with this.

Smart grids will not prevent that investment is needed in the networks over the years to come. The extension of networks (North Sea ring, Mediterranean ring...) will require investment. Smart grid technology might in such cases actually add to the costs.

Would you add to or change the regulatory challenges set out in Section 3.6?

The emphasis in this section appears to be wrong. It gives the impression that regulators should stimulate risk taking. (3.6.1 in particular) We do not agree: the networks are so essential that security is the overriding aspect. This does not mean that companies should not be stimulated to be innovative, but the starting point is very different. Regulators can require the companies to invest in research and development.

We stress again that a challenge for the regulators is to stimulate the companies to have well trained and qualified staff, to respect their corporate social responsibility obligations, and to deal with the fragmentation, complexity of the value chain by providing clarity of responsibilities. Workers and their unions are a key stakeholder.

Do you agree that regulators should focus on outputs (i.e. the benefits of smart grids) rather than inputs (i.e. the technical details)?

No. A mix of both will be needed. We have argued before that the complexity of networks and the fragmentation will increase. Regulators will be required to develop clear guidelines on inputs as well.

By the way: we do not agree with the ideological point made that business knows better. We remind you that Kenneth Lay, the former CEO of ENRON, found guilty of criminal behaviour, argued that imperfect markets know better than a perfect regulator. We know what mess he and his co-conspirators made of it, destroying billions of dollars of value. It is the sort of ideological statements that ensure that companies escape regulation, that regulators abdicate from their responsibilities and ensures users are exploited. It applies to energy markets as to other markets (financial ones example).

The experience of the regulators themselves should be guidance as well. If they do not intervene market prices will be much higher than is appropriate and just.

Which effects and benefits of smartness could be added to the list (1) - (7) presented in Section 4.1, Table 1? Which effects in this list are more significant to achieving EU

targets? How can medium and long-term benefits (e.g. generation diversification and sustainability) be taken into account and measured in a future regulation?

Which output measures should be in place to incentivize the performance of network companies? Which performance indicators can easily be assessed and cleansed of grid external effects? Which are suitable for European-level benchmarking and which others could suffer significant differences due to peculiar features of national/regional networks?

As we argued:

- Availability of qualified and well trained staff. Regulators can assess this through: demanding overview of outstanding job vacancies in relation to the number of jobs in the company; plus an overview of the number of people in training in the companies (apprenticeships) in relation to overall workforce. Both categories would have to be divided in specific education levels or job categories. Another measure is the nr of agreements between the company and the trade unions to train workers. This benchmark could be part of the overall security and quality of supply benefit measure.

Do you think that network companies need to be incentivised to pursue innovative solutions? How and what output measures could be set to ensure that the network companies pursue innovative solutions/technologies?

Yes. If there is no incentive to train workers, it will often not be done from fear of training for the broader labour market and not benefiting directly. The end result is that there is a lack of trained staff. As we argued earlier, the easiest solution would be to consider the training programmes agreed between the unions and the companies, and to encourage to companies to enter into such programmes.

Do you consider that existing standards or lack of standards represent a barrier to the deployment of smart grids?

Yes. See our earlier response.

Do you think that other barriers to deployment than those mentioned in this paper can be already identified?

Lack of skilled workers. See earlier responses.

Another barrier we identified concerns unclear responsibilities in the value chain.

Do you believe new smart grid technologies could create cross subsidies between DSO and TSO network activities and other non-network activities?

Possibly. What should be prevented is that users and especially vulnerable users are charged for expenses and developments they will hardly benefit from, or for which they will not recuperate the investment.

What do you consider to be the regulatory priorities for electricity networks in relation to meeting the 2020 targets?

The regulators should consider developing mechanisms for ensuring skilled and trained workforce that can operate, maintain and develop the networks of the future.

Regulators should prevent that the fragmentation and complexity is made worse by outsourcing and sub-sub contracting arrangements. We consider it important that the regulators define the core competencies for which the companies need to have qualified staff. As we will be confronted with an increasing number of companies, the contents of licenses becomes more important. Regulators should impose four conditions on companies as part of a license:

1. Obligation to employ and train a skilled workforce to deliver a quality service
2. Prohibition on outsourcing core functions, including network maintenance and customer service
3. Liability cannot be devolved to sub-contractors
4. Contracts should be obliged to maintain sectoral wage levels

EPSU is the European Federation of Public Service Unions. EPSU represents over 8 million workers in their 274 trade unions in all European countries. EPSU organizes workers in state administration and central, local and regional government, health and social services and the utilities (energy, water, waste). In the electricity and gas sector EPSU affiliated unions organize workers in all parts, including the distribution companies and auxiliary services.

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