

ERGEG Consultation “Draft Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas“

Position of RWE

RWE welcomes the initiative of ERGEG to launch a consultation of “Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas” as the decision on a roll out of smart metering will in particular constitute a regulatory challenge in several member states. Likewise, we welcome the opportunity to issue comments to the draft GGP.

Whilst the GGP defines a helpful set of standards for regulators, they do not discuss the regulatory aspects of smart metering, contrary to what the title of the documents suggests. We would recommend that the guidelines comments on how best to regulate smart metering and the surrounding issues. We would have expected ERGEG’s document to pose questions such as ‘does this require legislation?’ or ‘who is responsible for what?’ etc.

RWE generally agrees with ERGEG’s assessment that smart meters are a means to enable customers to participate in the energy markets in a more active way. An active demand side is an important factor in ensuring that there is an ongoing balance between supply and demand and that forced interruptions of consumers are avoided. In order to achieve this, it is important that data collected by Smart Meters is used for balancing and settlement purposes for each Balancing Responsible Party and that this replaces estimated data derived from standard load profiles. Thus the introduction of smart metering might well be justified by the advantages (i.e. especially a more stable electricity network) that would stem from a more active demand, particularly as the penetration of renewable energy sources increases..

Having said this, we are also of the opinion that decisions and analyses with regard to a possible roll out of smart meters should be prepared and implemented with great care. In particular the efficiency of all measures to be taken should be considered before taking any decision or making any analyses. As also set out in the 3rd energy package, RWE supports national cost-benefit analyses to come to the most economically reasonable and cost effective decision.

Besides that, the design of a study and the selection of the benchmark case depends in turn on the system of metering already established in the individual member state. For example, in Germany major customers are measured with a (daily) system of load registration anyhow so that, the cost-benefit analysis should focus on customers who are not measured in such a way today such as household and commerce customers – as recommended by ERGEG.

The roll-out of smart meters in the European Union will imply large investments in new assets and processes on the one hand and stranded costs on the other hand (current meter park and associated systems). Given the scope of investments at stake, a clear need arises to avoid being locked in either a technology or limited functionalities as this would result in additional further stranded costs in the future.

RWE thinks that there are lessons to be learned with respect to electricity ‘smart’ metering from countries such as Sweden and Italy which have been at the forefront in installing a new generation of meters in Europe. Especially RWE would like to point out that a full rollout should not cause major stranded investments for any company responsible for the metering infrastructure today. National energy regulators will have an important role to play in ensuring minimisation of stranded assets – again irrespective of the question of ownership of and responsibility for the metering infrastructure today. Where this is unavoidable, companies should be either given a transition period or a compensation for the lost assets.

Our comments apply generally to both electricity and gas, if not indicated otherwise. With regard to the proposed draft GGP we would like to comment as follows:

General comments

We support the approach in Recommendation 14 of the “extensive value chain approach” as we agree with ERGEG that an informed decision providing benefits for society as a whole can only be taken when an overall picture of costs and benefits has been established. It is therefore essential to evaluate all corresponding costs – in this regard attention should be paid to the operating costs resulting inter alia from a much larger IT operation, and accordingly the analysis should not be restricted to investment costs of the new metering infrastructure. These costs must be compared to the generated benefits. Costs and benefits are especially expected for DSOs, customers and suppliers but they will most probably be distributed unequally among the different stakeholders. It follows that those having to bear the costs in the first step are not those who will benefit from the roll out in the short term. Also one should keep in mind that in a market economy it will always be customers who will have to bear costs in the long run.

In this regard RWE takes a critical view of ERGEG’s position on the remote reading of all meters given that this approach will entail a considerable cost increase compared to the status quo. This is especially relevant with regard to investments in metering, IT and a matching telecommunications infrastructure and well as the expected operating costs. Additionally, data communication, data management and also data protection costs will be rising. In this context, the cost saving effects for network operators as envisioned by ERGEG are at least questionable and most probably dependent on the national market model. Therefore we recommend a careful examination of costs and benefits.

RWE regrets that ERGEG essentially does not take a position on the responsibility of stakeholders to finance any roll out of smart metering. In spite of the diverse forms of organisation of metering systems in the different Member States, RWE is convinced that only the mandatory installation by one single responsible party (i.e. network operators where possible due to national legislation) can guarantee the roll out of smart metering independent of demand in due time. This (insofar efficient) approach calls evidently for an acknowledgement of the underlying costs due to regulatory reasons – most certainly if network operators are to be held responsible.

Furthermore, RWE observes that the opportunities to shift consumption to time periods of low or base load are most probably limited. This is especially true with regard to the average household demand (in Germany approx. 3.500 kWh of electricity; even less in the CEE countries RWE is active in). There are several reasons to this, the most obvious one being the fact that in apartment buildings it is hardly possible to run the washing machine at night without disturbing neighbours. For households in particular, the potential for shifting load is, in fact, crucially dependent on the extending the use of electricity in other areas, such as heat and transport.

Also one should mention that appliances can only be turned 'off' if they are actually 'on' beforehand or vice versa which in turn shortens the overall flexibility potential. For example only those refrigerators that are actually consuming electricity (or are about to do so) in an individual moment in time can be turned off if the idea was to save load. It is therefore very advisable to critically assess the potentials in both directions i.e. saving and shifting consumption.

We see one exception to this assessment: In markets where non-legal off-takes from the electricity network and other problems in facilitating payments from certain customers do play a major role, one should at least consider coping with that problem with a more intelligent metering infrastructure.

Also one should critically examine the smart metering pilot projects that have been undertaken so far. Firstly these are often based on a rather small number of participants (< 100) which is why their results should not be generalized naïvely. Secondly RWE assesses existing studies to be based on too simplified assumptions or to be questionable with regard to questions of methodology: For example in most studies available to us all observations of changing consumption behaviour are ascribed solely to the smart metering technology installed without paying proper attention to other variables (e.g. changes in the price of electricity, replacement of high-energy consuming appliances due to their dysfunction during the pilot and not due the consumers' "smart-meter"-induced realisation of the inefficiency of the replaced appliances).

Furthermore we are deeply concerned about the possible conflicts between the European legislation with respect to metrology equipment (i.e. the MID) and the technical concept apparently favoured by ERGEG. RWE conjectures from its contacts with the calibration offices in different member states that ERGEG's interpretation (see Section 2: "(...) *ERGEG considers this provision (i.e. the reading of the display as the only measurement result that serves as the basis for the price to pay) to be realistic only in the specific case where the value transmitted through the telecommunications system ... does not match the displayed value (...)*") is probably not shared in all member states or by all responsible calibration offices. On the contrary, we consider it necessary to harmonise the different national rules to secure an EU-wide consistent application of a more "smart" metrology equipment by way of adjusting the MID (e.g. with respect to the rules on the display of values relevant for billing). Albeit we believe that one single European smart meter would actually not be helpful as national energy markets are still very different in nature e.g. in their average usage of electricity or gas.

Gas-specific comments

Especially with regard to the gas market we consider a cost-benefit analysis of smart metering to be essential, even more so than for electricity. The introduction of smart meters in the gas market should only be considered subsequently to the introduction in the electricity market in order to be able to make use of the experiences of implementation and the outcomes of the efficiency assessment.

It is important to note that when implementing smart metering in the gas sector consumption should be measured and transmitted in m³ not in kWh (see e.g. Recommendation 17). The measurement of kWh at the customer's premises would be very costly and accordingly would necessitate additional tasks for network operators or suppliers in order to convert volume continuously into kWh (where applicable with changing heating values).

With regard to Recommendation 20, Question 20 a) and 20 b) as well as Recommendation 22, we would like to note that, unlike in the electricity market, household demand for gas is largely driven by space heating needs. Accordingly, consumption is essentially dependent on temperature and the change of season and usually takes place during the day. A shift of gas consumption to the night seems neither reasonably feasible nor necessary due to the fact that, unlike electricity, gas can be stored. The network's capacity to store gas is usually sufficient to balance out fluctuations of load within single days and wholesale markets have a daily granularity rather than hourly. In the opinion of RWE, this means that in the gas market time or load variable tariffs and restrictions on capacity in the household sector will probably not yield the intended results. ERGEG should also note that this assessment with respect to the German market is in line with the current legal situation, which unlike in electricity does not provide for time or load variable tariffs in the gas sector.

The question of a necessity for variable tariffing in gas becomes even more apparent when considering the that in the future no capacity problems are expected in gas **distribution** networks as in Germany demand for gas for the purpose of space heating is decreasing. Due to increasing requirements in building standards (e.g. the national legislations that stem from the EU's Energy Savings Directive and other provisions) similar developments are expected in other markets where RWE is active. Consequently, there is currently no application of smart meters in distribution networks and with respect to small and medium customers. We see one exception to this generally depreciative assessment: In markets where non-legal off-takes from the gas network do play a major role one should consider coping with that problem with a more intelligent metering infrastructure.

As to the synergies of a "combined" roll out of smart meters in electricity and gas described by ERGEG in Chapter 7, we would like to point out that these can only be achieved if such a cooperative approach fits with the respective national regulatory frameworks. With respect to a DSO driven roll-out (where applicable) it should for example be possible for the gas network operator to make use of the telecommunication system already installed for the electricity meter and to recover the underlying costs in its regulated tariffs. In this context, questions on non-discriminatory access to the telecommunication system as well as on data security and

protection are more than likely to be addressed by different stakeholders. This is of high relevance for Germany as due to the high number of network operators, the DSO operating the electricity network is often not identical to the operator of the gas grid; similar question had also to be addressed in the Netherlands when planning the (now postponed) roll out there. Furthermore, it needs to be noted that in a liberalised framework for metering operation and services, as in Germany for example ,a number of tasks, interfaces, contractual rules etc. will be necessary to achieve a “divided” usage of the ‘common’ infrastructure by different network operators and/or metering operators and service providers.

We would like to comment on the individual recommendations of ERGEG in the attachment.

Attachment



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