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**Statement of the
Verbraucherzentrale Bundesverbandes e.V. (vzbv)**

**Position Paper on Smart Grids
ERREG - Public Consultation Paper**

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Section 1 – Introduction

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

We do consider that the electricity market in total is facing new challenges. The challenges affect networks as well as power generation, electricity supply, device manufacture and consumption. In our opinion most important is to develop a solution for the market in total. In course of this the framework must be borne in mind different proposals for solution and alternative methods to reach the target. A jointly coordinated approach will be useful.

The necessary base load capacities for the future have to be identified in consideration of the 2020 targets – i.e. the potential of hydro-, biogas-, geothermic plants and, virtual power plants, the potential of technical optimizing of existing power plants for stabilizing the line voltage. The necessary development of storage methods including electro mobility have to be taken also into account. The cost allocation of the grid has to keep under review taking prosumers into account. Prosumers leave partly the mutually supportive group in the section of producing for their own consumption. But they need all the benefits of the grid in the sections of power feed and own demand.

2. Do you agree with the ERGEG's understanding of smart grid? If not, please specify why not.

For example the integration of renewable energy, the transportation of electricity to the point of consumption and a high level of reliable supply are well known functions of network operators. The basic functionalities in Germany already exist. Renewable energies have a share of more than 16 percent of the German electricity consumption. About 500.000 renewable plants in Germany are already integrated in the electricity market. And the consumers already pay for this integration.

The development of the energy market will cause to build up the power grids. But not each development of the grid in the future should to be sold under the name of "smart grid". In our opinion "smart grid" indicates special solutions of special problems. Especially distribution networks have to find new solutions because of new requirements to balance demand and supply. At present it will be the major challenge to clearly work out which special and new features are necessary for and belong to a "smart" grid. For the area of the grids a rational network planning for Europe is mandatory as a first step.

3. 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?

The question implies that regulated companies should be committed to provide services in order to save energy on household or consumer level. Generally it has to be questioned whether regulated companies are the right target group for this kind of obligations. The discussion of the implementation of the EU directive on Energy End Use Efficiency and Energy Services within Germany shows that it is hardly possible to break through the inherent logic of energy suppliers to sell energy (and not to save it). Moreover, it has to be questioned what kind of services are potentially able to save energy on household level, by whom they should be provided and at what price. Examples from other countries show that it is quite complicated to implement legal instruments such as white certificates in order to regulate energy suppliers.

Within this debate it might be useful to think of other players that could be committed to save a certain amount of energy. Municipalities, for example, could have saving obligations. They

could then plan for themselves whether they want to reach their target by modernizing buildings, by committing energy suppliers, modernizing their transport system or every other measure they think has the largest saving potential in their region.

Section 2 – Drivers for smart grids

4. Do you agree with the drivers that have been identified in the consultation document? If not, please offer your comments on the drivers including additional ones.

In general we do agree with the identified drivers. As we stated in our answers No. 1 and 2 the grid is only one part of the necessary solution. With regard to active end-user participation, especially household consumers, the question is how elastic the demand might be. Also a question is if the potential can be used economically, i.e. the price of the grid networks for time-based measurements as a requirement for time-based tariffs of the suppliers are too expensive. Because of this time-based tariffs make no economically sense at present.

Section 3 – Smart grid opportunities and regulatory challenges

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

It is necessary to develop the market from the viewpoint of the consumer. At the end all market developments should serve the needs of consumer.

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

Energy suppliers have to interlink consumption and power generation with attractive tariffs. But it is necessary to find the right conditions to solve this problem.

7. Do you think that the current and future needs of network users (Note: In our case, small customers/consumers) have been properly identified in Section 3.3?

We do agree with the identified needs for household consumers and household “prosumers”. One of the main targets will be the understanding of supply in the future. At present the electricity supply is a question of general-interest service. The power generation has to follow and accommodate the demand. It must absolutely be avoided that in the future the demand has to follow the power generation, i.e. low-income households are only able to use electricity during times of high level of generation and therefore low prices. Also we have to highlight the risk of undersupply because of rising price level following the expansion of renewable energy and networks. In Germany the electricity prices will rise probably by 10 percent in the next five years because of expansion of renewable energy. The network provider will invest 40 Billion Euro in the grid during the next 10 years. This investment could cause a price increase of probably 5 percent more. Higher commodity prices will be an other factor affecting the electricity price. Therefore it is absolutely important to take the price effects always into account. Efficient measures need therefore to be taken to reach the 2020 targets.

8. Do you think that the main future network challenges and possible solutions have been identified in Section 3.4 and 3.5 respectively? If not, please provide details of additional challenges/solutions.

We refer to our answers No. 1, 2, 5 and 7.

9. Do you expect smarter grid solutions to be essential and/or lower cost than conventional solutions in the next few years? Do you have any evidence that they already are? If so, please provide details.

We refer to our answers No. 4 and 7. Efficient processes and participation of consumers on the benefits in the market are needed to control the rising of electricity prices because of upcoming investments.

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

We refer to our answers No. 1, 2 and 3.

Section 4 – Priorities for Regulation

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

As we already stated in our answers No. 1, 2, 4, 5 and 7 it is highly important to consider the effects for the demand site - and especially the household consumers.

12. Which effects and benefits of smartness could be added to the list (1) - (7) presented in Section 4.1, Table 1 (Note: This is the table included in the summary)? 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?

For the area of the grids in a modern electricity market we do agree with the list in Section 4.1. It seems to be necessary to look at the Benefits for the member states in a differentiated way. For the security and quality of supply the consumers in Germany pay already billions of Euros every year with the high network charges. The failure time in Germany amounts to about 16 to 18 minutes per year. It might be uneconomically to improve the security and quality of supply in Germany. Therefore the weighting of goals should be based on the actual circumstances in different regions.

13. Which output measures should be in place to incentivise 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?

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14. 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?

In general we do not believe it will be necessary to motivate network companies to pursue innovative solutions in Germany. The grids in Germany are partly 40 years old. Collapsed power pylons and the development of wind energy in Germany illustrate the need for future investments. A return on equity of 9 percent set the financial incentive for the investment. And feed-in-tariffs with purchasing obligation of renewable energy as well as the duty of general-interest-service are key drivers in a modern electricity market. The innovative solutions will in general be driven by the market.

Still a problem might be that we do not have a real ownership unbundling. It has to be sure that network companies do not prefer related companies by innovative solutions.

Special attention must be given to an efficient expansion of the cost-intensive grid and a critical analysis of the eligible business expenses.

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

Referring to answer No. 4 not a lack of standards seems to be a problem to integrate household consumers to a modern electricity market but for example the economic interests of network companies. An adoption of grid fees to allow active end-user participation seems to be necessary.

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

Referring to answer No. 1 barriers for a modern electricity market may arise also in other fields outside the network, i.e. the tariff structure for household consumers or development and market integration of intelligent devices.

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

Because of the lack of ownership unbundling the network companies and related companies of power generation and distribution still have a common economic interest. Obviously grid expansion and network control provide an opportunity for preferential treatment of related companies, i.e. time for grid connection of new plants or rejection of operating power plants.

Also liberalized markets for smart meters or energy efficiency services might be influenced by related companies.

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

Referring to answers No. 1 and 2 it is necessary to face the new challenges for the whole energy market, taking into account different proposals for solution and alternative methods to

reach the targets. Special problems as the need of smart grid have to be identified. A rational network planning for Europe has to be worked out.

An other priority will be to take care of an efficient grid expansion and a critical analysis of the eligible business expenses as mentioned in answer No. 14. Target is to build up a “smart” grid for reasonable price, not a “super grid” overcharging the consumer.

Not at least it is necessary to find the right conditions to allow household consumers to play an active role in the new system as mentioned in answers No. 4 and 7.