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FEBEG Remarks on the ERGEG – Public consultation paper on Draft Guidelines of Good Practice on Regulatory Aspects of Smart metering

1. General remarks

- We welcome following positive elements in this consultation:
 - o ERGEG's suggestion that the complete value chain should be taken into account: this is not only important for the cost benefit analysis but this should also be taken into account when defining the smart meter ready market processes. All stakeholders should be involved (including balance responsible ("ARP's") parties/shippers and suppliers, ESCOs, metering agents,...);
 - o Link between the two commodities gas and electricity (enhanced customer service and cost saving);
 - o The fact that reference is made to the European communication standards and to the necessity for maximum interoperability;
- We would welcome that ERGEG would take into account following additional elements:
 - o The role of the supplier which is now minimized although the supplier is a major point of contact towards the client. Suppliers are not only impacted by smart metering, but do also create added value (e.g. customer segmentation and tailor made solutions);
 - o The end to end process is not described (e.g. ARP and settlement processes);
 - o Although ERGEG recognizes the complete value chain has to be considered, we regret that there should be a focus on benefits for network operators and that a full roll-out is considered as a starting point. The latter should be the result of the cost/benefit analysis;
 - o Listing minimum customer services and smart meter functionalities is a too narrow approach to provide a solid regulatory framework for smart metering. Also the assignment of roles and responsibilities to different market parties should be clarified in order to minimize costs and maximize benefits. Therefore a modification of the actual market model may be necessary;
 - o Market regulation, e.g. balancing and settlement codes, should be adapted to enable the use of real load profiles throughout the value chain instead of synthetic load profiles, especially for 'prosumers'. Otherwise the full benefits of

demand response, demand side management and load curtailment as well as distributed generation can not be achieved;

- In this consultation defined functionalities are based upon current state of technology and understanding of market functioning, both subject to fast evolutions. The regulatory framework should not hinder future technical and cost/benefit-effective developments.

2. Remarks on the recommendations electricity

Recommendation 1

- Information on actual consumption, costs and earnings on a monthly basis to customer is a strict minimum. Moreover, this does not necessarily mean that upstream processes also should work on a monthly basis. The communication of the data should anyway be more frequent for the ARP's:
 - Therefore: suggestion to delete *'and should be transmitted monthly to the relevant market actor'* on page 19 last paragraph.
- The way of communication towards the customer should be the choice of the relevant market actor. If no electronic transfer (through website or email) is possible, it should be allowed to charge this communication to the customer.

Recommendation 2

- Historical data should be registered to be able to reconstruct any case of discussion or events in the past (e.g. move in the past). The level of detail should be high enough in order to recalculate new time frames;
- ERGEG's recommendation for accurate metering is welcomed;
- When considering remote meter reading, cost efficiency should be considered.

Recommendation 3

- On request of the customer advanced (budget) billing should still be an option in order to avoid high invoices during the winter period (certainly for heating). The annual bill is of course based on the real consumption and consumption pattern.
- Meanwhile, settlement and balancing arrangements should indeed no longer be based upon estimated volumes, but on the real ones.

Recommendation 4

- The supplier should be commercially free to offer different products to different market segments.
- With regard to timings of the consumption or production, the interests of grid operators, who face capacity issues, can conflict with interest of suppliers, who try to optimally provide generation with the lowest marginal cost (like wind generation). The definition of timeframes, should hence take into account interests of both grid operators and suppliers/ARPs in a transparent way. Ideally the definition of timeframes should be contractually arranged between supplier

and customer, but the concept needs to be supported in the market model behind it.

- If timeframes are only based on grid capacity constraints, the possibility to reflect the low energy costs in the price towards the customer could be lost.
- In case two set of timeframes are defined: one by the grid operators and one by the suppliers/ARPs, there is a potential risk to give opposite pricing signals towards the customers (e.g. low grid costs ⇔ high energy cost).

Consequently, grid constraints should be avoided by adequate investments in the grid to allow that the potential of the RES can be maximally exploited.

- Answer to question 4a:
 - Because the consumption and production profile of individual customers will no longer be statistically relevant, FEBEG prefers a small time interval (e.g. 15 min values for electricity) or at least the same as applicable in the wholesale market balancing and settlement processes.
 - Gross local generation and gross consumption at customer's premises should be measured separately not only the net exchange with the grid. Reason behind is the following: for a typical residential or small business consumer, his load profile will probably remain statistically predictable. His generation profile on the other hand depends not on behavior but on availability of sun, wind or water. The sum of both (= net exchange of the grid) is therefore not statistically determinable and could lead to massive unbalance and hence grid stability at risk, which should of course be avoided with all means.
- Answer to question 4b:
 - This needs further study. No sufficient experiences available at this stage to answer this question. For sure, this should be designed in a very flexible and supplier specific way and should not block future developments.

- **Recommendation 5**

- The costs of an investment in a smart metering system that supports this functionality should be justified with the return/benefit that can be expected from remotely reducing or increasing production and consumption capacity;
- It should also be clarified who will be responsible for this functionality and what services this party can deliver to other stakeholders. The impact upon all stakeholders of unilaterally controlling the capacity by one of the market parties should be taken into consideration (e.g. unilateral peak shaving by grid operators can have an impact upon the ARP of a supplier and can therefore not be accepted by ARPs without their prior consent and moreover subject to a correct market based remuneration of this service).

- **Recommendation 6**

- Remote activation or de-activation of supply, or rather a flexible and fast service to start and stop a supply, is an opportunity to bring the contractual supply arrangements in line with the actual physical supply on the access point(s) used by the customer. If social public service obligations specify cases in which this principle can not be freely used, legal arrangements should also clarify the roles and responsibilities (and the funding arrangements) of all involved stakeholders (grid operator, commercial supplier, social supplier, customer, landlord, tenant,...).

- **Recommendation 7**

- In the recommendation it is unclear if it only concerns the measurement of net 'exchange' with the grid (injection and off-take) or the pure production and consumption of a customer. In addition to the mere measurement of the net exchange, we favour a separate measurement of the production and the consumption. If this is combined in one meter device or rather a metering setup, is not relevant. See also our comments on recommendation 4a.
- Having a separate measurement of the gross production is useful for:
 - Attribution of green power certificates or CHP certificates;
 - Sales of the produced energy;
 - Balancing (of the production portfolio);
 - ...
- Having a separate measurement of the gross consumption is useful for:
 - Measuring achieved energy savings;
 - Minimum supply of green energy (quota);
 - Transparent billing;
 - Social public service obligations;
 - Forecasting and balancing of the demand portfolio;
 - ...
- Having a separate measurement of net exchange with the grid is useful for :
 - Compatibility with storage;
 - Attribution of labels of origin;
 - ...

- **Recommendation 8**

- A customer should always have the right to access the data which is used for billing him for a certain service. This information should be transparent. Cost effectiveness (type of customer) should be considered when selecting the appropriate communication channel to provide him with this information.
- The roles and responsibilities should be clarified (as regards who owns the data and who handles the data).

- **Recommendation 9**

- In current balancing and settlement processes outages on LV networks are not measured, nor taken into account when allocating volumes to the suppliers and ARPs (due to the use of Synthetic Load Profiles). Also suppliers and ARPs should be notified if a part of their customers' energy supply is interrupted and this

interruption should be taken into account for determining imbalances The cost effectiveness and efficiency of this service should be considered.

- Notifying the customer does not mean that the damage can be avoided. The DGO still remains responsible/accountable for damage caused by the grid failure.
- The same alerting can be considered for voltage peaks which could cause damage to in-house appliances.

- **Recommendation 10**

- The cost effectiveness and efficiency of this service should be considered.
- It should be clarified which market party (DGO, supplier or third party) should be able to offer this alerting service to the end-customer under which conditions (technically and commercially, e.g. access to the telecommunication system that enables this).

- **Recommendation 11**

- It is not clear what is meant by *gateway*. If this concerns a communication port on the meter to make the metering data available for other services, we agree that this is a necessary functionality.
- In home automation is no longer a regulated aspect and should be in the hands of a commercial party (supplier or third party).
- It is not said that the telecommunication system that supports the smart metering system, is best suited (or even accessible) for in home automation services (where today broadband internet connections seem to be a better choice regarding capacity, flexibility and costs).

- **Recommendation 12**

- The benefits of measuring voltage quality on each access point are very questionable (compared to well chosen metering points in de distribution grid). If a full roll-out of a smart metering system is done by distribution grid operators, investment costs should not be overburdened with this functionality, especially when these costs will be socialised.

- **Recommendation 13**

- In current balancing and settlement processes outages on LV networks are not measured, nor taken into account when allocating volumes to the suppliers and ARPs (due to the use of Synthetic Load Profiles). Also suppliers and ARPs should be notified if a part of their customers' energy supply is interrupted and this interruptions should be taken into account for determining imbalances;
- Answer to question 13:
 - (Aggregation) Services that directly or indirectly give access to the wholesale market (e.g. customers which generate electricity or with electricity storage can do arbitrage between high and low wholesale prices);

- Energy efficiency reference measurements, which show achieved energy savings (and consequently support financial services for investments in energy saving measures).

- **Recommendation 14**

- We second this recommendation as the most important one. A cost benefit analysis (CBA) using an extensive value chain should also form the basis for even the 'minimum customer services' in this Paper;
- Net Present Values (NPV) should be positive without additional customer charges;
- There should not only be a focus on the costs and benefits for network operators but also on the costs and benefits for other market parties (e.g. suppliers => data management system, billing,...);
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- The (complete service) value chain also includes ARPs, TSOs, aggregators, Energy Service Companies, etc.;
- Customer segmentation should also be taken into account, meaning that a full roll-out of smart meters is not automatically beneficial to all customers, but for certain groups of customers it can be;
- Energy savings as a result of smart metering services, if taken into account as a benefit in the CBA, should be proven and not 'assumed'. Otherwise they should be taken as a target (Key Success Factor) when designing a smart metering system and the supporting industry model;
- 'Benefits' for customers like load shedding, reduction of peak load, real-time pricing and innovative tariffs, should be translatable and analysed throughout the extensive value chain. This means that conflicting interests between market parties, like grid capacity issues for grid operators versus availability of low marginal cost intermittent renewable energy by suppliers, should be solved. Market processes and agreements should be adapted, like the use of real load or production profiles in balancing and settlement arrangements. Indirect consequences, like shifts in responsibility from grid operator to consumer when a customer is informed about a grid problem, should also be correctly considered;
- Suppliers/retailers as Major Point of Contact to the customer, seem to be the most suited and important enabler for the largest group of possible customer benefits. They are not mere "billing machines and complaint handling centres", but can by correct segmentation and targeting of customer groups with tailor-made service offering at customers' choice, reach a much larger group of customers than is possible with a standardised solution. The technical solutions and the industry model nevertheless should support this approach;
- What concerns benefits of network operators, it is questionable whether the 3 points stated below are tasks to be performed by the DGO. They rather belong to the responsibilities of the suppliers/ARPs:
 - Reduction of peak load: it is not proven, with a 2020 scenario as a starting point, that reducing peaks will have the desired economical and ecological benefit, considering that a not-negligible part of the future energy supply will come from intermittent renewable energy. Peak shaving should always be offset against well chosen investments in grid capacity;
 - Profiling and data aggregation: in current industry models, the full responsibility of correct load profiling and the supporting data

aggregation lies with suppliers and their ARP. Today, for this information, like metering data, suppliers depend upon the services of distribution grid operators, which therefore should be entirely accountable, which not is necessarily the case today. Therefore mainly suppliers, and as a consequence their customers, will benefit from an improved service based upon smart meters;

- Balancing: in current industry models, the full responsibility of balancing lies with suppliers and their ARP. Today, for this information, like allocation of supplied volumes, suppliers depend upon the services of distribution grid operators, which therefore should be entirely accountable, which not is necessarily the case today. Therefore mainly suppliers, and as a consequence their customers, will benefit from an improved service based upon smart meters.

- **Recommendation 15**

- Product offerings by suppliers based on a smart meter solution, automatically means that all customers can benefit from the offered services.

- **Recommendation 16**

- We welcome the special attention to possible discriminatory behaviour. Smart meter solutions rolled out by a grid operator should not favour a particular supplier, because commercial product offers and differentiation can be restricted by the functionalities of the smart meters.

3. Remarks on the recommendations gas

- **Recommendation 23**

- The activation and de-activation of supply should be a minimum service like for electricity.

For comments on the other recommendations, reference is made to the above remarks on electricity which are also relevant for gas.

4. Remarks on the recommendations on data security and integrity – electricity and gas

- **Recommendation 29**

- The customer approval can be part of the contractual agreements between the supplier/third party and the customer.
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