



Response to Ofgem Smart Metering Implementation Programme Prospectus 28 September 2010

Executive Summary

1. E.ON welcomes the Government's Prospectus on smart metering and we compliment Ofgem and DECC on the thorough and well reasoned content.
2. We are pleased that the programme is committed to operating in an open and transparent way. The introduction of the Implementation Coordination Group is particularly welcome. We commit our support to a successful programme delivery.
3. We also agree with the early focus on consumer protection measures including data security and privacy. Together with the ERA we are already progressing activity with Consumer Focus and other consumer groups on the development of an installation customer charter, which should reflect the need to avoid unwelcome sales activity as part of the metering installation visit.
4. Creating a smart energy code to bring together electricity and gas for the first time is a significant step forward on the way to simplifying industry processes. We have consistently advocated that smart meters should be used to transform customer experience not only by the provision of accurate and timely consumption information but also by removal of the complexity around existing industry processes. Without simplification customers may not be able to enjoy the full benefits of smart metering and this view is endorsed by our early experience from smart meter trials. Against a forecast Data Communications Company (DCC) start of autumn 2013 it should be possible to make considerable progress and incorporate a new centralised registration system which we believe is essential to deliver robust access control. There is also potential scope for integration of data processing and aggregation activity before DCC go live.
5. We are keen to maintain momentum on preparation for the roll out of smart meters to meet the targets set and bring the benefits of smart metering to our customers. To this end it is helpful that the normal consultation response time has been reduced to enable swifter progress on the more time critical elements of the programme and that programme momentum is being maintained throughout the consultation period.
6. We support the proposal to accelerate the completion of deployment of smart meters, and suggest that it is possible to achieve delivery of smart meters to 90% of our customer base within 5 years of the delivery of the fully-enabled DCC (by Q3 2018, given currently understood DCC delivery timetable). However, the implications of this acceleration will increase the cost of the stranding of legacy meters to the industry (and hence to customers), and we are disappointed that there appears to be no further consideration of an appropriate



stranding mechanism to compensate. The importance of this is more pronounced in an environment of accelerated delivery, and will be a disincentive to acceleration.

7. The acceleration of the roll out will also have significant capital implications for the industry, meaning additional capital will have to be raised in the shorter term. You will recognise there are challenges of this in the current business climate, in particular given other calls on capital required by the industry to meet customer and regulatory drivers associated with the decarbonisation agenda. We believe that these accelerated aspirations would be better supported by including meter ownership in the regulated asset base. This does not remove supplier responsibility for delivery, but means that capital can be raised within the regulated environment and removes uncertainty over future stranding risk of the smart metering assets. This will help avoid these costs of uncertainty being passed to the customer.
8. A major concern from the Prospectus is the uncertainty over arrangements until the full DCC is in place. The Prospectus may be interpreted as implying that smart meter roll out should be deferred until the interim mandate is introduced in summer 2012, which we do not believe is the intent. Whilst we recognise there is still much to do, we had expected to be fitting compliant smart metering systems much sooner than summer 2012. We are keen to work with the programme to establish whether there are ways in which the start of the roll out can be significantly advanced whilst still allowing greater certainty on investment.
9. We are also concerned about unconstrained roll out of smart meters across the industry during the interim period. It is valuable to use this window for a controlled market start-up, with an appropriate cap and floor on roll out volumes per supplier. However, without commercial and technical industry agreement, installing high volumes of smart meters adds risk to the programme and has the danger of causing negative customer experience (particularly on Change of Supplier). It should be noted that there is an imbalance here as the installing supplier does not bear the risk of supporting customers when they switch away to a new supplier, thus creating a dangerous incentive to deliver a sub-optimal industry outcome.
10. It is important that any interim processes are simple and do not detract from progressing the final solution. Whilst we are supportive of a controlled volume of smart meters being deployed in this period, we have concerns that disproportionate attention is given to the interim solution, and this will delay availability, add cost and distract attention from the delivery of the enduring solution which is needed to deliver the full benefits of smart metering to customers. Depending on the interim solution defined, service providers to this interim solution may also have incentives to add complexity which does not necessarily add value to the overall business case.



11. As arrangements for both smart grid deployments and further details of Green Deal become known the programme will need to maintain a link with these projects and initiatives. Smart metering roll out is an important facilitator to realising the benefits of the governments aspiration for a low carbon economy and will be a key factor in both these areas of development.
12. A number of other main comments on the Prospectus are included in the appendix for areas that are not covered by the questions. This includes ownership of WAN module which sits better with the DCC than the supplier. We support the importance given to consumer protection measures within the Prospectus consultation as we believe this is an important aspect of smart metering rollout.



Prospectus Questions for Response 28 September 2010

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)?

1. It is essential that customers are engaged with the roll out of smart metering in GB in a positive way, which will help deliver the benefits identified in the business case.

Industry Process Design

2. Smart meters should be used to transform the customer experience through the provision of accurate and timely consumption information, and the removal of the complexity around existing industry processes. Simplifying processes will allow customers to enjoy the full benefits of smart metering. With the current projected Data Communications Company (DCC) start date of autumn 2013, it should be possible to make considerable progress against the plans, incorporating a new centralised registration process which is essential to deliver robust access control. The timetable will also provide scope for the integration of data processing and aggregation activity.
3. We are very pleased that there will be a smart energy code to bring together electricity and gas for the first time and we see this as a significant step forward.
4. We support the early focus on consumer protection, including a major focus on data security and privacy.

Interim Arrangements

5. Interim arrangements must provide a robust service for customers. The interim measures must provide confidence to the customer and should not add additional cost to the programme. The interim solution must be simple with limited industry change, to avoid an enduring solution which is to the detriment of the DCC.
6. Once the technical specification is agreed and ratified by Europe, we expect to see a sharp increase in the volume of smart meters being rolled out. Interim arrangements must provide clarity on installation requirements for customers receiving a meter prior to the DCC 'go-live' date; it is important that customers have a positive experience which promotes the main smart meter delivery programme.
7. Our suggested approach is for an AMR solution. This is a simple approach with minimal change to industry processes. AMR service only will involve a monthly meter reading (using standard D10 and gas equivalent); it will exclude the prepayment service (Pay As You Go); tariff updates are not allowed; no remote connection; and compliant meters will remain on

the wall after change of supplier, unless the change is essential, for example to deliver prepayment.

8. This approach allows contracts to be either separate or bundled together, but either way it should be inclusive of communications charges; interim commercial agreements for electricity and gas available for all suppliers, big and small and meter and IHD must meet the minimum specification. The approach will need an industry change to show a meter as '*smart*' and a process to confirm status via Meter Point Administration Service (MPAS) on line (ECOES). Suppliers may need to make further changes to systems to avoid default agent appointments by geography.
9. We consider that the interim period should be regarded as a controlled market start up phase. We would recommend that a cap be placed on the volume of smart meters that are rolled out prior to the delivery of the DCC. Without commercial and technical industry agreement, installing very high volumes of smart meters adds risk to the programme and has the danger of causing negative customer experience (particularly on Change of Supplier).

Targets & Consumer Protection

10. We agree that suppliers should have the freedom to devise their own roll-out strategy. Setting targets may be counterproductive and deflect suppliers from delivering a positive rollout, in an efficient and cost effective manner.
11. A level of reporting on supplier's progress will allow a view to be taken on industry's progress, but strict targets will not be an efficient way of measuring progress, especially in the early years when there will be many critical dependencies. The DCC has yet to be appointed and its creation is breaking new ground for the industry. It is unrealistic to consider setting targets until there is greater certainty.
12. We are fully supportive of the proposed consumer protection measures highlighted within the Prospectus consultation and support the proposal of developing a Code of Practice for smart metering. The Code of Practice should be built on existing codes and working practices. The ERA has begun work to identify changes and gaps in existing arrangements and the new smart metering Code of Practice can therefore build on existing arrangements e.g. ERA sales codes and Safety Net and update these in readiness for smart metering.
13. The Code of Practice should cover customer engagement issues pre, during and post smart metering installations. We support the proposal that there should be no unwelcome sales activity and in parallel recognise that there must be clear guidelines to set out how we can engage with our customers in a way that is not classed as unwelcome, but allows us to take



the opportunity that the smart metering installation process offers to deliver energy efficiency advice and measures.

14. E.ON welcomes the proposal for a national awareness campaign as this will help suppliers gain access to change the meter. We believe organisations such as the Energy Savings Trust could be well placed to work in partnership with local communities and industry to promote awareness of the benefits of smart metering.

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

15. The level of content and detail within the Functional Requirements Catalogue will provide a good basis to move forward.
16. We are pleased to see the meter design taking account of requirements for Network operators and potential smart grid developments. The proposals should allow demand side management benefits to be developed and realised over time.
17. The final specification must be approved at the earliest opportunity and made available to manufacturers to start committing resources to build meters in volume ready for deployment.
18. E.ON is encouraged that a modular design for Wide Area Network (WAN) Communications is being developed. This allows for future requirements to be taken forward without a need to replace metering systems.
19. We see development of HAN and WAN requirements, specifications and standards as the key piece of work to concentrate resources over the coming months.
20. We have raised some specific concerns in our response to question 5, Design Requirements.

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

21. We are happy with the technical specification A-H proposals. The catalogue of requirements provides the right level of detail for an industry group to be able to quickly get to grips with, and flesh out a technical specification. We are comfortable with the proposals to develop the technical specifications.
22. Once a detailed plan is available we should seek opportunities to accelerate the roll-out process, this could be through the parallel working of work streams which reduces timelines (e.g. technical specifications could be written alongside finalising functional requirements). We believe industry could effectively write a specification now, subject to any amendments by utilising supplier, ERA SRSM, ENA and Prospectus documents.



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)?

23. The proposed approach to roll out is sensible and we would welcome a national awareness campaign.
24. With suppliers holding the obligation to roll out smart meters, it is critical that they retain a good level of flexibility in their roll-out strategy to allow the market to maintain a level of differentiation through the products and services offered.
25. Whilst it is prudent to review progress and consider if any issues identified during the course of roll-out require action, the reasoning for this must be understood and justified before any constraints are imposed. We understand the important driver in the deployment strategy to meet the needs of emerging smart grid requirements, and recognise this as one important exception to the planned approach of supplier-driven deployment strategy. An appropriate mechanism (including incentives) may be of value to facilitate the early delivery of smart grids.
26. The acceleration of the roll out will also have significant capital implications for the industry, meaning additional capital will have to be raised in the shorter term. You will recognise there are challenges of this in the current business climate, in particular given other calls on capital required by the industry to meet customer and regulatory drivers associated with the decarbonisation agenda. We believe that these accelerated aspirations would be better supported by including meter ownership in the regulated asset base. This does not remove supplier responsibility for delivery, but means that capital can be raised within the regulated environment and removes uncertainty over future stranding risk of the smart metering assets. This will help avoid these costs of uncertainty being passed to the customer.

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?

27. It is helpful that Ofgem have proposed to phase the programme to provide early certainty for investment. We are keen to work with the programme to establish whether there are ways in which the start of the roll out can be accelerated and further certainty over the process before summer 2012 would help this. Whilst we recognise there is still much to do, we had expected to be fitting compliant smart metering systems much earlier.
28. We have consistently advocated that smart meters should be used to transform customer experience, not only by the provision of accurate and timely consumption information, but also by removing the complexity around existing industry processes. Without some simplification customers will not be able to enjoy the full benefits of smart metering. With the forecast DCC start of autumn 2013, it should be possible to make considerable progress

against these plans, incorporating a new centralised registration process which we believe is essential to deliver robust access control. Against this timetable there is also potentially scope for integration of data processing and aggregation activity.

29. We support the implementation of a smart energy code, which brings together both electricity and gas for the first time; this is a significant step forward. We also support the early focus on consumer protection, including a major focus on data security and privacy.
30. Our main concern from the prospectus is the uncertainty over arrangements prior to the full DCC being in place. The interim processes should be simple and not detract from progress on the final solution.
31. We are concerned that interim commercial interoperability is being dealt with outside of the core programme, via the Review of Metering Arrangements. Interoperability is an absolute prerequisite in industry design, both longer term and for the important interim period until the DCC is active.
32. In addition we understand a separate assessment of Independent Gas Transporter (IGT) arrangements will take place later this year. This review should consider how these sites can best be managed through the new Smart Energy Code.
33. The timescales of both the Review of Metering arrangements and IGT initiatives must be aligned with the work of the Smart Metering Implementation Programme (SMIP)..

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?

34. Acceleration of the programme can best be achieved by substantial ramp up of activity once the full DCC capability is in place. We are concerned about unconstrained roll out of smart meters across the industry during the interim period when full benefits will not be available to customers. We believe it is valuable to use this window for a controlled market start-up, with an appropriate cap and floor on roll out targets per supplier. Without commercial and technical industry agreement, installing high volumes of smart meters adds risk to the programme and has the danger of causing negative customer experience (particularly on Change of Supplier).
35. Once a detailed plan is available opportunities to accelerate roll-out should be sought. As discussed in response to the Prospectus question 7 this could be by work-streams working in parallel within one another.
36. Overtime further opportunities to accelerate roll out may be identified and this could build on increasing the levels of resource whilst maintaining quality controls. There may also be



learning's that are gained from the roll out process that can improve efficiency and speed of roll out.

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?

37. Yes; through the parallel working of work-streams, this can reduce timelines. For example work on the technical specifications could be carried out alongside working and finalising functional requirements. Industry could effectively write a specification now subject to any amendments by utilising existing supplier, SRSM, ENA and Prospectus documents.

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?

38. E.ON supports the approach to governance; this is pragmatic and should assist with delivering benefits to all. We are pleased that the programme recognises suppliers as a key delivery partner in the roll out of smart metering. The introduction of an Implementation Coordination Group is also very welcome. However, the structure appears hierarchical; it is not clear how an escalation process works for issues resolution and it is therefore extremely important to ensure that there is an appropriate constitution in place to ensure that key decisions are made at the right level.

39. From the documentation provided, we would like further clarity on the timescales for decision making and resolution of issues.

40. The programme needs to be able to respond to issues and risks in a prompt and timely manner, ensuring any identified problems are communicated to industry parties at the earliest opportunity, to allow suppliers and other affected parties to react appropriately and accordingly. We see the programme working most effectively as an open and transparent forum for exchanging views and ideas. Whilst we shall directly resource workstreams, it is also vital from a strategic stand point that more senior executives and programme managers are able to access and have dialogue openly with the programme leaders.



Statement of Design Requirements

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

41. We consider a modular approach has a number of benefits, not least the reduced risk of having to exchange the entire metering asset should any HAN issues arise in the future thus providing Meter Asset Providers further confidence that smart meters will remain installed for their full economic lives. However technical viability and cost benefit analysis needs to be completed.

Are suitable HAN technologies available that meet the functional requirements?

42. No, our research into the HAN market concludes that there is no *'one size fits all'* HAN solution, that will deliver all the functional requirements.
43. All the solutions that we have reviewed have their plus and minus points. In addition to this, we are not aware of any open standards that would meet all the requirements proposed.
44. We therefore propose that industry trials will be required to establish what will work best in a variety of situations, in order that a single solution or mixture of solutions can be identified for GB to provide the necessary certainty and interoperability needed.

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 to change out SIMs?

45. This is a commercial question, requiring input from mobile communications providers as well as the Supplier and metering agent community.
46. We assume that at this stage the question relates to interim arrangements, as the final DCC WAN Comms solution is unknown. Based on this, we believe that interim arrangements should avoid a need to switch communications providers.
47. Transferring mobile providers at the same time as change of supply events is something that has not really been embraced by the industry to date. In the PC 05-08 AMR metering market we see very little of this sort of activity and instead meters and or SIMs are being exchanged rather than simply switching providers.
48. We are keen to work alongside the programme to understand what is available and how it could be used to address any operational issues which prevents smart meter from taking advantage of the technology. Whilst the initial roll out of smart metering maybe based on cellular solutions as a result of an available infrastructure, this position could be quickly diluted as other technologies without the need for a SIM become available.

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

- 49. Overall we are pleased with the technical specification proposed, i.e. A-H proposals. We view the catalogue of requirements to be at the right level of detail for an industry group to be able to quickly get to grips with and flesh out a technical specification.
- 50. For gas we welcome the inclusion of functionality to facilitate local CV measurement. This is an important step towards the development of mains renewable gas. Our support for this is based on our assumption that it will not be the meter itself that carries out CV measurement, but that the meter will be capable of receiving data flows that deliver CV information and therefore allow calculation of energy at the meter.
- 51. We are pleased to see elements of the DNO requirements for smart grids already included within the catalogue.

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

- 52. In principle the functionality proposed in clause 3.37 appears reasonable but we do have some concerns in relation to last gasp.
- 53. Smart meters may give customers an impression that outages will automatically be notified to the distributor. This is not the case without additional metering hardware and the Cost Benefit Analysis undertaken by the ENA has shown that there is unlikely to be a positive outcome. We therefore believe the choice is one based on customer's willingness to pay for this additional functionality.
- 54. We have no direct evidence to show that customers may want this technology, however if Ofgem were to consider it appropriate for inclusion now we would support such a decision.
- 55. We would however caution that any delay in reaching such a decision must not impact the programme and therefore delay finalising the technical specification
- 56. With regards to auxiliary switches referred to at clause 3.38, we consider that these items are not required for all metering systems, but where there is a requirement, a meter with this functionality should be available at an agreed specification. A proportion of the housing stock in the UK will have heating loads which will require this functionality when smart metering systems get rolled out. A detailed specification should be provided and agreed by industry for instances where this functionality is required.
- 57. With regards to the requirements (D.S.2) for storage of 12 months half hourly consumption data we would suggest a cost benefit analysis is undertaken for both gas and electricity consumption data in view of the potential additional memory costs.



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

58. There is a suggested requirement (OP.8) for explicit direct interaction with the smart meter on activation of the supply enablement function. Although we would agree that this is required for gas smart metering we do not believe that this is justifiable for electricity smart meters, where the safety requirements have not been proven (and would also apply to supply interruption). There would be considerable inconvenience in requiring a customer to go to the meter to re-enable the supply when it may take a few minutes for credit to be registered on the account and a requirement for access could prevent the end to disconnection which could be brought about if pre-pay was available to all, or nearly all, customers.
59. We also have concerns about the implicit requirements for consumers to physically interact with smart meters to perform various tasks (e.g. back up for PAYG functions). The drivers for these requirements seem to be driven from 'old world' existing metering experience and not from what will become the operational normal in the smart world. With the installation of HAN technology and the provision of IHD to consumers it will become normal practice for consumers not to physically interact with their meters even when they are located in what we currently consider to be accessible locations (e.g. outside meter boxes). Why would consumers choose to visit their meter when the information would be available via a far more accessible device (e.g. phone, TV, pc)?
60. There are many references in the Prospectus to the implicit development of these types of solutions but there are also too many contradictory requirements for future smart meters to be developed with an assumption that consumers *will* physically interact with them.

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

61. Yes.

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

62. Strong leadership will be required from the programme to make decisions and maintain momentum. We do not consider an obligation is required for suppliers; as a supplier we will



certainly be fully committed to the programme and have a vested interest in ensuring a specification is concluded as soon as possible to deliver government aspirations for an early start to the roll out.

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

63. We believe the majority of functionality is available now and lead times from manufacturers should not be an issue.

64. We see a number of HAN specific and related issues;

- No proven HAN for the UK utility industry; due to specific nature of UK market and housing stock we do not see any existing standard e.g. Zigbee or Zwave etc as simply transferable for UK;
- There are currently no fully open protocols or standards available as proposed;
- We consider industry trials are required to prove capabilities of the various potential service providers. Whilst trials may delay the programme slightly, it is a means of ensuring we *'get it right first time'*.
- As part of any trial of HAN we would suggest some consideration is given to the level of "noise" interference any such widespread deployment of this technology may cause to customer and other similar networks that may already be deployed in a concentrated geographic area;
- There are other technical issues to be considered
 - i. Modular design for WAN
 - ii. Configurability of PP/Paygo
 - iii. Physical components to support new mandatory requirements
 - iv. Security and privacy standards/protocols for software and firmware
 - v. Interim WAN standards and protocols

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?

65. Yes, we should look to accelerate the process through work-streams running in parallel once a detailed plan is available. We also believe industry could effectively write a specification now, subject to any amendments by utilising existing supplier SRSM, ENA and Prospectus documents.



Implementation Strategy

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?

66. The approach to governance is pragmatic and should assist with delivering benefits to all parties. We are pleased that the programme recognises suppliers as a key delivery partner in the roll out of smart metering. The introduction of an Implementation Coordination Group (ICG) is also very welcome. However, the structure appears hierarchical in places and it is therefore extremely important to ensure that there is an appropriate constitution in place to ensure that key decisions are made at the right level.
67. We would like further clarity on how any escalation process will work if a serious issue is raised within the programme team. From the documentation provided it is unclear what the timescales for decision making and resolution of issues are. The programme must respond to issues and risks in a prompt and timely manner to ensure any identified problems are communicated to industry parties at the earliest opportunity, allowing suppliers and other affected parties to react appropriately.
68. The ICG could be vehicle to escalate stakeholder issues and provide strategic design and direction.
69. We see the programme working most effectively as an open and transparent forum for exchanging views and ideas. Whilst we shall be directly resourcing workstreams, it is also vital from a strategic stand point that more senior executives and programme managers within suppliers are able to access and have dialogue openly with the programme leaders.

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

70. As with any large programme, many of the activities being undertaken will have co dependencies in other areas that will be critical to the overall success of the programme. We consider there to be a number areas of cross cutting activity that should be undertaken;
 - Interim arrangements
The development of Interim arrangements is key to the success of early deployments (as per the government stated aspiration) and this will cross over areas such as consumer protection and data security.
 - Commercial Interoperability & Independent Gas Transporter Review
Commercial Interoperability is an area that is not entirely within the control of the programme and we understand is being reviewed as part of Ofgem Review of Metering Arrangements. This is an extremely critical area of work. Whilst the DCC will go some way towards ensuring meters and more importantly customers can change suppliers

without needing to have smart metering systems exchanged, without an agreed industry methodology for managing the commercial aspects to smart metering we have a concern that customers will ultimately be disadvantaged and the commercial market will not function as intended. We would expect that the proposed review of IGT arrangements planned for later this year will also cross over with discussions from a technical, regulatory and commercial perspective for the programme.

- Smart Grids/Green Deal

As arrangements for both smart grid deployments and further details of Green Deal become known, the programme will need to maintain a link with these projects and initiatives. Smart metering roll out is an important link to realising the benefits of the governments aspiration for a low carbon economy and will be a key facilitator in both these areas of development. Enablement of the Low Carbon Network Fund projects is also important and it may be possible to apply learning's to later stages of the smart meter programme.

Security and privacy are also recognised as major cross cutting areas.

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?

71. We have consistently advocated that smart meters should be used to transform the customer experience, not only by the provision of accurate and timely consumption information, but also by removal of the complexity around existing industry processes. Without some simplification customers will not be able to enjoy the full benefits of smart metering. We believe that against a currently forecast DCC start of autumn 2013, it should be possible to make considerable progress against these plans incorporating a new centralised registration process which we believe is essential to deliver robust access control.
72. It is helpful that Ofgem have proposed to phase the programme to provide early certainty for investment. We are keen to work with the programme to advance the deployment of smart meters earlier than summer 2012. We recognise there is still much to do, but we had expected to be fitting compliant smart metering systems much earlier. Early activity is also important for early delivery of other government initiatives such as the Feed-in-Tariff (FIT), the proposed Green Deal, and Renewable Heat Incentive (RHI).
73. Our main concern from the prospectus is the uncertainty over arrangements until the full DCC is in place. We are also keen to ensure that interim processes should be simple and not detract from progress on the final solution.



74. We have detailed our proposals for Interim arrangements in response to Prospectus Question 3.

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

75. Yes, although we do have some additional comment relating to the staged approach.
76. There is a risk with the proposed obligation on potential DCC service providers to have to take on existing communication contracts as a legacy from the interim period that potential bidders may be put off by the commercial and or technical complexity this poses.
77. DCC could mitigate such a risk by simply pricing in the costs of taking on interim communication arrangements, but this will result in higher prices than envisaged under the Impact Assessments. Our proposal for interim arrangements is detailed in answer to Prospectus Question 3 will assist with mitigating this issue.
78. There will be a doubling of effort (to a greater or lesser degree) by having a requirement to develop both longer term (DCC arrangements) and interim systems and processes in tandem. Careful programme leadership is required to ensure that the interim arrangements do not cross over to long term arrangements and that key resource does not get tied into interim arrangements to the detriment of the longer term DCC development. We are also keen to ensure that interim processes should be simple and not detract from progress on the final solution.
79. We consider that the interim period should be regarded as a controlled market start up phase. We recommend that a cap is placed on the volume of smart meters that are rolled out prior to the delivery of the DCC. Without commercial and technical industry agreement, installing very high volumes of smart meters adds risk to the programme and has the danger of causing negative customer experience (particularly on Change of Supplier).

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?

80. Acceleration of the programme can best be achieved by substantial ramp up of activity once the full DCC capability is in place. We are concerned about unconstrained roll out of smart meters across the industry during the interim period when full benefits will not be available to customers. We believe it is valuable to use this window for a controlled market start-up, with an appropriate cap and floor on roll out targets per supplier. Without commercial and technical industry agreement, installing high volumes of smart meters adds risk to the

programme and has the danger of causing negative customer experience (particularly on Change of Supplier).

81. We should look to accelerate the process through work-streams running in parallel once a detailed plan is available. We also believe industry could effectively write a specification now subject to any amendments by utilising existing supplier SRSM, ENA and Prospectus documents.

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?

82. In principle we agree with the approach as long as it provides adequate time for all market participants to prepare for the roll out. We would wish to see commercial interoperability arrangements agreed, such as SLAs for transfer of technical meter details, obligations on parties to provide services, e.g. data retrieval data collection etc, by industry prior to any final go live decision.
83. However, if some suppliers are ready earlier and have completed their systems development and passed any industry accreditation or testing procedures, they should be allowed to move forward, without having to wait for other suppliers to be ready.

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

84. The high level plan assumption of six months between grant of DCC licence, services procurement and go live seems at best challenging. Options for maximum possible development and activity within the programme activity and for parallel working should be considered in formulating the detailed plan.
85. We would wish to see the following additions to the high level plan;
- Milestone required ensuring that commercial arrangements are in place for the go-live rollout as the complexity extends beyond the agreement of functional and technical meter specifications (i.e. commercial interoperability);
 - There is an assumption that a ramp-up period is needed for suppliers although it is equally important to have a ramp-down of activity to appropriately manage resources;
 - There will inevitably be a small number of premises that do not get a smart meter installed due to failure to gain access, e.g. empty premises or simply those where customers despite all reasonable efforts simply will not engage with their supplier

and permit access. Appropriate plans should be developed to accommodate these under future smart metering industry arrangements;

- There should be a dependency on appropriate data security and privacy measures being in place prior to suppliers being mandated to deploy smart meters;
- Prior to DCC go live there may be a period of migration activity for meters installed during the interim period.

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

86. We are broadly in agreement on the outputs identified for each of the phases of the programme.
87. In review of the documentation it would appear that consumer awareness does not start until Phase 3 of the programme. In our view this is too late and plans to develop consumer awareness should begin now in order to get consumer buy.
88. One area which appears to be missing is the requirement for any commercial framework to deliver commercial interoperability. The programme needs to link with the Ofgem Review of Metering Arrangements & Independent Gas Transporter and ensure that timescales for delivery of this critical work are captured and planned accordingly. Clear milestones and dependencies from these activities need to be identified and built into the overall SMIP plan.



Roll Out Strategy

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?

- 89. Overall we support the proposed approach to roll out. With suppliers holding the obligation to roll out smart meters they must retain a good level of flexibility to enable them to manage roll out plans and maintain a level of differentiation through the products and services they offer customers.
- 90. It is helpful that Ofgem have proposed to phase the programme to provide early certainty for investment.
- 91. Once suppliers have developed their systems and processes for the enduring and interim solutions, they should not be restricted in going ahead and deploying meters in advance of other suppliers. However, It is valuable to use this window for a controlled market start-up, with an appropriate cap and floor on roll out volumes per supplier. Roll out should not be constrained by suppliers being held back by the slowest participants. This will assist in delivering government aspirations for an earlier roll out.
- 92. As requirements and / or electricity Network constraints emerge during the roll out period, we would wish to see Distributors having a level of appropriate input to supplier roll out plans to mitigate any potential Network constraint issues and enable smart grid.
- 93. It is prudent to review progress and consider if any particular customer segment requirements become apparent during the course of the roll out. These would need to be understood and justified before being imposed.

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

- 94. Yes.

Is there a case for special arrangements for smaller suppliers?

- 95. No, we do not believe it appropriate for smaller suppliers to have any special arrangements. Introducing variants may cause interoperability issues, thereby affecting the competitive market place. All suppliers should make a proportional contribution to the overall roll out.



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?

- 96. We would welcome the creation of an independent body to manage and promote a national overall smart metering awareness campaign. This would provide a degree of independence for customers to create trust and public buy-in which is essential for the early stages of the rollout. Managing the early rollout stage as a controlled market start up will further mitigate customer risks.
- 97. An independent and trusted body can provide the public with information on the overall programme initiatives and benefits and provide a public face for the industry for specific issues and customer groups such as vulnerable and fuel poor customers, rural communities etc.
- 98. We consider the body should have similar constitution to Digital UK which is generally regarded as successfully managing the digital switch over to date.
- 99. We suggest that the body could be managed through Energy UK, with additional representation possibly from smaller suppliers, Ofgem, Consumer Focus, DECC and meter manufacturers.

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?

- 100. The most appropriate way of developing a code of practice or customer charter will be an inclusive and collaborative process. It should involve all appropriate parties including consumer groups and those that will be required to comply with the standards and requirements within such codes or charters. We are also very supportive of ensuring customer protection measures are robust for smart metering and would like to see the current initiative between the consumer lobbyists, Ofgem and the regulator result in the development of self regulatory codes which have served the industry well in the past.
- 101. Any code of practice will need appropriate governance to underpin the obligations within it. Governance should enable review and update simply and quickly and should not become burdensome and costly on the signatories. Governance costs should be minimised wherever possible.

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?

102. Yes, suppliers should have an obligation to take "all reasonable steps" to install a smart meter.
103. In defining reasonable steps, learning's can be taken from current recertification programmes and policy exchange visits for electricity and gas metering. A number of attempts to contact customers are made including a number of visits to the customer premise.
104. In the absence of warrants the programme should consider what should happen to the small residue of customers who simply refuse access to their premises to affect a meter exchange to smart. Consideration needs to be given to striking a balance between the costs of supporting a small number of residue dumb meters through legacy systems versus potential customer disruption to effectively replace a dumb meter for smart.
105. A completed installation could be defined as the meter(s) communicating via the WAN and if accepted, when the in home device is working. This could be determined before the meter installer leaves the premise.

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

106. No, we do not believe this is appropriate; suppliers should have the freedom to devise their own roll-out strategy. Setting targets may be counterproductive and deflect suppliers from delivering a positive roll, in an efficient and cost effective manner.
107. Licence changes to affect targets and monitoring against targets may actually delay the programme and be counterproductive.

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

108. A level of reporting on supplier's progress will allow a view to be taken on industry's progress, but strict targets will not be an efficient way of measuring progress, especially in the early years when there will be many unknowns, such as the structure of the DCC.

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

109. We support the proposal to accelerate the completion of deployment of smart meters, and suggest that it is possible to achieve delivery of smart meters to 90% of our customer base within 5 years of the delivery of the fully-enabled DCC (by Q3 2018, given currently understood DCC delivery timetable). However, the implications of this acceleration will

increase the cost of the stranding of legacy meters to the industry (and hence to customers), and we are disappointed that there appears to be no further consideration of an appropriate stranding mechanism to compensate. The importance of this is more pronounced in an environment of accelerated delivery, and will be a disincentive to acceleration.

110. Shorter term arrangements required to resource a further reduced rollout timescale will increase resourcing costs both in terms of recruitment and training and also hire rates.

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

111. We have no evidence that suggests any particular groups or meter types should be prioritised. The proposed approach to roll out is appropriate and prioritising certain groups or meter types will be counter-productive. With suppliers holding the obligation to roll out smart meters, they must retain a good level of flexibility to enable them to manage roll out plans in a manner which they believe is cost effective, efficient and allows the market to maintain a level of differentiation through the products and services they offer customers

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?

112. We agree a level of annual reporting on progress is required such that the programme can maintain a view on the status of each suppliers roll out activities.

113. We do however see difficulties reporting specific customer benefits e.g. energy efficiency/reduction of consumption due to seasonal trends and variances. Setting up control groups against which to maintain such reporting may also prove to be difficult further into the roll out.

114. The level of customer churn in the competitive market also adds further complexity and targets must not introduce any "gaming" i.e. simply acquiring customers once a smart meter has been installed by a competitor.

115. A balance needs to be struck to provide the programme with assurance on roll out without being an onerous activity and cost to suppliers which ultimately the customer bears.

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?

116. Established meter operators already have adequate protection with regards to on site security arrangements for customers and this should be included in the code of practice for smart metering installation.



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?

117. Yes. We are also very supportive of measures ensuring customer protection and that these are robust for smart metering. We would like to see the current initiative between the consumer lobbyists, Ofgem and the regulator result in the development of self regulatory codes which have served the industry well in the past.
118. Our view is that any Code of Practice should build on existing codes and working practices. Work is already starting within the ERA to identify what needs to be changed and where gaps appear as a result of smart metering. The new smart metering Code of Practice can therefore build on existing arrangements, for example the ERA sales codes and Safety Net and update these in readiness for smart metering.
119. We believe the code of practice should cover customer engagement issues pre intra and post smart metering installations.

Appendix - Further Detailed comments on the Prospectus

120. The set up and operational efficiency and effectiveness of DCC will be major factors in the roll out of smart metering. It is therefore important that there is strong oversight, controls and transparency and this should reflect the requirements of the key users of the service.
121. The prospectus has established workstreams to address technical interoperability, but is largely silent on commercial interoperability. We have raised this issue in our response to Ofgem's Review of Metering Arrangements, including a recommendation that standard industry agreements and or guidelines should be developed to address issues such as the treatment of installation costs and early removal termination charges. We also believe it is necessary to tackle the problem of Independent Gas Transporters who fit the majority of gas meters to new properties but may not meet supplier smart metering requirements.
122. The Impact Assessment still shows substantial benefit from the removal of meter reading visits. This benefit will be significantly eroded if 2 yearly safety visits continue as the norm. We welcome the proposal that industry participants should work with HSE in order to move to a risk based approach and believe that the programme should maintain focus on the progress achieved in this area in fulfilling its role of overseeing delivery of business case benefits.
123. We are pleased that the importance of facilitating smart grids features prominently in the prospectus and believe that the enablement of smart grid should be a firm programme deliverable so that this key area does not fall victim to de-scoping at some later date.
124. We believe it is unrealistic to consider setting targets for suppliers at least until there is greater certainty. The mass roll out of smart metering by suppliers within a competitive metering market is already entering into new territory and has critical dependencies on the performance of an as yet non-existent DCC. Under a Supplier installation led model the market should drive activity and we believe that progress reporting rather than firm targets will be more appropriate.
125. We are very supportive of ensuring customer protection measures are robust for smart metering and would like to see the current initiative between the consumer lobbyists, Ofgem and the regulator result in the development of self regulatory codes which have served the industry well in the past.
126. On a more detailed but important point we believe the view that the supplier who fits the first meter and will therefore have responsibility for the ownership of the WAN module, requires further consideration. This places a burden and responsibility on suppliers for technology updates where the decision will be taken by DCC and therefore is outside of supplier's control. It may make more sense for DCC to own the asset with installation remaining with the supplier. There are also potential conflicts over issues over maintenance



where the second meter is installed by another provider. Under current proposals if Supplier A installs the first meter and WAN module which continues to operate well but Supplier B then fits its meter and cannot get or loses connection there is no incentive on Supplier A to fix this problem.