



Elster GmbH · Postfach 18 80 · 55008 Mainz

European Regulators' Group for Electricity and Gas
28 rue le Titien
1000 Bruxelles

Dr. Michael Arzberger
Vice President Solution Management
Elster Integrated Solutions
Steinern Straße 19–21
55252 Mainz-Kastel
Tel. +49 (0) 6134-605-0
Fax +49 (0) 6134-605-395

smart_metering@ergeg.org

Response to Public Consultation Paper on Draft Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas

Dear Sirs or Madams,

Elster welcomes the opportunity to respond to the ERGEG Public Consultation Paper on Draft Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas.

Our Group operates globally as one of the largest providers of metering solutions for electricity, gas, water and heat, covering the entire smart metering value chain from meter to data management system. We have production and office facilities in all major European countries.

Elster is committed to open, interoperable standards and actively participates in EU projects following up on M/441, like Open Meter or the Smart Grid Task-force and several local standardization groups.

In our view smart metering is an integral and important part of smart grids, giving them high quality data input on one hand and means of control by eg. load shedding capabilities on the other hand.

We fully share the ERGEG point of view, that customer's trust and positive opinion to smart metering is of utmost importance for the success of related roll-out projects and thus would be fully supportive of mentioned rules for security and privacy. However we believe that this line of thought has to cover the entire smart metering system end to end – what in particular is including the meter itself. In this sense we see a metrologically approved smart meter as the fundament for a chain of trust of the customer.

In the past decades the European metrological framework has successfully disapproved general worries against energy meters and established a high level of acceptance. These achievements must be leveraged into smart metering.

In this sense we welcome and support an extension of the MID to smart metering as mentioned in paragraph 2. Also to further extend this principle, from a secure and trusted meter into the entire dataflow, we would like to underline the importance of end-to-end security. This means that fundamentally a secure (i.e. encrypted & authenticated) "tunnel" is established in-between the customer and the communication

head end / meter data management system, making security for relevant data fully independent from the actual communication path.

Clearly even such a secured environment has to respect and establish customer privacy. This includes limiting communication and / or storage of information only to an extent that is strictly needed for the purpose and anonymization of data (eg. by aggregation) whenever no link an individual is strictly needed.

Further comments to the recommendations / answers to consultation as follows (summarizing comments for electricity and gas)

Recommendation 1 /17 - Information on actual consumption, on a monthly basis

Goal of the 3rd Energy Package is improvement of consumption patterns through more active behavior of customers. A sustainable change in behavior can only be driven by monetary incentives. For this reason we see actual monthly billing as the key factor for the success of the 3rd Energy Package.

Recommendation 2/18 - Accurate metering data to relevant market actors when switching supplier or moving

We support this recommendation. Reading of metrological meter must apply technical measures to guarantee data authenticity and integrity.

Recommendation 3/19 - Bills based on actual consumption

We support this recommendation. Reading of metrological meter must apply technical measures to guarantee data authenticity and integrity.

Recommendation 4a (Consultation)

The frequency of interval reads depends on the envisioned usage of interval data. For information purposes we would recommend 1h reading period, for network operation usage (eg forecasts) 15 minutes or less are proposed.

Recommendation 4b (Consultation)

Any TOU structure must be transparent and understandable for the customer. For this reason we would not recommend more than 4 TOU tiers.

Recommendation 6 - Activation and de-activation of supply

We agree, but would like to stress that fully remote activation of customers (without any local interaction) might not be desired for legal & security reasons. In such cases we would propose the possibility for local interaction (ie. confirmation) by dedicated pushbuttons

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

Several European countries implemented different tariffs for import and export of energy (eg. to encourage/subsidize sustainable generation). In cases where those tariffs apply to the gross generated / consumed energy, two separate meters are inevitable.

In cases where generators / consumers are billed on the net energy, calculation of net energy can even with two meters be done in a suitable meter data management system.

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

We see this (in addition to more frequent / monthly billing) as the key feedback loop to influence customer consumption behavior.

Recommendation 9 - Alert in case of non-notified interruption

We see outage alarms in general as very critical. These events are in most cases not singular but will occur to a high number of devices (eg. on a feeder outage). This will cause “alarm storms” with hundreds of alarms, all with the same, and thus redundant, information. Proper handling of such storm will call for excessive effort in the system infrastructure.

Also outage alarms require very significant technical (and monetary) effort for provision of back-up energy in all parts of the system – meters, concentrators, communication devices etc.

In our opinion the effort and benefit are NOT balanced for outage alarms.

Recommendation 10 - Alert in case of high energy consumption

We support the provision of “high consumption alarms” but would, for above mentioned reasons, strongly recommend to handle such alarm locally, ie. by displaying them on an in home display.

Recommendation 11 - Interface with the home

We agree. See above.

Recommendation 12 - Information on voltage quality

Measurement of power quality according to mentioned standards requires residential meters beyond today's industrial specifications. Such measurements require significantly sophisticated and powerful signalprocessing, with consequences on cost and power consumption.

We recommend to restrict power quality measurements to slow changing effects, in order to keep the necessary effort in reasonable limits.

Recommendation 13 - Information on continuity of supply

Generally agree, but logging must be restricted to very few and simple events.

Recommendation Question 13

We see it generally advisable to comprehensively include all consumption data, ie. Electricity, Gas and Water.

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

We agree and recommend extending ANY consideration to the full value chain

Recommendation 16 / 26 / 27 / 28

We agree and want to stress that also from a cost efficiency point of view, exhaustive roll-out are desirable to most efficiently use necessary infrastructures.

Recommendation 22 - Remote capacity reduction / increase

We doubt the overall technical feasibility of remote capacity reductions. Gas consuming devices require constant pressure. Remote reduction of flow-rates will result in decreased pressure, what will cause failures / alarms / emergency shut-offs of gas utilizing equipment (like burners).

Recommendation 23 - Activation and De-Activation of Supply

Many local European legislation do not allow (remote) de-activation of gas supply.

Also for security reasons fully remote switching of gas supply without local interaction is not recommended.

We see local confirmation of re-activation of supply as a mandatory requirement.

Recommendation 24 - High consumption alarms

We would recommend the provision of “high consumption alarms” on a local in home display

Recommendation 25 – Interface with the home

We recommend to equip the meters with suitable interfaces to allow communication with inhome devices.

Recommendation 29 - Customer Control of Metering Data

Referring to the results of Smart Grid Experts Group 2, we see this as one of several options to suit the consumer's right for privacy.

Looking forward to further enquiries and discussions,

kind regards,

