

STATEMENT

provided by the German Association of Local Utilities (VKU below) on the ERGEG public consultation paper on draft guidelines of good practice on regulatory aspects of smart metering for electricity and gas

Berlin, 3 September 2010

The VKU represents 1,370 local utilities in the areas of energy, water and waste disposal. In the end-user segment they have a share of 65% in electricity, of 53% in natural gas, of 53% in provision of heating and of 67% in the provision of drinking water. The wide range of services provided by local utility companies are reliable, environmentally compatible and affordable for the consumer. They make a significant contribution to regional economic development. With over 220,000 employees the individual segments together generated revenue in excess of 90 billion euro in 2009. Investments amounted to 10 billion euro. The majority of these investments took the form of contracts placed with companies located in the region.

1. Introduction and general remarks:

The VKU welcomes the public consultation on the issue of ERGEG's draft guidelines of good practice on regulatory aspects of smart metering for electricity and gas and is grateful for the opportunity to comment on them.

The VKU unreservedly supports ERGEG's goal to create a suitable framework for standards to be implemented from the 3rd package in the context of smart metering.

A general point to be made is that the introduction of smart metering and services based on it will initially require a great deal of investment, which has to be undertaken primarily by the public utility companies or distribution system operators. Mass-implementation, interoperable and low cost solutions for them are still lacking at present.

For public utility companies to develop smart metering further, the appropriate framework is required, which guarantees both investment security as well as increasing energy efficiency.

As for the consultation document in general it should be stated that no clear division can be identified between regulatory and competitive functions. In Germany certain specifications are implemented in regulating smart metering, while further services are left to the competitive sector. Clearly defining the regulatory and competitive requirements characterises what is required of a smart meter significantly. The same applies to the overall costs of a nationwide rollout.

From our point of view ERGEG's recommendations should be more clearly separated into competitive and regulatory roles (minimum requirements).

We would like to comment in detail on ERGEG's draft guidelines of good practice on regulatory aspects of smart metering for electricity and gas as follows:

2. Remarks about the recommendations:

Recommendation 1: Information on actual consumption, on a monthly basis

With regard to the intervals in which users of smart meters should be given information, a difference has to be made between straightforward information and information related to billing. For information about consumption, fixed and comparable intervals must be selected (e.g. daily, weekly, monthly and annual readings). For actual billing the maximum monthly readings should be used. However, a firm demand that billing-relevant data for the supply and feed-in of energy should occur at least monthly does not seem advisable. Customers should be free to choose the appropriate intervals (monthly, quarterly or annually).

Recommendation 2: Accurate metering data to relevant market players when switching supplier or moving

Remote reading is currently not one of the technical minimum requirements of smart meters in several member states (e.g. in Germany). For this reason, this feature is left to the market. As long as this feature has not been defined and implemented as a minimum requirement, remote reading should not be the basis for recommended data quality or for selective intervals or frequency. Should remote reading be implemented as a basic function in all member states, rapid access to consumption data of meters may accelerate or improve the

process of switching provider, whereby this does not necessarily guarantee an increase in data quality. However, aspects of data protection and appropriate intervals should also be taken into consideration (see comments on recommendation 1).

Recommendation 3: Bills based on actual consumption

The first thing that should be mentioned is that bills – at least in Germany – are only issued in a few exceptional cases based on estimated readings. Normally, the providers or customers themselves read the consumption data (usually annually). Payments are made based on the usual past rates of consumption for the household. These payments are constant anticipated sums and are offset against the actual amount consumed at the end of the billing period. This means the customer has expenses for the whole year for energy supplies that are consistent and can be planned.

As already mentioned in recommendation 1, billing should occur at most monthly or at longer intervals. Billing based on current consumption at shorter intervals would not be advisable due to data protection and practical reasons. Nonetheless, in our view, customers should still have the opportunity to decide themselves on their billing frequency, as billing frequency also has cost implications. Irrespective of this, the customer can obtain information about his current consumption at the meter itself or in another form.

Recommendation 4: Offers reflecting actual consumption patterns

In several member states (such as Germany) legal requirements already apply on introducing time or capacity-variable tariffs. Energy providers have the opportunity here to sell the appropriate products – even based on smart meters. However, the use of shorter intervals than monthly readings is not possible for billing purposes (in Germany, for example) based on weights and measures laws in force that have not yet been harmonised throughout Europe. Only information about readings from shorter intervals is possible. The opportunities for energy providers are greatly restricted by the current weights and measures law. What is required here is European harmonisation and revision.

4. a) Question to stakeholders:

When interval metering is applied, which interval should be used for customers and those that both generate and consume electricity? Please specify timeframes and explain.

- 1. Less than half an hour**
- 2. Half an hour**
- 3. One hour**
- 4. More than one hour**

As already mentioned, the measured readings can be used only for information purposes in several member states due to the restrictions of weights and measures law. Shorter intervals than monthly readings are therefore not suitable for billing purposes. To display the consumption data, intervals of 15 minutes for electricity would make sense. The same applies to the feed-in of energy. However, data protection requirements must be complied with in both cases, so that unauthorised third parties do not have access to this information (e.g. problematic for displaying on a meter).

4. b) Question to stakeholders:

When Time-of-use (ToU) registers are applied for customers and those that both generate and consume electricity, what would be an appropriate number of registers? (Comment: In this case, registers are equivalent to prices)

On condition that the weights and measures terms have been adjusted and data protection concerns have been taken into consideration, the number of registers and different price bands should not be specified but left to the free market. In a metering system in a regulated environment with defined minimum standards (e.g. the status quo in Germany) a minimum of two registers is sufficient.

Recommendation 5: Power capacity reduction/increase

The functionality of a remotely controlled limitation or increase in supply should in our view not be a standard feature of a smart meter with domestic customers. To employ this function, the technical requirements in a private household call for numerous investments (e.g. in a smart home). Even the implementation process itself raises the (financial) cost for market players enormously, which is why the cost-benefit analysis repeatedly mentioned in section one of the consultation paper should precede any such recommendation initially. Irrespective of this, active regulation of consumers by a market player would not necessarily be feasible in all member states (such as Germany). In addition, extensive investments in infrastructure would be required, especially among distribution system operators. The regulatory framework does not allow for such innovative investments in every case. In Germany, for example, reducing costs in the context of regulating incentives is the primary goal. Under current conditions, distribution system operators would be unable to make innovative investments pay for themselves, given current network revenue.

Incentives to promote investment in modern metering systems are virtually non-existent. What is required here is the regulatory framework to be adapted.

Recommendation 6: Activation and de-activation of supply

In our view, consumers already have the option today of reducing or completely lowering their energy consumption and supply when absent by using various devices (e.g. power distribution unit with main switch). This feature should be considered less in conjunction with smart metering and more in the smart home or energy advice context and should therefore not be included as a general recommendation.

Recommendation 7: Only one meter for those that both generate and consume electricity

In our view, the standard meter should not be defined for both energy flow directions. Consumers who take on the function of a producer at the same time, are far less common compared with households that only consume electricity. Therefore, the latter require a simpler and probably lower cost meter.

Apart from this, several technical solutions already exist for dealing with simultaneous consumption and feed-in. Nor is it sensible and feasible in every case to use just one meter (e.g. with multiple family dwellings with their own consumption and third party supply via sub-meters). The recommendation for just one meter for supply and feed-in should therefore be dropped.

Recommendation 8: Access on customer demand to information on consumption data

As mentioned above, consumers should have access to information about their own energy consumption at all times. However, in many cases (e.g. multiple family dwellings) this is not guaranteed, as metering facilities have been installed centrally and easy access is excluded. The use of alternative approaches (e.g. SMS, separate display, Internet) would be one solution. However, this data could only be used as preliminary information without being binding for billing purposes, as the terms of weights and measures law do not permit other inclusions. In addition, data protection requirements (such as what is shown on the meter display) have to be adhered to. The costs of this kind of service also have to be recognised in the context of a standard solution.

Recommendation 9: Alert in case of non-notified interruption

In our view a warning or alert system for power cuts or interruptions should not be a feature of a standard smart metering system. Instead, free market players could provide this kind of service as a special feature.

For the distribution system operator this kind of feature has no added value when considering the cost-benefit ratio. Technical disruptions or failures are already registered today even at low voltage (at least in Germany) and loss or damage to customers avoided. At the transformer level comparable protective mechanisms already exist for the most part. This recommendation should therefore be dropped.

Recommendation 10: Alert in case of high-energy consumption

This feature should also be provided as an additional service by the free market. Not every consumer is interested in this type of feature.

Realtime information about current consumption can also be guaranteed with the aid of other features (short metering intervals with subsequent visualisation).

Apart from this, further basic conditions have to be clarified first to implement this kind of feature. Examples of this, as mentioned above several times, are weights and measures law and data protection.

Recommendation 11: Interface with the home

To fulfil the requirements of the 3rd package with regard to information about the customer's current consumption, various devices can be used. While considering the basic conditions referred to, an in-house display, a display on the meter or visualisation via an online portal could be used to display information. Nonetheless, a smart home interface would be an additional feature, which should also be left to the free market. This would also go beyond pure information and should not be part of the basic meter. However, each of these solutions – if the system operators are to implement them – should also be identified in terms of costs in the context of regulatory activities.

Recommendation 12: Information on voltage quality

The monitoring of voltage quality, insofar as distribution system operators have actively adopted it before now, is already part of their job, even without the introduction of smart

meters. To guarantee system stability and safety, distribution system operators are already taking the appropriate measures today. The quality of supply is already comparatively high in Germany today and the number of average power cuts and downtimes is correspondingly low. This issue should not therefore be formulated as a recommendation in conjunction with smart metering and should be deleted.

Recommendation 13: Information on continuity of supply

See comments on point 12.

Recommendation 13: Question to stakeholders:

What further services should be envisaged in order to allow consumers and those that both generate and consume electricity to be aware and active players in smart grids?

In our view the clarification of the open and currently insufficiently developed legal and regulatory framework would generate further programmes and service options based on smart metering in the free market. Further stipulations in the context of this consultation would therefore not be advisable.

Recommendation 14: When making a cost benefit analysis, an extensive value chain should be used

In our view, the intention to review the entire value chain as part of a cost-benefit analysis is very welcome. Taking account of specific costs, such as guaranteeing data protection is welcome. However, apart from the detailed description of benefits for several market players, potential risks or cost factors are missing from the list. In addition to the benefits described, potential execution methods should also be included in a cost-benefit analysis and financially evaluated. Subsequently, the meaningfulness of implementing a benefit can be evaluated given the relevant cost.

Furthermore, the customer's acceptance should also play a role in evaluating these measures. Even if the cost-benefit analysis should produce a positive outcome for a particular benefit, there should also be a market demand for it to be implemented.

Previous experience in Germany has shown that enlightening the customer about the cost-benefit ratio as much as possible also has a decisive effect on the prevalence of smart metering. The recommendation for a cost-benefit analysis should therefore also include the significant cost factors and an obligation to enlighten consumers (e.g. via a legislator's initiative).

Recommendation 15 and 16: "All customers should benefit from smart metering" and "No discrimination when rolling out smart meters"

As mentioned in recommendation 14, when it comes to the cost-benefit analysis, consumer requirements should be addressed and a comprehensive explanation of the opportunities and risks of smart metering undertaken.

Notwithstanding ERGEG's recommendation 15 it is not possible for all consumers to benefit equally from the potential of smart metering. Instead, it would make sense to create customer clusters in advance with a specific evaluation, as smart metering is likely to be more economical for heavy users than for consumers with low consumption. It might be

worthwhile extending the deployment of suitable smart meters in stages (e.g. basic meter and basic meter with an upgrade). As such, it would be possible to roll out an interoperable and all-encompassing basic solution via the distribution system operator, which would then have other features added, depending on customer needs. In the context of regulatory activities a guarantee would have to be made that the system operators would be able to earn enough to cover the costs incurred.

This is how a non-discriminatory, all-embracing and low-cost transition to smart metering could be achieved, which might contribute to optimising the system operators' activities. As such, all the system users – even those with the basic meter – would benefit from a rollout.

Recommendation 17: Information on actual consumption, on a monthly basis

See comment on recommendation 1

Apart from this, with gas it is doubtful whether the possibility of consumers controlling their consumption is comparable with electricity. Due to the physical properties of gas (e.g. its inertia) consumption is more difficult to control and especially to see compared with electricity.

Furthermore, when implementing smart metering products there are technical restrictions (such as a lack of power connection), which make the use of several current technologies either not possible or only with higher costs. It would therefore appear advisable to record consumption readings no more than hourly and provide them as information to customers.

Recommendation 18: Accurate metering data to relevant market actors when switching supplier or moving

See comment on recommendation 2

Recommendation 19: Bills based on actual consumption

See comment on recommendation 3

In addition, monthly consumption rates fluctuate enormously, especially with gas. Whereas consumption is especially high in the winter months, it drops significantly in summer. With monthly bills, the amounts payable would be very high in winter and low in summer. In our view, therefore, consumers would hardly accept a monthly bill.

Recommendation 20: Offers reflecting actual consumption patterns

20. a) Question to stakeholders:

See comment on recommendation 4

When interval metering is applied, which interval should be used for customers and those that both generate and consume electricity? Please specify timeframes and explain.

- 1. Less than half an hour**
- 2. Half an hour**
- 3. One hour**

4. More than one hour

See comment on recommendation 4a

In addition, based on the reasoning in recommendation 18, maximum hourly readings should be displayed.

20. b) Question to stakeholders:

When Time-of-use (ToU) registers are applied for customers and those that both generate and consume electricity, what would be an appropriate number of registers? (Comment: In this case, registers are equivalent to prices)

See comment on recommendation 4b

Recommendation 21: Access on customer demand to information on consumption data

See comment on recommendation 8

Recommendation 22: Hourly flow capacity reduction/increase

See comment on recommendation 5

In addition to this, the basic conditions or the ability to influence gas consumption make it difficult to take advantage of or develop price advantages for end consumers. When it comes to major clients, in several member states such as Germany, appropriate models are in use (e.g. interruptible contracts). However these are less suitable for domestic customers. Furthermore, most domestic customers use gas for cooking or heating. Variable or dynamic rates would therefore only have a slight effect or none at all on consumption itself.

Recommendation 23: Activation and de-activation of supply

See comment on recommendation 6

Recommendation 24: Alert in case of high-energy consumption

See comment on recommendation 10

Recommendation 25: Interface with the home

See comment on recommendation 11

Recommendation 26: When making a cost benefit analysis, an extensive value chain should be used

See comment on recommendation 14

Recommendation 27 and 28: “All customers should benefit from smart metering” and “No discrimination when rolling out smart meters”

See comment on recommendation 15 und 16

Recommendation 29: Customer control of metering data

No clear specifications have existed to date on implementation-relevant issues to do with data protection. However, it would seem advisable that the use and recording of data should be agreed with each consumer. We therefore welcome the fact that ERGEG is pushing for a clarification of this matter.