

Dear Sir/ Madam

Please find Silver Spring Networks' response to the consultation on "DCC Licensing and Licence Application Process".

Silver Spring Networks provides communications modules, software, and networking expertise to the utility industry. We've deployed more than 10 million highly reliable, responsive electric meters across the Americas and Australia. We think that our practical experience and proven scale is relevant, particularly when networking actual utility devices, including Smart Grid. We have responded to the DECC PQQ for Communications Services with Cable & Wireless Worldwide. Our focus in this response is primarily aimed questions that have bearing on WAN services.

- 1. 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.**

Silver Spring defers in responding to this question.

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

Silver Spring defers in responding to this question.

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

Silver Spring defers in responding to this question.

- 4. 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.**

Silver Spring defers in responding to this question.

- 5. Do you agree with the proposal to have a single document with a single set of licence conditions that apply to both**

licences?

Yes.

- 6. Do you agree with, and have any comments on, the proposed approach to establish all of the DCC licence conditions as “special” conditions?**

Yes.

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

No.

- 8. Are there any other consequential licence changes that you consider might be necessary as a result of the creation of the new licensable activity?**

No.

- 9. Please provide any comments on the proposed approach in relation to geographic scope of the DCC licence and provisions relating to its duration.**

We agree with the geographic scope of the DCC licence as a whole. Lots 1, 2, and 3 as prescribed by the PQQ should correspond to the boundaries of distribution network operator licences so as to cleanly include the subsequent provision of smart grid services.

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

Yes.

- 11. 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 rational for your views.**

These issues should be addressed in the DCC licence alone.

12. 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?

We think that the technical and architectural approach to the DCC should not preclude smart grid services. Competition for services within a DNO licence should not be considered within scope at this stage of the programme.

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

Yes.

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

Yes. Energy efficiency (i.e., GHG emission reduction and baseload reduction through consumer awareness or automated demand side management programmes) was an explicit principle of the Smart Metering Implementation Programme. Neglecting energy efficiency would detract from the overall value proposition. An obligation should exist to ensure that communications architectures can enable efficacious delivery of load and price control signaling--via either energy suppliers, distribution network operators, or energy services companies.

15. 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?

Yes.

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

These are acceptable.

17. Do you agree that the SEC should be designed to take into account consumers' interests by meeting its applicable

objectives, rather than having a explicit objective related to the protection of the interests of consumers?

Yes.

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

Yes. Programmes such as conservation voltage reduction can result in consumer savings, GHG emissions reduction, and general operational efficiencies. Conservation voltage reduction (CVR) is deemed by some to be the “killer app” of the smart metering and smart grids. Communications network architectures should enable reliable, cost effective CVR and other volt/VAR optimization schemes that result in distribution network operational efficiencies, the benefits of such flow ultimately to the consumer.

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

The objective needs to be encapsulated in the SEC, regardless of whether it is “separate”. It should be explicit, not implicit. Capable, responsive, cost effective communications networks will have a directly proportional effect on the quality of the energy efficiency programmes that can be implemented via the DCC or organizations leveraging the capability of DCC-managed infrastructures.

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

With acknowledgement of our responses to the questions immediately above, yes.

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

As you state, there is no definition for “compliant”, so this question seems specious.

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

See Answer 21.

23. 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?

No response.

24. 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?

No response.

25. 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).

No response.

26. 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?

Yes.

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

Yes.

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

Yes.

29. 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.

No opinion.

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

Yes.

31. Are any specific provisions needed which require DCC not to discriminate between service providers? Or is it sufficient to rely on obligations on DCC to maintain and develop an economic system and, in the procurement of DCC services, to promote competition in the provision of such services?

Yes.

32. Do you agree that DCC should be independent of service providers? Do you agree that a de minimis level of affiliation between DCC and service providers should be permissible?

Yes.

33. What level of affiliation do you consider should be set for the maximum level of shareholding or control of any individual service provider may have in DCC?

No response.

34. Do you agree with the business separation between DCC and users that is proposed? More specifically, do you agree that no DCC user that operates in a competitive environment should be permitted to have more than a 20% shareholding or control in DCC, and that DCC and its subsidiaries should not be permitted to have any shareholdings in users or service providers?

Yes.

35. Do you agree that it is not necessary to explicitly require business separation between DCC users and DCC service providers?

Yes.

36. 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?

Yes.

37. To what extent do you believe that the existing financial ring fencing provisions (and those proposed by Ofgem in its recent consultation on this issue) should be included in DCC's licence?

No response.

38. Do you agree that a flexible approach to financial security should be adopted and, if a financial security is required, what level of financial security should be provided?

No response.

39. What are your views on whether it would be appropriate to require DCC to pay for a proportion of the costs of appointing a new DCC in the event of an early licence revocation? Do you think that this potential liability should be reflected in the level of financial security required from DCC?

No response.

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

No response.

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

No response.

42. 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?

Yes.

43. 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.

Yes.

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

Yes.

45. 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.

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

Yes.

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

Yes.

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

Yes.

49. 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?

Yes.

50. 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?

We pose a question to your question: can the SMIP wait until the establishment of a DCC licence in order to remove the regulatory risk that is impeding deployments of foundation-stage metering? Further, we posit that scale trials of WAN technologies are necessary in order to gauge the side-by-side efficacy of candidate WAN technologies. Demonstrable scalability is critical: we assert that scale trials are necessary in order to ensure that technologies provided by CSPs function as advertised. Without early-stage assurances to energy suppliers (i.e., the removal of risk), we remain unconvinced that suppliers will take on these necessary scale trials.

51. 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?

Yes.

52. 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?

Yes.

53. 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?

Yes.

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

This is the Smart Metering Implementation Programme: we cannot envision any disputes... No response.

55. 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?

Yes.

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

No.

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

No.

58. 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?

Yes, it is always appropriate to consider, so long as the consideration is close-ended. We have no strong views on this item.

59. 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?

The former.

60. Do you have views on the relative benefits of the two options (cost pass through and volume drivers) for recovery of DCC internal costs associated with SEC modifications?

No response.

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

No response.

62. Do you consider that any other cost areas may require mechanisms to deal with uncertainty?

No.

63. Do you agree that market share should be based on MPANs and MPRNs that are mandated to receive smart metering systems, rather than all MPANs and MPRNs?

No response.

64. Do you have a view on whether suppliers of only larger non-domestic customers should be charged a proportion of DCC internal costs?

No response.

65. We welcome views from stakeholders in regards to charges on network operators for DCC internal costs pre-“go-live” and whether they should charge DCC for services provided to DCC.

No response.

66. Do you agree that DCC should only begin to charge users for communication service providers' costs from “go-live”? Please provide reasons as to why this is or is not appropriate.

This would seem appropriate.

67. Do you have a view on whether the data service provider(s) should be treated differently from communication service providers and be allowed to recover its fixed costs evenly over the length of its contract from “go-live”? Please provide reasons why this is or is not appropriate.

The CSPs are arguably taking the brunt of the capital strain, particularly when deploying infrastructure that will deliver solid TCO over the term of the contract. In contrast, cloud services and the notion of “grow-as-you-grow” is a well-established service delivery model. As a participant in a CSP consortium, we are prepared to defer revenue as services are turned up; we posit that this notion is applicable to data services.

68. Is it appropriate that the allocation of costs on suppliers during rollout be based on the suppliers’ rollout plan for the year plus actual smart meters installed in preceding years? If so, how can this option for allocating costs during rollout be improved? If not, what is your preferred option and why?

No response.

69. Do you have a view on how any additional costs resulting from suppliers exceeding their rollout plans should be allocated? Should DCC be able to pass through to the relevant supplier any higher costs resulting from this (or should such costs be averaged across all users)?

No response.

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

It is not clear as to how to quantify the benefits delivered to network operators, particularly if sub-optimal communications technologies are chosen. For instance, if a technology in Lot ‘x’ only delivers data once-per-day, the value to the DNO is limited; in contrast, if a technology in Lot ‘y’ delivers data in near-realtime, the value to a DNO could be immense. Any market share-based charging model should take this into account.

71. 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?

Yes.

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

Yes. CSPs that carry traffic more efficiently should be rewarded.

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

Yes.

74. Should postage stamp charging apply to all users including network operators?

We have trouble reaching a conclusion given that we do not understand all of the assumptions that underlie the quantification of benefits that are exposed to DNOs. We refer you to our response to Question 70.

75. Do you agree with the proposed charging principles?

Yes.

76. 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?

Yes.

77. Do stakeholders have views on whether DCC's internal costs should be allocated across the different types to users on the same basis as service provider fixed costs?

The principle of consistency should be applied here, particularly with respect to internal costs versus the costs borne by consumers

of DCC services.

78. 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?

Yes. Note, some CSP offerings will be capable of providing extra capacity for minimal recurring OPEX (i.e., more value for money). Capacity for elective services should be negotiated between the DCC and the individual CSPs.

79. Do you agree that “a second comer principle” can be applied?

Yes.

80. 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.

Silver Spring has deployed and is reading more than 10 million meters, reading them at minimum six times daily. We have real-world experience in this area. We would welcome a private conversation on these items as 1/ the tables are inaccurate and confusing; 2/ many of the objectives are misaligned with our take on real-world deployments. We will state that we are delighted to see that the requirements have expanded well beyond once-per-day meter reading and are confident that value can be delivered.

81. 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.

See 80.

82. 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.

See 80. Note that we have presented to DECC Future Networks team and others in government an updated Cost Benefit Analysis based on the DECC Impact Assessment. The result was billions in GBP savings and additional benefits. We would be delighted to discuss with the SMIP team should they be interested.

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

No response.

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

Yes.

85. 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?

Definitely: we agree that this is a sound idea. We would encourage a conversation regarding taking this a step further: based upon transparent, well-defined metrics, CSPs should be provided performance incentives vis a vis other CSPs. The “reopener” mentioned in 7.3.2 should take this into consideration not just in aggregate (i.e., the DCC in toto), but also at the CSP level.

86. 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?

Yes.

87. Do you consider that it is appropriate to invite DCC licence applicants to propose KPIs?

Yes. The KPIs from “downstream” CSPs should be taken into consideration, also, when finalizing the KPIs for the DCC in aggregate.

88. 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?

We believe that as many contracts as possible should transition to the central DCC and relevant CSP. DCC and CSPs should be remunerated adequately for excess integration.

89. 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?

Yes, this should work.

90. 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?

Yes.

91. What in your view is the most appropriate option for allocating the guaranteed adoption volume across energy suppliers and on the mechanism, including timing and frequency, by which any allocation unused by one supplier should be redistributed to other suppliers?

The removal of regulatory risk and DECC-sanctioned scale trials of WAN communications technologies is requisite. The efficacy of the communications technology should be compared/contrasted side-by-side in terms of reachability (i.e., coverage), reliability (i.e., successful transactions), responsiveness (i.e., round-trip transaction time), and security.

DECC has outlined a 100% coverage objective: the ability of any particular WAN solution to meet this goal should be transparently quantified before investments are made and contracts are awarded. Without reliable communications, consumer confidence in the program will be at risk.

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

As soon as the DCC is legally conceived, contracts should be adopted. The criteria for adoption and transition plans should be articulated before the DCC is constituted.

93. Do you agree that a four stage process as outlined in paragraph 9.10 is appropriate for appointment of DCC?

Yes.

94. Do you consider that applicants should commit to lodge a form of financial security at the invitation to apply stage that would take effect if the licence was granted to the applicant?

Yes.

95. Do you agree with the proposals for dealing with changes to consortia including allowing changes up to but not beyond submission of responses to the ITA?

Yes.

96. Do you agree with the proposal for one overarching confidentiality agreement for each applicant group rather than individual confidentiality agreements for each member of an applicant group?

No response.

97. Do you have any comments on the approach to clarifications and dialogue with prospective applicants?

No response.

98. Do you agree with the proposed approach to the pre-qualification stage including the timescale, the information required and the assessment methodology and criteria?

Yes.

99. Do you have any comment on the documentation to be provided by applicants for the DCC licence? Is there any other information that you think should be made available to applicants?

No response.

100. Do you agree with the proposed approach to the Invitation to Apply stage including the timescales, the assessment criteria and their weightings?

No response.

101. Do you agree with the proposals for appointing one or more preferred applicants as well as one or more reserve applicants to ensure that there are alternatives in the event that a preferred applicant withdraws or is disqualified?

No response.

102. Do you agree with the proposal for an optional best and final offer stage in the event that two or more applicants have similar positions?

No response.

103. Are there any other specific issues that you think should be considered before grant of the licence?

No response.

104. 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?

No response.