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Smart Metering Implementation Programme- DCC Licensing Team  
Department of Energy and Climate Change  
3 Whitehall Place  
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24 November 2011

Dear Sir

**Smart Metering Implementation Programme: a consultation on the detailed policy design of the regulatory and commercial framework for DCC (September 2011)**

UK Power Networks is pleased to respond to the above consultation. We have responded to most of the questions posed by the consultation in the appendix to this letter, deleting the questions we have chosen not to answer for clarity.

Notwithstanding other benefits recognised in the Government's Impact Assessment, we believe that the proposed rollout of smart meters to all domestic and most SMEs by 2019 is an essential component of the UK's strategy for achieving an affordable transition to a low carbon economy, and ultimately to meeting its statutory obligations in respect of reducing carbon emissions.

For the smart metering system to play its full role, it will be essential that the smart meter technical equipment specification (SMETS), the overall capability of the data communications system, the licence obligations and incentives placed upon the DCC, and the Smart Energy Code are each fully aligned with that objective.

Both the Smart Energy Code and the proposed licence obligation on DCC with regard to promoting (or facilitating) energy efficiency must be drafted such that it requires DCC to promote (or facilitate) the wider objectives surrounding low carbon transition, for example:

- the development by suppliers of new tariffs which will encourage consumers to make greater use of low carbon generation and low carbon technologies; and
- facilitating the development, maintenance and operation of efficient, coordinated and economical systems of electricity distribution.

We believe it is essential to ensure that the procured wide area network (WAN) communications system will support the full functionality and technical capability of the smart metering system as currently specified in the Industry Draft Technical Specification (IOTS). Our answers to questions 80 to 82 and the attached appendices 2 and 3 are of particular relevance here.

We are conscious that whatever arrangements are put in place to recover the costs of DCC services, it is the consumer who will ultimately pay. While it is important to ensure that the data communications system is sufficiently future-proofed to eliminate the risk of future technical or economic stranding, it is also important not to specify or procure functionality ahead of foreseeable need. In that regard, tables 6.2 and particularly 6.3 of the consultation include functionality that was not specified by the Energy Networks Association and which we do not believe will be required by DNOs in the immediately foreseeable future.

Appendix 3 of our response (based on tables 6.2 and 6.3) provides clarification of the required functionality necessary to support DNOs in the development, maintenance and operation of efficient, coordinated and economical systems of electricity distribution.

Finally, in terms of Foundation Stage obligations with regard to adoption, we believe that the overriding requirement is to ensure that the provisions fully embrace the requirement for technical and commercial interoperability of the smart metering system.

We hope that you will find our detailed answers in the appendix useful and confirm that we have no objection to this letter being published on DECC's website.

If you have any questions about our response, please do not hesitate to contact me.

# Appendix

## Chapter 2: Proposed regulatory approach to DCC

*Q1. Please provide views on the approach to basing the prohibition upon contracting with all licensed suppliers in respect of all domestic smart meters, and on the way in which the specific wording of the prohibition should be developed.*

We agree that it is important under the Prohibition Order not to inadvertently catch parties other than DCC who are legitimately involved in smart meter related data communication (including consumers) but at the same time to ensure that the specific services undertaken by DCC can be undertaken only by a licensed entity. The need to ensure security of private information is of particular importance in this consideration.

*Q2. Do you think there will be any persons other than DCC who might inadvertently be captured by a definition structured in this way?*

We do not believe that any parties other than DCC will be inadvertently captured at this time, though it is important to recognise the possibility of future (including unforeseen) market developments which could create new smart meter information related products. For example, commercial aggregators might seek to provide a range of ancillary services based on smart meter information. Such services could be of interest to suppliers and also network operators (including the national electricity transmission system operator, NETSO).

*Q3. Do you have any other comments on the form of the licensable activity?*

We note that the proposed drafting of the licensable activity is in respect of domestic smart meter information communication services undertaken on behalf of suppliers. However, while understanding the desirability of a narrow definition of the licensable activity, the consultation could perhaps better explain the rationale for excluding SMEs without half hourly metering (i.e. micro-businesses) or for excluding smart meter information communication services undertaken on behalf of network operators (including DNOs and GDNs but also independent network operators).

We note that Government has previously concluded that suppliers and metering service providers will not be obliged to use DCC services but that DCC will be obliged to offer terms, including in respect of advance meters (paragraph. 3.57 d of the consultation refers). While that might be appropriate, we would nevertheless be concerned for Government to make provision to ensure that such services are procured in a manner consistent with the wider objectives of smart metering, including the development of smart grids. This is fundamental to the achievement of the smart metering business case (also known as the Impact Assessment).

*Q4. Please provide comments on the proposed changes to legislation identified in Table 2.1 and Table 2.2 and any other possible changes that you consider might be appropriate.*

We agree that the proposed amendments to the legislation are suitable to the creation of a new licensed body to be responsible for the communication and collection of smart metering data. Furthermore we believe that the legislation should be further amended to provide within statute the duties of the DCC (see also question 11).

We have also identified that the Electricity Act 1989 requires consequential amendment, particularly to paragraph 9 of Schedule 6 and Schedule 7, to enable the Meter Operator a statutory right of access to install the communications devices which will be required in order for the smart meter to communicate with the DCC. A similar amendment may also be required in the Gas Act.

*Q7. Do you have any comments on the scope and nature of the consequential licence changes that we propose to make?*

We believe that the licence for the DCC should provide a clear date from which the Data Transfer Services and MPAS transfer from the electricity distributors to the DCC.

### **Chapter 3: DCC licence conditions**

*Q10. Do you agree with the proposed general objectives of DCC set out above?*

While we agree with DECC's overall approach and the specific objectives laid down in paragraph 3.16, we would question whether a requirement for DCC to develop, maintain and operate an efficient, coordinated and economical data and communications system would recognise the wider economic benefits of a fully integrated DCC service. For example it would not provide sufficient incentives to facilitate the development, maintenance and operation of efficient, coordinated and economical systems of electricity and gas distribution. We felt that this would be a lost opportunity in the development of this sector of the industry.

The concept of an efficient, coordinated and economical communications system could easily be interpreted from a purely parochial standpoint (i.e. the communications system itself) rather than in the context of an efficient, coordinated and economical overall energy system. This is particularly relevant to the development of responsive demand services, and smart grids generally, and the consequential requirements for volume and latency of transmitted data.

*Q11. Do you think it is necessary to include any statutory duties on DCC in the Gas and Electricity Acts or is it appropriate address these issues in the DCC licence alone? Please provide the rationale for your views.*

We believe that the obligations of the DCC should be set down in statute in order to ensure that Parliament is stating the clear purpose for which the DCC is being established. There is a precedent for this as the Electricity Act provides for the statutory duties of an electricity distributor and we believe that similar provisions setting out the statutory requirements of the DCC should be included in legislation.

*Q12. Do you agree that any obligation to facilitate competition in the area of distribution should be considered as part of the implementation of any future smart grids related arrangements?*

Applying a similar argument to that in our answer to question 10 (and while noting DECC's comments under paragraph 3.7) we would question whether there should not be a more specific obligation to promote competition.

*Q13. Do you agree with the approach proposed in relation to the protection of consumers interests?*

In terms of protection of consumers' interests, an important obligation is that relating to security of data privacy. However, especially in the context of low carbon transition and the potential impact that both decarbonisation of electricity generation and the electrification of heat and transport will have on the end-to-end electricity supply chain, consumers' interests will also be critically dependent on DCC facilitating the development, maintenance and operation of efficient, coordinated and economical systems of electricity distribution.

*Q14. Do you think DCC should have a separate objective to promote (or facilitate) energy efficiency?*

While agreeing with the intention behind this objective, we feel that 'energy efficiency' is too narrow a definition: energy efficiency could be taken to mean simply reducing energy waste. While this is of course important, in the context of low carbon transition there will also be a need to influence consumer behaviour in other ways; for example, by encouraging more control over the time of day that electricity is consumed, especially demand building applications such as heat pumps and electric vehicle chargers.

Encouraging more control could mean either taking more control or relinquishing control (for example, to an energy aggregator or energy services company). It will therefore be important for DCC, in meeting its obligation to develop, maintain and operate an efficient, coordinated and economical data and communications system, to also have regard to:

- facilitating competition, for example between suppliers in the development of time of use or more dynamic tariffs which might be more demanding of data services in terms of volume and speed of communication signals; and
- facilitating the development, maintenance and operation of efficient, coordinated and economical systems of electricity distribution, including the development of smart grids which will enable network operators to make use of smart meter data to manage networks more actively and efficiently.

*Q15. Do you agree that SEC licence condition should be drafted so as to provide flexibility over the future scope of the SEC, i.e. that the scope of the SEC in the DCC licence condition should be drafted in a permissive manner?*

We agree with DECC's proposal; at this stage it would be impractical to define the scope of the SEC definitively. Indeed, we believe that the SEC will need to be flexible and able to evolve in a systematic manner over time. Even under a permissive regime, we believe that ensuring responsive governance will be demanding.

*Q16. What are your views on the SEC Applicable Objectives set out above?*

While in general we believe that the objectives proposed for SEC are appropriate, we have a number of comments relating to the proposed objectives and the consequent implications for the legal drafting of DCC's licence conditions in respect of the SEC which we cover in our answers to the following questions.



*Q17. Do you agree that the SEC should be designed to take into account consumers' interests by meeting its applicable objectives, rather than having an explicit objective related to the protection of the interests of consumers?*

We agree that, in practice, consumers' interests would be best protected by ensuring that the SEC objectives are sufficiently comprehensive rather than relying solely on a general objective. However, recognising that the SEC will necessarily be an evolving code (and that the evolution path might not be entirely predictable at this stage), we would see value, if only in terms of providing consumer assurance, in the SEC also having an explicit obligation to this effect.

*Q18. Should there be a SEC objective related to promoting (or facilitating) efficiency of energy networks?*

We believe that facilitating, rather than promoting, efficiency of energy networks is appropriate. Network operators already have a statutory obligation to develop, maintain and operate efficient networks and regulatory incentives to promote the same outcome. The role of the SEC should be to ensure that all parties, including but not limited to DCC, have an obligation to facilitate efficient energy networks. This will be particularly important during the low carbon transition (please see our answer to question 13 above).

*Q19. Do you think the SEC should have a separate objective of promoting (or facilitating) energy efficiency?*

As explained in our answer to question 14, we believe that 'energy efficiency' is too narrow a concept and should be extended to also embrace the efficient use of energy in terms of recognising both the carbon and electricity network marginal cost implications of using electricity at times of either low wind generation output or peak demand. Facilitating end-to-end electricity system efficiency is the key to meeting UK plc's obligations in respect of greenhouse gas emissions and ensuring affordable low carbon transition. This will ultimately confer greater benefits to consumers than energy efficiency alone.

*Q20. Do you agree with the definitions of the services that DCC should be required or permitted to provide?*

We agree with the concept of core, elective, value added and other services and the broad definitions relating to each. Each of these has conceptual value in meeting the wider objective of affordable low carbon transition.

*Q21. In relation to which non-compliant metering systems should DCC be required to offer services?*

We believe that DCC should be obliged to offer services to SMETS compliant meters (but noting that SMETS will evolve over time, including from SMETS 1 to SMETS 2, and DCC must be obliged, for the duration of its licence, to continue to provide services to all meters that were SMETS compliant at the time of installation). This will be essential to ensuring commercial interoperability of smart metering systems, which is fundamental to the development of enduring smart metering services such as MAP, MOp and MAM.

022. *In relation to which non-compliant metering systems associated with energy supply at consumer premises should DCC be permitted to offer services?*

We believe there would be merit in permitting DCC to offer services in respect of advance metering systems. Such systems are a valuable source of data that could facilitate the development of smart grids.

023. *What information should be made available to all users about:*

- *elective services;*
- *value-added services?*

*Should information be restricted to that required to assess the impact on other users of DCC services or should there be full transparency? Should DCC be required to make available the detailed commercial terms and conditions of such services?*

In the interests of affordable low carbon transition, DCC should have an incentive to innovate and develop service products that would fall into the elective and added value services categories. Information relating to such services should be sufficiently transparent to enable prospective users to properly evaluate such services—including, but not restricted to, information required to assess the impact on other users of DCC services and indeed those whose legitimate operations (including regulatory duties) might be impacted as a consequence of such services.

While described as elective or added value services, we would regard such services as core to the facilitation of competition and energy efficient systems.

024. *Do you think the detailed terms and conditions for elective and value-added services should be set out in the SEC or included in bilateral agreements between DCC and persons to whom it is providing services?*

While it would be desirable to set out in at least general terms, the conditions relating to non-core services, it would be impractical, not to say potentially restrictive, to exclude bilateral agreements. Needless to say, it will be important to ensure that in entering into bespoke service agreements, DCC has an obligation to offer equivalent terms to all DCC Users.

025. *Are there any other matters that we have not addressed related to the nature of services provided by DCC? (Note that provisions addressing independence and non-discrimination in the provision of DCC services are covered in paragraphs 3.119 to 3.120).*

The consultation is drafted very much in the context of DCC services to suppliers. We have made specific reference to important services that DCC will provide to network operators (and other parties), and while we acknowledge that users other than suppliers are not explicitly excluded (arguably they are implicitly included), we would be concerned if such other users were not at the forefront of DECC's thinking in terms of the obligations on DCC as conveyed by licence drafting and in terms of the evolution (and indeed governance) of the SEC.

For example, we cite the ENA smart metering Use Cases and other related documents as an essential source of reference for the services that network operators would seek to secure through the DCC or otherwise.

026. *Do you agree that DCC should be required to externally procure specific services and have principles that determine what other services it should externally procure?*

DCC should not be required to pursue an external procurement approach where that would have the effect of undermining the core activities of DCC as a licensed entity. Examples of such services would include those cited in paragraph 3.75.

However, given the monopolistic nature of DCC, for other services the underlying principle should be that DCC should procure (or outsource) services wherever that would lead to effective competition (i.e. innovation, better services and/or reduced costs). However, DCC should not be precluded from offering such services in-house provided that (for example through benchmarking) DCC could demonstrate that such services could be provided more cost-effectively in-house than through a procured service. This benchmarking could be repeated as part of the renewal of the DCC licence.

027. *Do you agree with the procurement objectives for DCC identified above?*

We agree with the overall proposals laid down in paragraph 3.89. In particular, we would emphasise the need for flexibility, and this is of particular importance in the procurement of WAN services. While it is difficult to quantify the future requirements of the WAN in terms of bandwidth, latency and overall performance, or predict the rate at which the WAN might be required to evolve, it is clear that the decarbonisation of electricity production and the gradual electrification of heat and transport will impose considerable stress on future electricity distribution networks and transmission systems if technological and commercial innovation in smart grids is undermined by an inadequately specified WAN. That is not to suggest investment ahead of need; rather, the commercial test for procured WAN services should be based on long-run cost benefit analysis. In particular, it will be important to consider whether any given technology might have limitations for future development that could result in the initial investment becoming stranded.

028. *Do you agree that DCC should be required to produce a procurement and contract management approach document?*

We agree that this is the appropriate approach.

029. *We seek your views as to whether the procurement and contract management approach document should be required to be submitted for approval by the Authority and/or the Secretary of State.*

Given the wider objectives to be served by DCC services, including the need to procure services that will not only serve consumers' needs but also facilitate the transition to an affordable low carbon economy, we would see merit in approval by both the Authority and the Secretary of State.

030. *Is the scope of the proposed prohibition on discrimination, which is limited to undue discrimination between uses or classes of users, adequate?*

As the DCC will be a monopoly provider we believe that it should therefore be subject to a prohibition on discriminating between users. This is similar to the existing prohibition on discrimination between customers which exist for electricity distributors who also occupy a monopoly position in their respective licence areas.



*Q36. Should DCC be prohibited from using confidential information for any purpose other than the licensed DCC activity? Should DCC be obliged to impose this restriction on service providers contractually?*

DCC should be prohibited from using confidential information for any purpose other than the licensed DCC activity and DCC needs to be obliged to contractually impose this restriction on its contractors.

*Q40. Are there any other conditions that you consider should be imposed in DCC's licence to ensure its continued financial viability?*

No, we do not believe that any other conditions are required -those proposed appear to be appropriate.

*Q41. Would it be appropriate for a special administration scheme to apply to DCC?*

We believe that it is appropriate for a special administration scheme to apply to the DCC; this is as a result of their services being an essential part of the industry and any interruption to these services would have a significant negative impact on UK pic. We believe this special administration scheme could be implemented in a similar way to that applied to DNOs.

*Q42. Do you agree with that DCC should be required to ensure business continuity of service providers and should monitor the provisions that they have in place to deliver business continuity?*

We believe that this should be done as part of the contract management of the DCC's service providers and audited on a regular basis.

*Q43. Do you believe that DCC needs to include in its service provider contracts any further protections which help to secure against, or mitigate the consequences of, a financial failure of a major service provider? Please provide examples of any additional protections you consider suitable.*

We believe it is appropriate to review the requirements placed upon current industry parties (e.g. governance bodies such as MRA and DCUSA) and to mirror those where appropriate. Anything above these arrangements requires review and consideration in order to avoid unnecessary work for all involved.

*Q44. Do you agree that it is appropriate to grant the initial DCC licence for a ten year period?*

Given the monopoly status of DCC (and notwithstanding the Authority's powers in respect of licence revocation) it will be important to strike a balance between:

- on the one hand, ensuring adequate continuity during and beyond the smart meter rollout programme (for example, in respect of procured data and communications services); and
- on the other hand, maintaining the option for the Authority to periodically test the market to explore whether, in light of experience in procuring, developing and providing DCC services, a more suitable licence holder might be available.

With this in mind we agree that, with appropriate provisions for licence extension and ultimate novation of service provider contracts, a 10-year nominal licence period (with a five-year extension option provision) is reasonable. However we believe that there is merit in exploring whether the five-year extension provision could be recurring.

*Q45. Do you agree that flexibility for the Authority to decide to extend the initial DCC's licence by up to 5 years would be desirable?*

Yes-please see our answer to question 44 above.

*Q46. Do you agree with the approach described for the treatment of DCC internal costs for any extension period?*

We see merit in being able to test the market as part of any decision to extend the licence by five years, though it will be important not to undermine confidence in the DCC licensing process by creating uncertainty as to a prospective OCC's revenues in the event of a licence extension.

It will also be important for the licensing authority to be transparent as to the weighting it would apply to a DCC's projection of costs over the extension period.

*Q47. Do you agree that DCC should be required to ensure that any critical services can be transferred to a successor?*

Yes- we agree that DCC should be required to ensure that any critical services can be transferred to a successor. However, it will be important to robustly evaluate the 'minor' services that the consultation proposes need not be transferred, to ensure there are no hidden consequences.

*Q48. What scope of matters governing the handover to a successor do you think need to be included in DCC's licence?*

We agree with the items laid out in paragraph 3.167 but also believe that it is appropriate to include a general 'catch-all' provision that the successor licence holder is provided with all of the information necessary to provide a seamless transition of service provision on change of licensee.

*Q49. Do you agree that DCC's licence should be capable of being revoked in the event of a repeated or material failure to meet service levels?*

We agree that the DCC's licence could be capable of being revoked in the event of a repeated or material failure to meet service levels. These service levels and the circumstances of a failure should be clearly defined in advance of implementation.

*Q50. Do you agree that the DCC licence should contain a condition which gives it a high-level obligation in relation to foundation and subsequent rollout, activities and that the detailed obligations can be dealt with as part of the development of the SEC?*

While this proposal will require more detailed consideration in light of evolving views on the timing of programme milestones during the Foundation Stage, it would seem important to ensure that this key phase of the programme benefits so far as is practicable from the provision of such services that DCC is able to bring (particularly in respect of coordination and preparations for system testing) prior to DCC operational go-live. A high level obligation in the DCC licence is one means of achieving this.

051. *Do you agree that DCC should have a high-level obligation, albeit initially "switched off" relating to the provision of meter point/supplier registration services?*

We believe that it is appropriate for the methods that have already been used in distribution licences for the introduction of licence conditions which are initially 'switched off' to be used in the case of the DCC licence conditions. An example of this can be seen in electricity distribution standard licence condition 50 where there is a clause "This condition applies on and after [date]..."

052. *Do you agree that conditions should be introduced in other licences providing the ability to release other licensees from the requirement to provide meter point/supplier registration services at some point in the future?*

We support the introduction of such a condition, though its precise wording and interaction with the proposed DCC condition need further exploration to ensure the requirement to provide the service at any given point in time is clear.

053. *Do you agree that DCC and other relevant licensees should be subject to an obligation requiring the licensee to take steps to facilitate the transfer of meter point/supplier registration activities to DCC?*

We support the introduction of such a condition, though its precise wording and the strength of the obligation (i.e. reasonable steps) need further exploration.

054. *What dispute mechanism would be appropriate to apply to disputes involving DCC and who should be enabled to determine such disputes?*

We believe that using a comparable process to the existing disputes process in OCUSA is an appropriate mechanism.

055. *Do you believe that DCC should be required to operate its business in a way that ensures it does not restrict, prevent or distort competition in gas shipping, the generation of electricity and participation in the operation of an interconnector?*

This is an important point of principle, extending (with reference to paragraph 3.191) to a requirement not to distort competition in meter operation or the provision of energy services. A requirement to ensure commercial interoperability (which is an essential provision in respect of avoiding distortion of competition) would be a further important obligation.

056. *Do you have views on the additional conditions discussed above?*

We agree with the proposal to include a licence condition requiring DCC to make available costs of providing services to licensed network operators. In relation to theft, damage and meter interference, while we understand the position put forward by the DCCG Working Group, we believe that not imposing a licence requirement on DCC in this area leaves the industry exposed. A licence condition that is phrased to take into account the DCCG Working Group's concerns over not needing to analyse the data but still informs other relevant licensees where it believes theft, damage or meter interference has taken place is appropriate.

057. *Are there any additional conditions that you would wish to see included?*

Please see our answer to question 56.

058. *Is it appropriate to consider extending the Secretary of State's powers to provide equivalent powers to modify DCC's licence conditions as it does for other energy licences for the purposes of implementing smart metering?*

While it is difficult to envisage a specific requirement it is for Government to consider whether such provisions might be appropriate, given DCC's role in facilitating low carbon transition and hence the achievement of the UK's greenhouse gas emission reduction targets (for example, the Fourth Carbon Budget).

#### **Chapter 4: Revenue requirements**

059. *Do you consider that it is practicable for DCC licence applicants to provide costs for undertaking meter point/supplier registration? Or is it more appropriate to include a specific reopener for DCC's costs of undertaking meter point/supplier registration?*

We believe that applicants should provide costs for undertaking meter point/supplier registration services but include with them a detailed description of assumptions. A reopener could then be used where it is shown that through changes since the assumptions were made, an increase in costs has occurred.

061. *Do you have a view on the appropriate materiality threshold (trigger) for the revenue reopener?*

We believe that the materiality threshold for the revenue reopener should be 1% of annual turnover.

070. *Do you agree that network operators should be charged in line with their market share?*

We believe it is more appropriate for DCC to charge suppliers directly for the services they require, including those of the "core service". Allowing DCC to recover their charges via DUoS will add unnecessary additional complication to the existing settlements/revenue calculation processes.

#### **Chapter 5: Charging methodology**

071. *Do you agree that a standing charge should cover the service providers' fixed costs for providing core services, DCC's internal costs and the SEC management funding requirements?*

We believe it is appropriate that the service providers' fixed costs are covered through a standing charge.

072. *Do you agree that a proportion of service providers' fixed operating expenditure should be converted to volumetric charges?*

We believe that the volume of transactions carried out should be linked to the charge levied, so a volume element is appropriate. However, if this caused the DCC to over-recover, this would need to be returned to the relevant parties during the following charging period. Similar arrangements already apply to the management of MRA and DCUSA.



073. *Do you agree that the proposal for postage stamp charging is consistent with the objectives of the smart metering programme?*

The proposal to adopt a postage stamp charging approach would ensure that parties are treated fairly regardless of where the connection is on the network, which is consistent with the objectives of the smart metering programme.

075. *Do you agree with the proposed charging principles?*

The proposed charging principles appear to be fit for purpose in that they should support competition and not prevent or distort it, as well as having predictable and non-discriminatory charges, which will be important to the success of the smart metering programme.

076. *Do you consider that an objective for the charging methodology should be to promote innovation in the supply of energy, provision of energy related services and energy distribution?*

We believe that the facilitation of this is important as suppliers will need to be able to set themselves apart from others by offering a different range of value added services.

078. *Do you agree with the proposals to charge users for extensive assessment and design work in relation to AMRs? Should a similar approach be adopted for other elective services offered by DCC, regardless of the user accepting the service?*

We believe it is appropriate that the DCC charges for such assessment and design work; however, if the work was accepted and taken further and developed for operational use, those costs should not be charged for again. The proposal results in a cost reflective approach, paid for by the first party looking to develop the relevant service; however this should not prevent innovation within this area.

079. *Do you agree that "a second comer principle" can be applied?*

We agree that this would go some way to ensuring that innovation is rewarded and would be a fair approach for both 'first' and 'second' comers; however the approach needs to be workable.

## Chapter 6: Core services- **WAN** requirements

080. *Please indicate whether the Minimum Core Service Requirements (i.e. message size, frequency, response time and coverage) for each of the message flows in the above tables can be modified to reduce the potential impact on the WAN cost without compromising the corresponding benefits. Please quantify the additional Programme benefit that could be realised by including each of this message flows in the aggregate Minimum Core Service Requirements.*

We have worked closely with other DNOs, along with the Energy Networks Association (ENA), to prepare a functional specification for the smart metering system that would deliver real benefits to consumers and/or lower costs in the long run, and provide a foundation for affordable low carbon transition. We would draw particular attention to the ENA Functional Requirements for Smart Meters, which are available from the ENA website:

<http://2010.energynetworks.org/smart-meters/>



Also available from the ENA website is a comprehensive suite of documents supporting the case for including this functionality. This suite of documents is summarised in Appendix 2 of our response and includes:

- Benefits of Advanced Smart Metering for Demand Response Based Control of Distribution Networks Summary Report (ENAI SEDG/Imperial College)
- System Requirements Update
- Smart Metering System Use Cases
- High-level Smart Meter Data Traffic Analysis
- Data Traffic Analysis Workbook
- Security and Privacy Control Points
- Functional Requirements
- ENA High Level Smart Metering CBA: Summary Report
- ENA High Level Smart Metering Cost Benefit Analysis
- Privacy Impact Assessment

The High-level Smart Meter Data Traffic Analysis and associated Data Traffic Analysis Workbook report on the indicative data volumes that would be required to support the ENA Functional Requirements. The evidence-based justification for specifying the required functionality is contained in the Smart Metering System Use Cases, ENA High Level Smart Metering Cost Benefit Analysis and the Benefits of Advanced Smart Metering for Demand Response Based Control of Distribution Networks Summary Report.

It is essential that Government understands the criticality of the ENA functionality to ensuring affordable low carbon transition for consumers and hence the importance of ensuring that the WAN system is able to support that functionality.

To that end, we have worked closely with the ENA and DECC to ensure that:

- the overall performance requirements of the WAN are properly understood;
- the estimated message size, frequency, response time and coverage required to support each aspect of the required smart meter functionality are understood; and (importantly)
- only the minimum core service requirement, as envisaged at 2019 on completion of the rollout programme, is specified at this stage.

While these requirements are broadly summarised in Tables 6.2 and 6.3 of the consultation document, these tables contain a number of errors and omissions. Table 6.3 also includes a number of 'networks' requirements which were not specified by ENA and which UK Power Networks does not believe are justified at this stage. Appendices 3a and 3b attached to this document (based on tables 6.2 and 6.3 of the consultation document but highlighting errors, omissions and requirements not specified by ENA) indicate the WAN requirements at 2019 that UK Power Networks believes are necessary.

It is important to understand that DNOs generally have limited visibility of either the extent to which specific individual WAN requirements are driving costs, or the materiality of those costs.

It is also important to understand that the WAN requirements as at 2019 (in respect of message size, frequency, response time and coverage) do not reflect the longer term (beyond 2019) requirements of the WAN that are likely to be necessary to deal with future growth in volumes of low carbon technologies such as electric vehicles, heat pumps, wind generation and photovoltaic micro-generation.

We are aware that DECC is currently presiding over low carbon technology future growth scenarios in conjunction with developing Government's fourth carbon budget strategy. While we understand that these growth scenarios are not yet finalised (and in any case not known to us), we would urge DECC to ensure that in specifying the capacity and performance parameters of the smart metering WAN, it takes full account of its own projections for low carbon technologies.

While we do not advocate (WAN) investment ahead of need, we urge DECC to ensure that, in considering technical service offerings, the value of future options for expansion and enhancement of the WAN system is fully taken into account in any investment appraisal. In this respect, we would draw particular attention to the first of the reports listed above: 'Benefits of Advanced Smart Metering for Demand Response Based Control of Distribution Networks Summary Report (ENAI SEDG/Imperial College)'. In order for demand response based control of networks to be an effective solution to future demands placed on electricity networks by electric vehicles and heat pumps, and for the potential network reinforcement cost savings outlined in the study to be realised, it will be essential that the smart metering WAN system is sufficiently specified in terms of message size, frequency, response time and coverage (and/or is capable of future cost-effective expansion and enhancement) to provide an effective foundation for such demand response based control.

In summary, while we have insufficient visibility of the incremental cost of providing WAN capacity and functionality, we believe that the requirements stated in the attached appendices 3a and 3b (based on tables 6.2 and 6.3 of the consultation document but highlighting errors, omissions and requirements not specified by ENA) are the minimum core service requirements as at 2019 and that DECC should fully consider, based on its own fourth carbon budget future energy scenarios, the capability of the procured WAN service solution(s) for economic future expansion and enhancement, to deal with the electricity network and whole system impact of future low carbon technologies.

*Q81. Please quantify the additional benefit, if any, that could be realised by using the 'User Target' rather than the 'Minimum Core Service Requirement' in table 6.1. as basis for the procurement of DCC communication services.*

Our position is that the requirements set out in Appendices 3a and 3b (based on tables 6.2 and 6.3 of the consultation document but highlighting errors, omissions and requirements not specified by ENA) are the minimum core service requirements as at 2019. We note that these requirements, insofar as they are comparable, are less onerous in terms of frequency and/or response time than either the User Target or Minimum Core Service Requirement set out in table 6.1.

It follows that, from an electricity network operator perspective, we see no benefit (as at 2019) of specifying the User Target requirement above the Minimum Core Service Requirement in table 6.1. However, with reference to our answer to question 80, it is important for DECC to be mindful of the implications of its own future energy scenarios for future (beyond 2019) WAN functionality and hence the additional benefit that should be assigned to maintaining options for cost-effective expansion and enhancement of the WAN system.

082. Please provide views on whether the Service Requirements described in the above table represent the Minimum Core Service Requirements. Please also indicate whether in your view there are any additional Minimum Core Service Requirements not identified in the above table, and for any such requirement please quantify the additional benefits, if any, that could be realised.

As stated in our answers to questions 80 and 81 above, we regard the service requirements specified in the attached Appendices 3a and 3b (based on tables 6.2 and 6.3 of the consultation document but highlighting errors, omissions and requirements not specified by ENA) as the minimum core service requirements as at 2019. Appendices 3a and 3b cover the WAN requirements to meet the ENA smart meter functionality- as documented in the ENA Smart Meter Functional Requirements referred to above and as reflected in the current Industry Draft Technical Specification (IOTS).

## Chapter 7: Performance incentives

083. Please provide comments on the incentive regime proposed for DCC.

We agree with the high level incentive regime proposed for DCC; however we welcome the opportunity to participate in a further consultation once a more detailed proposal is available.

084. Do you consider it appropriate and feasible for the SEC panel and DCC to negotiate KPI targets?

We agree that it is appropriate and feasible for the SEC panel and DCC to negotiate KPI targets. This process would enable DCC service users' and end customers' requirements to be balanced against the cost of the service, taking into consideration technical constraints and introduction of new technologies.

085. Do you have views on the use of an independent audit of DCC performance? Should this be on a regular and/or ad hoc basis?

Regular reporting produced by DCC is important, and we agree that regular independent auditing of DCC should form part of the performance assurance framework. If the SEC Panel has serious concerns about a particular area of DCC service provision they should be able to instigate a focused independent audit with reasonable notice.

086. Do you consider that a sharing mechanism should be in place for DCC internal costs? Should a sharing mechanism be included in the contracts with the service providers?

We believe that a sharing mechanism for DCC internal costs should be in place. For all parties to benefit there still needs to be sufficient incentive for DCC to look for and implement internal cost savings.

Given the process to award DCC Service providers contracts and the potential size of savings due to technological change, we believe that implementing a sharing mechanism for DCC Service provider contracts is more important than the one for DCC internal costs.

087. Do you consider that it is appropriate to invite DCC licence applicants to propose KPI/s?

We believe it is appropriate for the licence applicants to propose KPIs as they should have knowledge developed through the bidding process about what are suitable KPIs for such a business. However, draft KPIs should be subject to there being a further consultation on the detail if the SEC panel is not in place at the time they are finalised.

## Chapter 8: Adoption of Foundation Stage communication contracts

*Q88. Are the criteria for adoption of contracts discussed in paragraphs 8.8 and 8.9 appropriate? Are there any additional criteria that should be included? Can quantitative thresholds for any or all of criterion be defined and, if so, how?*

The criteria set out in paragraphs 8.8 and 8.9 appear reasonable. However, one specific and important criterion not mentioned is that adoption of Foundation Stage communications contracts must not put at risk commercial interoperability. In other words, the novated contract and associated communications service should be transferable in the event of a change of supplier, without necessitating a visit to change the communications module. This is important both from an overall rollout cost perspective and especially in terms of avoiding unnecessary inconvenience to consumers and potential reputational damage to the overall smart metering programme.

*Q89. Do you agree with our approach to identifying the guaranteed adoption volume of Foundation Stage smart metering systems? Are the factors we have identified the appropriate ones? What are your views as to the appropriate values of the various parameters identified in Table 8.1?*

While we have no vested interest in proposing guaranteed adoption volumes, we believe that it will be important to the success of the programme to ensure that sufficient volumes of smart meters are rolled out during the Foundation Stage to assess the viability of communications systems (including, in particular, HAN solutions and standards) and also to test strategies for gaining consumer acceptance. The Foundation Stage of the programme represents an important opportunity for learning and it will be important to ensure that suppliers are not given disincentives with regard to installing a sufficient critical volume of meters for that learning to be effective.

It is for suppliers individually to determine the volume of meters that should be rolled out during the Foundation Stage to achieve these objectives (while managing any inherent pre-DCC go-live installation risk).

*Q90. Do you agree that DCC should be able to decide to adopt communication contracts associated with Foundation Stage smart metering systems in excess of the guaranteed adoption volume providing there is a net benefit to doing so? If so, does DCC need to be provided with additional obligations and incentives to encourage DCC to actively pursue such contracts and what factors should DCC take into account in making its assessments? Should we specifically provide for suppliers to compensate directly DCC for any costs incurred by DCC or its service providers in the adoption of additional contracts?*

Subject to the provisions in respect of adoption criteria we have suggested in our answer to question 88, and with regard to the benefits we have referred to in our answer to question 89, we see merit in principle in DCC being able to adopt communication contracts in excess of the guaranteed adoption volume provided there is a net benefit to consumers.

*Q92. Do you have views as to when Foundation Stage communication contracts should be adopted?*

We have no specific view on this question other than that the remaining life and cost of the contracts to be adopted will be important factors in this consideration.

## Chapter 9: Competitive licence application process

*Q104. Do you agree that in the event of DCC losing its licence the Authority should have the power to fast track the appointment of a temporary DCC? If so, is eighteen months an appropriate maximum time period for the temporary DCC to hold a licence before a new DCC can be appointed via a full competitive process? Which elements of the licence application process could be accelerated or eliminated to ensure rapid appointment of a temporary DCC?*

In the event of DCC losing its licence we agree that the Authority should have the power to fast-track the appointment of a temporary DCC. Given that the temporary DCC may need to operate inherited processes and systems, they are likely to require time to resolve any outstanding issues and possibly restore a full service to all SEC parties. The new temporary DCC should be able to undertake this and prepare a plan to hand over to the new DCC within 18 months.

The process to select a temporary DCC could be streamlined by eliminating the pre-qualification stage and requesting that applicants submit a single application combining pre-qualification information and an offer to undertake the role.

UK Power Networks  
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