

**EREGE DRAFT GUIDELINES OF GOOD PRACTICE ON REGULATORY ASPECTS  
OF SMART METERING FOR ELECTRICITY AND GAS**

**Response on behalf of  
Eurogas's Supply & Markets Development Committee**

**1. Introduction**

Eurogas welcomes the opportunity to comment on this useful initiative by EREGG, which will be of great value in supporting the deployment of smart metering across Europe as required in the gas and electricity directives.

We recognise the importance to consumers of the improved information available via smart metering, and the desire of regulators to ensure the benefits of smart metering are made widely available. Where actual metering data is not available to gas suppliers on a regular basis, e.g. due to the DSO or metering company not being able to gain access to the meter, suppliers have to bill their customers on the basis of estimated rather than actual consumption. Smart metering offers the possibility of improving billing, customer switching and home-moving processes, and transforming other industry systems e.g. balancing and settlement, to the benefit of retail competition.

In the legal provisions of relevance to smart metering (1.4) EREGG considers the 3<sup>rd</sup> Package requirements in this regard, noting that implementation of smart metering systems may be subject to economic assessments of long-term costs and benefits to the market and customers. Eurogas highlights this 3<sup>rd</sup> Package provision, which addresses those markets and / or customer segments where the installation of smart metering is questionable from a cost/benefit point of view. Member States and regulatory authorities concerned should undertake impact assessments before smart meters are deployed.

We note the identification of 'minimum' and 'optional' customer services and comment in detail on these in this response. We also comment on the more general guidelines proposed.

While some of our members also have interests in electricity, the following comments on behalf of Eurogas are focused on the guidelines related to gas smart metering i.e. recommendations 17 - 29. We also focus primarily on the smart meter itself, rather than considering other possible elements of a metering system on customer premises.

Finally, even if the definition of responsibilities for the provision of services among different stakeholders is out of the scope of these Guidelines, this being defined at national level by NRAs, we believe a clear definition of the roles of market participants is important in order to guarantee the correct and smooth functioning of the market. In our opinion, a clear distinction should be made between metering services (e.g. provision of metering data etc.), often regulated, and post-metering services (e.g. home automation etc.) that should in any case be open to market competition.

## **2. General comments on proposed gas smart meter services**

We recognise that the services listed in Recommendations 17 – 21 are likely to be considered by Member States as the most important. It is therefore right that regulators should focus on them as representing the core functionalities in any roll out of smart meters in the gas sector. However while we would not wish to add to this list, we believe that there should be maximum scope and flexibility in how such functionalities are actually provided e.g. some services may be able to be provided by means of communications via the smart metering installation; alternatively information may be communicated via the internet. We therefore would not wish to see the core functionalities identified by ERGEG specified in any greater detail at EU level.

For this reason, we are concerned by the language in section 1.3 of the consultation, which talks of 'minimum' services being imposed on the industry. National regulators and industries should be free to develop their own frameworks, within which smart metering services can be developed for customers, ideally in a competitive environment and taking into account any synergies offered by smart meter projects in other commodities, (e.g. electricity, heat and water). To avoid misunderstanding, we suggest that what ERGEG refer to as 'minimum' services are termed 'core' services.

The 'optional' services listed in Recommendations 22 - 25 are likely to be beneficial to the development of the gas market, both in terms of customer participation and market competition. However these services are likely to involve additional cost. We comment further on the 'optional' services below, in particular on Recommendation 23, where we suggest careful investigation of the safety issues related to remote activation and de-activation of gas supply. We also wish to draw attention to our comments regarding Recommendations 20, 22 and 24, and highlight ERGEG's references to interval metering, which do not seem to be relevant for the generality of gas customers. Similarly, we do not believe that measurement of pressure compensation should be considered important for the mass market (section 5, page 34).

As noted above, Eurogas believes that in general, the provision of information services should for the most part be left to market conditions. It should be up to suppliers and ESCOs to offer such services to customers and for customers to decide whether they want such services.

Regarding Recommendation 29, Eurogas instead proposes the development of a code of practice within the new Privacy directive addressing in greater depth the important issue of data protection and data security in relation to smart metering.

## **3. Detailed comments - Gas**

*'Minimum' services*

### **Recommendation 17 – Information on actual consumption, on a monthly basis**

Considering firstly the data collection aspect, we note that the frequency with which gas consumption is measured will have an impact on the cost of smart metering. This will have to be considered in the cost/benefit analysis and there are likely to be national differences, depending on the nature and extent of gas usage in the Member State concerned. For those with a large number of low consumption customers, where meters are perhaps currently read manually only once or twice a year, the gains from higher frequency of meter reading for such consumers may not be readily apparent, whereas the costs incurred would have to be covered.

However the recommendation focuses on the provision of information on consumption to the customer, which is to be free of charge and no less frequently than monthly. We would comment that a monthly basis may not be useful to or used by some customers and many customers might prefer information in another format e.g. annual statement analysing

monthly/seasonal use, or perhaps daily by i-pad. We also note that the 3<sup>rd</sup> Package goes no further than 'frequently enough'. It should thus be for individual Member States and/or NRAs to decide on the frequency (monthly, bi-monthly, quarterly etc), taking account of the costs and benefits; the wording of this recommendation could suggest that assessments have already been made.

The recommendation is rightly not specific about the form in which consumption information is to be delivered. If it is electronically via the smart meter itself (potentially to a specific visual display), the costs of delivery may be relatively low, and there are also other electronic solutions by which suppliers can opt to communicate information on actual consumption and related cost to their customers e.g. through internet or email. Clearly the sending of information to customers in paper form would generate additional costs for suppliers, which would have to be recovered from customers in some way and the more frequent such communication, the higher the cost.

In this context, Eurogas believes that even in a system of monthly meter reading, suppliers should be able to continue to offer the option of monthly budget billing with an annual reconciliation bill to customers that prefer equally spread payments over the year.

Eurogas supports a customer-centric model, where the supplier is the main point of contact with the customer. Given the need to provide both cost and consumption information for the customer together, we believe the supplier should take on this responsibility. However we recognise there is a clear need for thorough assessments to be carried out on a national level, to determine how roles and responsibilities with regard to such smart meter-related services should be assigned, including data security and privacy aspects.

### **Recommendation 18 - Accurate metering data to relevant market actors when switching supplier or moving**

Eurogas recognises that the availability of accurate metering data is an important feature of smart metering.

However we note the reference in this recommendation to interval metering, which in the glossary is defined as:

*Capability of smart meters to record consumption and injection in short intervals (e.g. 10 or 15 minutes, 1 hour and so on) and store them for a minimum period (e.g. 1 month) inside the meter before being read by the data collector. These capabilities require the transmission to the data collector of a significant amount of values (e.g. for active energy consumed: 2,880 values for 1 month of 30 days if the interval is 15 minutes). It allows time of use pricing and is suitable for handling real time pricing and critical peak pricing.*

The last sentence suggests this is mainly relevant to electricity (where time-of-use tariffs and critical peak pricing can be readily envisaged). Interval meter reading in the sense of the glossary is not relevant for small and residential gas customers and so we assume the reference in this recommendation to interval metering is not intended to relate to the generality of gas customers, where the drivers associated with electricity are unlikely to apply.

### **Recommendation 20 - Offers reflecting actual consumption patterns**

We doubt that seeking to change the daily usage pattern of residential gas customers by tariffs which vary according to the time of day would be realistic, since in this sector gas is primarily used for heating and the capability of most gas consumers to change their gas consumption patterns, especially for short periods of time, is much more limited than for electricity. The scope to encourage shifts in gas consumption patterns through peak / off-peak and time of use tariffs is similarly limited.

Given the nature of time-of-use tariffs), we feel this recommendation is more applicable for electricity, where peak and off-peak periods can most readily be envisaged and hourly (or more frequent) profiling is critical.

In gas, most European countries apply daily balancing rules and smart meters are thus relevant to support daily profiles. Large industrial gas customers (with consumption typically above 2 to 500 GWh depending on the country) and electricity generators might need hourly information for operational purposes, but daily profiling for the mass market should be sufficient.

As regards interval metering, there two aspects to consider - the functionality of the meter and what data will be made available to whom and when.

Concerning meter functionality, we believe that an hourly timeframe is likely to be the reference target for larger customers, since it will enable gas suppliers to make detailed customised offers or energy saving advice to such customers based on hourly, daily or monthly consumption data as appropriate. A decision to extend this functionality to all customers including residential would have to be based on a proper assessment of costs and benefits, and the feasibility of the infrastructure that would be required.

For time-of-use registers, one register would be sufficient in the case of gas.

Regarding the provision of detailed metering data to final customers, this will not be the same for all market players and for all customers and should be left to supplier and customer agreement.

#### **Recommendation 21 - Access on customer demand to information on consumption data**

Eurogas considers a distinction should be made between direct access to raw data from the meter and passed to the customer's computer or in home display and access to consumption data that has been checked and verified (in most Member States by the DSO or a meter data company).

Eurogas agrees that different channels may be used to provide the latter kind of information to customers. Moreover, since on-demand customer information depicting up-to-date consumption data may be difficult to provide to all customer segments, these services could be initially addressed only to larger customers, at least initially (and assuming this meets the cost benefit analysis).

#### *'Optional' services*

The 'optional' services considered in recommendations 22 – 25 should not mean that smart meters which do not support these services (but comply with the 'minimum' services) are automatically rejected, since many of the objectives can be met in other ways.

#### **Recommendation 22 – Hourly flow capacity reduction/increase**

The concepts of reduction of capacity and reduction of gas flow should not be confused.

Regarding the latter, if the goal is improving energy efficiency, these should be sought through comprehensive energy management services rather than the gas meter. Similarly, where customers are concerned to manage their consumption, measures such as budget or prepayment meters should be considered rather than physical constraints being imposed on the customer's hourly gas flow rate.

### **Recommendation 23 – Enabling activation and deactivation of supply**

Close attention should be given to safety concerns when considering remote activation and deactivation of gas supply. In some Member States it may not currently be possible due to national legislation. However, where it is permissible and suitable safeguards are in place, activation and deactivation of gas supply offers benefits to customers, suppliers and distribution companies.

Provided that legal and safety concerns can be fully met, we believe many Member States will wish to consider it as part of the core service.

### **Recommendation 24 – Alert in the case of high energy consumption**

The way this recommendation is phrased implies continuous monitoring of the customer's gas consumption by the gas supplier, in near real time. If this is a general objective, it could entail additional cost. It could also annoy customers if they get alarm signals during extreme temperatures. A high energy use threshold is subjective - it depends very much on weather, housing conditions, and circumstances of occupant (e.g. elderly person at home all day).

Eurogas recommends leaving this to market conditions. It should be up to suppliers and ESCOs to offer such services to customers and for customers to decide whether they want them - in a competitive market, the demand for an alert service would be naturally met.

Eurogas notes that local information systems, such as are envisaged in Recommendation 25, may be cheaper and more practicable for most customers.

### **Recommendation 25 – Interface with the home**

As ERGEG notes, metering installations may be equipped with a gateway that enables home automation and allows for future customisation. Again, Eurogas recommends leaving the offering of such services to market conditions.

#### *Costs and benefits*

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

We agree with ERGEG view that a cost/benefit analysis should take into account the extensive value chain (DSOs, suppliers, metering operations etc.), with particular regard to the costs and benefits for network operators acting under a regulated regime in order for NRAs to fix cost-reflective tariffs.

Analyses will need to take account of the differing range of services which Member States choose to be included in their national roll-out.

In our opinion three more advantages should be included in the list of the benefits of smart metering for gas suppliers:

- The possibilities for product and service innovation, so as to adapt better to customer needs.
- Profiling and data aggregation. The availability of smart metering for customers connected to the distribution network would allow suppliers to considerably improve the load profiling of their customers. This activity is of utmost importance for suppliers in order to customize their commercial offers.

- Balancing. Accurate data on customers' off-takes would allow suppliers/shippers to more accurately balance their positions. However the extent of any improvement to the balancing regime (particularly as a result of the deployment of smart metering for residential customers) will very much depend on the nature of the gas market in each Member State.

Considering the benefits A) to H) identified, we would make two further comments:

- B) Load shedding schemes - in gas, the customer expects 100% availability, unless he has purchased an interruptible service.
- C) Reduction of peak load - see our previous comments on the relatively less important role of this for gas. It is likely to be primarily applicable to larger loads. Cost/benefit analyses should be as quantitative as possible. Particular functionalities of meters must not be imposed without prior assessment of their economic benefits. The analysis should evaluate the impact on separate groups of stakeholders and not only the overall result; segmentation of gas consumers according to their consumption should also be considered.

In addition to identifying benefits, an objective analysis should also take account of any disadvantages that smart metering may entail for different interest groups.

National authorities/regulators must also ensure that investors have a sufficient rate of return to recover investments.

#### *Roll-out*

### **Recommendation 27 - All customers should benefit from smart metering**

This is strangely worded. We agree that, assuming a positive cost/benefit analysis, all customers should be eligible to obtain a smart meter and to receive the services offered. However, while general benefits such as lower cost of billing and improved switching processes supplier leading can be expected, not all customers will necessarily benefit from smart metering or benefit equally, and clearly the cost/benefit analysis may mean some customers do not receive smart meters at all. We believe this recommendation should be reworded to address these points.

### **Recommendation 28 – No discrimination when rolling out smart meters**

Eurogas agrees with the importance of ensuring that customers on regulated prices and market prices are treated consistently, and that smart metering should not be an opportunity for vertically integrated network businesses to favour their affiliated suppliers. However the wording of the recommendation is potentially wider in scope. Eurogas would be concerned if this recommendation were to constrain the introduction of smart metering on the basis of need, geography or other business considerations.

Also, if an assessment of costs and benefits were to show that smart metering is not warranted for certain segments of gas customers or that lower functionality meters are more appropriate, this should not be seen as discriminatory.

#### *Data security and integrity*

### **Recommendation 29 – Customer control of metering data**

Eurogas recognises that customers must have confidence in the security and privacy of their data. Indeed there is the risk that some customers will not accept smart metering systems if they are concerned about inappropriate or unauthorised access to personal data.

We agree with ERGEG on the importance of co-operation with national agencies dealing with privacy issues and compliance with national provisions in this area; we also recognise that the specifics of energy should be taken into account. Also, it should always be clear to the customer who has access to his data and what is done with it.

However Eurogas does not believe that consideration of this important and complex area should be reduced to the two sentences in these recommendations. Integrity, privacy and security issues between market actors regarding consumption data are complex and require detailed analysis.

At EU level, the existing directive on data protection is shortly to be revised, and the principles to be adopted for smart metering should be consistent with this general framework.

Instead of this recommendation, Eurogas therefore proposes the development of a code of practice within the new directive, which would address this important issue in greater depth and could be used to help guide local arrangements.