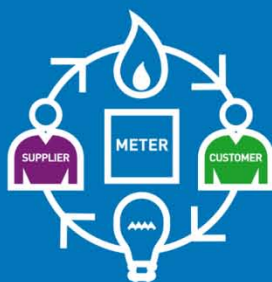


September 2010

Smart Metering

SRSB & Beyond Project

Response to DECC/Ofgem Consultation on
Smart Metering for Electricity and Gas –
September Response



Overview

This document provides responses from the Energy Retail Association to the Smart Metering consultation questions highlighted for a September response in the consultation papers published on July 27 2010.



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2 EXECUTIVE SUMMARY

We congratulate Ofgem and DECC on the release of the Prospectus and we are pleased that the content is generally well defined and well reasoned. The additional clarity given by preferred positions is welcomed and we look forward to participating fully in the ongoing development work of the Programme through Phase 1 and beyond. The SRSB project at the ERA is resourced to contribute to this development work and is keen to be involved.

We are pleased to be invited to the DCC and SMDG Expert Groups, which we believe will contribute significantly to the facilitation and assurance of the successful smart meter implementation. It is essential that transparency is maintained to inform all stakeholders of developments and that these Expert Groups and associated Sub Groups are appropriately chaired to maintain momentum.

Additionally, we would like to emphasise the need for Supplier representation in the Consumer Advisory Group and Privacy and Security Advisory Group, which we believe is key to understand the commercial and technical practicalities of implementation from the parties who will be given licence conditions to deliver the roll-out of smart meters. It is important to ensure that consumer protection measures are defined appropriately to deliver the overall benefits of smart metering. For example, customers may be given the option to opt-out of certain measures, rather than opt-in which may not deliver the level of uptake required to deliver benefits defined in the Impact Assessment (e.g. energy efficiency from Time of Use tariffs).

The ERA was one of the first organisations to call for a Code of Practice for the installation process, so we welcome this policy. We expect this to be delivered within a self-regulatory regime, similar to other existing Codes of Practice or the Ombudsman Scheme, and we look forward to taking a lead role in the development of the content of this Code of Practice.

The introduction of a new Go-Live date for smart meter installation without the DCC service in place is a positive step to bring forward roll-out and gives the potential to realise IA benefits early. However, we believe that further consideration should be given to: additional costs/risks introduced by a requirement for interim arrangements; and how any interim arrangements are made effective (e.g. is a mandate necessary?). Cost benefit analysis and the practicalities of implementation should continue to be addressed during the expert group work. The ERA has already done development work on what might be required for Interim Interoperability in advance of the DCC being in place. We are pleased to be involved in the DCC Subgroup 2 developing these arrangements further and we would welcome a lead role in taking this work forward with DECC, Ofgem and all other Suppliers. The scope (including security and privacy) and timing of any interim arrangements are an essential building block. There are differing positions and drivers amongst the



ERA members for interim arrangements and we will work hard to find a solution to this as part of DCG Sub Group 2 developments.

The setting of targets could be subject to 1:1 discussions with Suppliers, however if subsequently targets are set they must be simple, transparent and give Suppliers control on how to achieve them.

The definition of the DCC and the preferred policy statements associated with it are strong and we agree with the Prospectus that there is a large body of development still required to define the scope of DCC at each defined milestone. There are areas where further work is required to assess the implications of policy and where policy may need to change and we highlight some of these below:

- Scope of DCC and opportunities for industry simplification to deliver switching and other customer benefits
- Options for DCC ownership
- The principle of a “Lead Supplier”
- WAN Comms Ownership
- Structure, licensing and governance of DCC

There are significant risks associated with any slip in the milestones set out in the Prospectus, so it is essential that the industry and wider stakeholders have transparency of the detailed implementation planning at DECC/Ofgem. We believe that through expert group meetings, the Programme will be able to ensure that sufficient planning is carried out to ensure the delivery is right first time, and at the right speed.

During the subsequent work assumptions should be made on the ability of industry to deliver assets and systems and we need to understand the feasibility of these assumptions. For example, any slip in the DCC service Go-Live date will have implications on longevity of any interim arrangements and the overall testing and implementation of market systems. Industry wants to work with Ofgem/DECC to identify dependencies/constraints and look at where activities may be able to be done more quickly or in parallel, but this must be done against a backdrop of realistic and transparent planning.

As a collective, industry and DECC/Ofgem will have to consider the implications of market testing/trialling and providing industry with the assurance that the market will work from a standing start to the level of volumes set out in the Impact Assessment (previous risk mitigation techniques such as Controlled Market Start-Up have been discussed).

In the statement of design requirements, we are encouraged by functional definition of smart metering. We have provided a detailed assessment of functionality to Ofgem/DECC as part of our input to the Expert Groups and we look forward to contributing fully to further development to the next level of detail. There is still a significant challenge to define interoperable arrangements for smart metering with clarity on the definition of the HAN,



WAN and the communications module. It is important to ensure that smart meters and associated equipment installed under any interim arrangements do not require later upgrade or a return visit, otherwise the customer experience and IA will be compromised.

We believe there is a significant role for a smart metering Design Authority to give consistency in decision-making/design, a view on the future and to manage the industry design through the whole evolution:
interim arrangements → DCC → incremental DCC scope → Smart Grid → the future...

We would also need some clarity on how Statutory Instruments will be implemented (Major Code Review?) or what financing or cost recovery mechanisms might be required.

There are issues that are important for Suppliers, but must really be considered with Ofgem/DECC, rather than with the ERA as a Trade Association. These include:

- Commercial interoperability; we are encouraged to see these set out for resolution in the Prospectus
- Remaining obligations on must inspect/safety visits where the Impact Assessment does not recognise the cost of retaining them

Overall, we are pleased to see that supplier requirements are generally captured appropriately. We are encouraged by the progress of the Expert Groups so far and we are looking forward to contribute further to their outputs on an ongoing basis. The response below provides our answers on the September deadline questions as well as outlining areas to address during the expert group meetings.



3 PROSPECTUS QUESTIONS

Q3 Do you have any comments on the proposed approach to ensuring customers have a positive experience of the smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?

The proposed approach seems encouraging and in the right direction. The proposals seem to help remove a reliance on the enduring solution thus allowing Suppliers to learn from the early installations and ensure that the enduring solution is as good as it can be. The staged approach would indeed accelerate the delivery of benefits and help ease the overall effects of potential stranding. The ERA has led the way in calling for a self-regulated Code of Practice for installation and smart meter operation. We have begun a collaborative development process to deliver these products which would further facilitate a positive customer experience as well as general awareness for the customers on how to get the most out of smart meters to deliver the expected benefits.

It is important to ensure that consumer protection measures are workable and defined appropriately to deliver the overall benefits of smart metering. For example, a requirement for customers to opt in is unlikely to deliver the level of uptake required to deliver benefits defined in the Impact Assessment (e.g. energy efficiency from Time of Use tariffs or theft detection).

We expect involvement with a wide range of stakeholders to develop the Code of Practice including consumer bodies, Ofgem, DECC and all Suppliers and we are encouraged by the early joint workshop with Ofgem, Suppliers and consumer representatives.

Q6 Do you have any comments on the functional requirements for the smart metering system we have set out in the Functional Requirements Catalogue?

We think that the functional requirements as suggested by the Ofgem/DECC catalogue reflect the needs of the market. The ERA has completed an assessment of the functional requirements against existing specifications and this has been provided as input to the Expert Group development process. There are some concerns with the cost benefit case for some network requirements, particularly given the most recent published information from the ENA and believe the services need industry review to refine. Security needs more detail in definition. We look forward to an active role in ongoing development through the Expert Group deliberations.



Q7 Do you see any issues with the proposed approach to developing technical specifications for the smart metering system?

We fully agree with the proposal and are prepared to dedicate time and resource to support the development of specifications from the SRSM team at the ERA.

Q16 Do you have any comments on the proposals for requiring suppliers to deliver the rollout of smart meters (including the use of targets and potential future obligations on local coordination)?

We support Suppliers delivering the rollout of smart meters. The impact and risks of changing the rules for rollout by introducing later constraints will need to be fully and robustly assessed as current uncertainty and dependence on matters outside of suppliers control would make it very difficult to commit to or estimate reasonable meter roll out targets.

The setting of targets could be subject to 1:1 discussions with Suppliers, however if subsequently targets are set they must be simple, transparent and give Suppliers control on how to achieve them. Any subsequent reporting regime must also be simple and easy to implement and operate.

Q17 Do you have any comments on our implementation strategy? In particular, do you have any comments on the staged approach, with rollout starting before DCC services are available?

The ERA supports the early definition of technical specifications to enable the industry to start to deploy smart meters to meet roll-out timescales. We also agree that any options for Interim Interoperability must be considered in the Expert Groups and the ERA will fully support this initiative. The ERA is willing to take a lead role for Ofgem/DECC if they so wish to build on our work to date.

There are differing positions and drivers amongst the ERA members for interim arrangements and we will work hard to find a solution to this as part of DCG Sub Group 2 developments.

As noted in the Interim Interoperability DCG Sub-Group 2, we expect that by installing smart meters in customer premises before the DCC is operational:

- Customers will have the opportunity to change behaviour and therefore customer benefits in the IA will begin to be realised
- Industry will have the opportunity to use smart metering functionality and therefore some of the industry benefits will be realised and passed through to customers
- Suppliers will be able to install smart meters that will not be replaced at future change of supplier events, providing certainty to their assets and reducing the cost of stranding



However, it is important to ensure the right approach is undertaken for smart meters deployed before DCC Go-Live, consistent with the principles and requirements discussed in the DCG Sub Group 2 developments to date, During the Sub-Group meetings a number of risks will need to be carefully assessed due to the uncertainty currently surrounding enduring arrangements, including:

- Operational risks (ability to support complex products and processes in early deployment and security risks ahead of DCC);
- Technology risk – no testing with DCC creates risk of replacement of communications module and potentially even the meter, all of which would add cost to supplier and thereafter to customer, as well as jeopardising the overall customer experience;
- The risks of getting something wrong and creating negative media / consumer perception, which could damage the programme (benefits, access rates, etc.);
- All of the above have significant commercial implications for Suppliers; and
- The impact of these risks is amplified with greater meter volumes installed pre-DCC.

These risks will need to be managed and appropriate measures implemented to mitigate such risks.

Q18 Do you have any other suggestions on how the rollout could be brought forward? If so, do you have any evidence on how such measures would impact on the time, cost and risk associated with the programme?

We look forward to receiving further details of the implementation plans, assumptions and dependencies from the Ofgem/DECC programme so that the opportunities for revised planning can be assessed.

Q19 The proposed timeline set out for agreement of the technical specifications is very dependent on industry expertise. Do you think that the technical specifications can be agreed more quickly than the plan currently assumes and, if so, how?

The ERA has always been eagerly encouraging and facilitating the acceleration of delivery of the technical specifications and is ready to continue providing resource to support their development in detail. Any further acceleration will be dependent on the effective working of the Expert Groups and subgroups.



Q20 Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?

We support managing the programme according to established management principles and we agree with the need for an Implementation Co-Ordination Group, at which we would expect representation from all Suppliers and the ERA. We also believe it key to have Supplier representation in both the Consumer Advisory Group (CAG) and Privacy and Security Advisory Group (PSAG) to understand the commercial and technical practicalities of implementation from the parties who will be given licence conditions to deliver smart meters. It is also important to ensure the role of the ICG (Implementation Coordination Group) is clarified at an early stage thus facilitating an efficient smart meter implementation from the beginning.

The ERA has a role to play in co-ordinating member views in non-competitive areas. Industry and stakeholders must have a full project plan from the Ofgem/DECC programme to understand the assumptions being made on behalf of industry for delivery.

4 STATEMENT OF DESIGN REQUIREMENTS QUESTIONS

Q1 Should the HAN hardware be exchangeable without the need to exchange the meter?

It is our opinion that it would be useful for the suppliers to have a HAN that could be upgraded without changing the meter. However, we are not aware of any current obvious solution to meet such a requirement. We believe that getting clear and correct HAN requirements on upgradeable firmware and/or allowing the service providers to offer an appropriate solution that could meet such a requirement in near future can offset the risk of technical obsolescence.

In the context of technologies available today, we do not see justification for exchangeable HAN hardware which would potentially increase in cost, become more vulnerable to cyber attacks and more complex.

Should an upgradable HAN become available it should achieve a minimum standard of security required currently for HAN technology and should not be overly complex for customers nor costly to deliver.

Given time, innovation could see HAN solutions becoming available in form factors which are familiar to customers – USB, SD or micro SD card – and which it may be reasonable to expect them to ‘upgrade’ their own HAN hardware.



Q2 Are suitable HAN technologies available that meet the functional requirements?

We do not believe so at present, but there are developments to support GB requirements in the near future. Further testing/learning is needed to assure participants of a cost effective solution for all GB property types or the need for customisation.

Q3 How can the costs of switching between different mobile networks be minimised particularly in relation to the use of SIM cards and avoiding the need change out SIMs?

We believe there are technical alternatives to changing SIMs which should/could be used in GB. The requirement is for a CoS with no visit. The work on interim arrangements will help the market to progress solutions. The ERA cannot comment directly on costs.

We believe that we should be technology agnostic to the DCC network services, therefore discussions on SIM cards may be premature.

Q4 Do you believe that the Catalogue is complete and at the required level of detail to develop the technical specification?

The ERA has carried out a full review of the functionalities listed in the Catalogue and have provided this as input to the Expert Group discussions. We will use our analysis to support the Expert Group in providing critical reviews and we believe the Catalogue will deliver the required level of detail following an industry review.

Q5 Do you agree that the additional functionalities beyond the high-level list of functional requirements are justified on a cost benefit basis?

We have concerns with some Network Requirements and believe they do not reflect the latest ENA position, but a previous version of ENA requirements. In particular, the Programme mentions that last gasp communications does not add any new hardware, whereas the latest report prepared by the ENA states that this functionality does require a battery or a capacitor therefore causing extra costs in the area of £1-£5 and indeed the analysis of one of the ERA members places the cost higher still. Additionally, there is a further concern that the operational implications of such functionality could overload communication systems or participant systems if there are major incidents. There have also been issues with reliability and performance of this functionality. Moreover, ENA Cost and Benefit Analysis also envisages additional cost to meters to store network planning data, some of which is optional, which does not seem to be fully considered by Ofgem analysis. It is our view that it would only be fair to ensure that any additional Network Operator requirements were funded by them. Further work is needed in this area and we are encouraged that this is recognised in the relevant Sub Group.



We also have concerns at the amount of data to be held on a half hourly basis (consumption, export, reactive power, voltage etc.). The requirement should specify which data is expected to be stored and clearly outline which requirement envisages storage capacity rather than having a general requirement to store 12 months worth of half hourly consumption.

More detail would be needed on security in order to be able to deliver a comprehensive set of technical specifications.

We look forward to fully contributing to the development process through involvement in the Expert Groups and Sub-Groups.

Q6 Is there additional or new evidence that should cause those functional requirements that have been included or omitted to be further considered?

We agree with the positions taken by the Programme and the statements in 3.37 and 3.38 (subject to our answers to Q5 above). “Last gasp” functionality could especially impact the net benefits of the smart metering installation and thus should be reassessed. We will continue to support the Programme, particularly on the functionalities rejected.

Q7 Do you agree that the proposed approach to developing technical specifications will deliver the necessary technical certainty and interoperability?

We believe so, and the ERA SRSM project has the resource available to participate fully and support the Expert Groups in developing their output in this phase of the Programme. Development will be required to govern and accredit so as to deliver interoperability (both interim and enduring). Assurance regimes for the short term (interim) and enduring arrangements are part of the Expert Group developments and this is a crucial development to avoid costly operational issues.

Q8 Do you agree it is necessary for the programme to facilitate and provide leadership through the specification development process? Is there a need for an obligation on suppliers to co-operate with this process?

Yes to Programme leadership and industry is there to support. We do not believe an obligation is necessary on Suppliers who have a commercial imperative to comply with baseline specifications.



Q9 Are there any particular technical issues (e.g. associated with the HAN) that could add delay to the timescales?

The ERA does not see any show-stoppers. We would expect that lead-times for HAN solution delivery from manufacturers and standards developers – for the HAN, for DLMS, from M441 etc. might add a delay to implementation as at present no such solution is available in the market and any product would have to go through draft to publication, testing and adoption.

GB needs to also continue to monitor European standards activities (e.g. M441) to ensure that this does not introduce any additional risks.

Additionally, technical interoperability requirements might also add delay to the timescales. There are also some new areas – IHD, modular design for WAN components, for example, which will need full peer review; also Prepayment/PAYG configurability, warrantable valves, switches and batteries, security, software operation, firmware upgrade processes, and exception/fault scenarios. The question on whether a HAN standard needs to be mandated will need to be resolved.

Q10 Are there steps that could be taken which would enable the functional requirements and technical specifications to be agreed more quickly than the plan currently assumes?

See answer to the Prospectus Question 19 above.

5 IMPLEMENTATION STRATEGY QUESTIONS

Q1 Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?

See the answer to Q20 above.

Q2 Are there other cross-cutting activities that the programme should undertake and, if so, why?

The ERA agrees with the cross-cutting activities proposed.

Q3 Do you agree with our proposal for a staged approach to implementation, with the mandated rollout of smart meters starting before the mandated use of DCC for the domestic sector?

See answer to Prospectus Q17.



Q4 Do you have any comments on the risks we have identified for staged implementation and our proposals on how these could best be managed?

We agree with the risks identified and action is required to mitigate all risks. There will be further risks to identify and manage through the programme. The SRSB project is happy to share its risk register with Ofgem/DECC which has some further risks, including the risk of:

- pre-DCC 'go live' operational and technical risks;
- timescales for market participant system changes compromising overall milestones; and
- robust industry arrangements without extensive market testing/trialling.

Q5 Do you have any other suggestions as to how the rollout could be brought forward, including the work to define technical specifications, which relies on industry input?

See answers to Prospectus questions 18 & 19 above.

Q6 Do you agree with our planning assumption that a period of six months will be needed between the date when supply licence obligations mandating rollout are implemented and the date when they take effect?

From our experience this suggestion seems sensible on the basis that Ofgem will discuss potential obligations in advance. However, this needs to be subject to review of Ofgem/DECC assumptions, the detailed Ofgem/DECC plan and the plans of individual Suppliers. We must have transparency of the Ofgem/DECC plans.

Q7 Do you have any comments on the activities, assumptions, timings and dependencies presented in the high-level implementation plan?

It is difficult to pass comment without detailed, transparent plans available to industry. Given that industry are being asked to commit to licence conditions, we request transparency of all plans, assumptions and dependencies to ensure that industry can assess the match to their own plans and assumptions.

Q8 Do you have any comments on the outputs identified for each of the phases of the programme?

We broadly agree with the outputs, but the devil is in the detailed definition of products and the dependencies between products and that is where some of the potential risks and issues will be resolved (e.g. WAN ownership). Some scope and timings are likely to change as programme develops. We need a comprehensive and transparent programme plan to assess this fully.



6 ROLL OUT STRATEGY QUESTIONS

Q1 Do you believe that the proposed approach provides the right balance between supplier certainty and flexibility to ensure the successful rollout of smart meters? If not, how should this balance be addressed?

Yes, given that Suppliers are to lead the rollout, market forces will drive the Suppliers to their most cost effective way of achieving this.

Q2 Would the same approach be appropriate for the non-domestic sector as for the domestic sector?

Yes. The same approach seems appropriate for the non domestic sector – the drivers will be different so the Supplier plans will be different, but again a Supplier led programme will be naturally cost effective.

Q3 Is there a case for special arrangements for smaller suppliers?

We believe that all Suppliers should make a proportional contribution to the exercise.

Q4 What is the best way to promote consumer engagement in smart metering? As part of broader efforts, do you believe that a national awareness campaign should be established for smart metering? If so, what do you believe should be its scope and what would be the best way to deliver it?

ERA supports the idea of a national awareness campaign. We believe the best way to promote consumer engagement is for early smart meter installation and operation to be seen to be successful, good information to have been provided to customers and consumer groups at the appropriate times and for smart metering not to have been oversold. We believe that a layered approach to communication should be taken with a national awareness campaign delivered by a national body with more targeted communication delivered by Suppliers in partnership with their chosen agencies. We would, of course, expect a greater clarity on the costs and management of this activity prior to any decision being made.

Q5 How should a code of practice on providing customer information and support be developed and what mechanisms should be in place for updating it over time?

The ERA believes that the most appropriate way of developing a Code of Practice is through a collaborative process involving all parties that will be required to comply with the standards and requirements within the Code. We believe that this should be delivered in a self-regulatory regime with associated rules for change and update. The ERA has extensive experience of delivering and managing similar Codes of Practice for billing and sales and



is currently introducing a new set of commitments for the safety net which will be audited, reinforcing its commitment to self-regulation.

Q6 Do you agree with the proposed obligation on suppliers to take all reasonable steps to install smart meters for their customers? How should a completed installation be defined?

The obligation for Suppliers to take all reasonable steps to install smart meters for their customers is reasonable in principle. Suppliers are keen on completing the roll out in order to stop running on parallel systems. However, defining a complete installation is problematic.

In order to define a “complete installation” it is useful to await definition of a number of components involved in the installation process e.g. attempts to contact the customer, including visits to the property, ensuring the smart metering system can deliver the required functionalities, etc., and then review these in the context of the programme - there may be a need to recognise that some different aspects may be delivered over time. We expect this to be progressed in the Expert Groups and reflected in the Smart Metering Code of Practice.

Q7 Do you think that there is a need for interim targets and, if so, at what frequency should they be set?

We would expect targets to be subject to bilateral discussion between Ofgem/DECC and individual Suppliers.

Q8 Do you have any views on the form these targets should take and whether they should apply to all suppliers?

We would expect targets to be subject to bilateral discussion between Ofgem/DECC and individual Suppliers.

Q9 What rate of installation of smart meters is achievable and what implications would this have?

We do not feel this can be answered by the ERA. We would expect targets to be subject to bilateral discussion between Ofgem/DECC and individual Suppliers.

Q10 Do you have any evidence to show that there are benefits or challenges in prioritising particular consumer groups or meter types?

We do not believe there is any compelling evidence for prioritising any groups other than those that the Suppliers prioritise. External prioritisation has a risk of introducing additional cost and potentially being counter-productive. Additionally, activities such as customer requests, regulatory obligations to exchange old meters and natural economic drivers to exchange other meters in close proximity will already deliver a cross-segmented smart meter



deployment, so it is unlikely any particular customer group will be left to the end.

Q11 Do you agree with our proposed approach to requiring suppliers to report on progress with the smart meter rollout? What information should suppliers be obliged to report and how frequently?

The impact of reporting on Suppliers' systems and processes will need to be assessed as part of the impact analysis process. DCC, once established, could be well placed to report on smart metering that is installed and operational, but this would not cover the interim period and would need an appropriate impact and risk assessment (including potential impact of late DCC delivery).

Q12 Do you agree that there is already adequate protection in place dealing with onsite security or are there specific aspects that are not adequately addressed?

The protections that are in place have been developed over some time to be suitable for onsite security so should generally be adequate.

Q13 Do you agree with our proposal to require suppliers to develop a code of practice around the installation process? Are there any other aspects that should be included in this code of practice?

The ERA has led a commitment to develop a Code of Practice for the installation of smart meters and we fully support this proposal. Contents are in development at the moment and a collaborative development process with wider stakeholders has been suggested.