



## DCUSA Change Report

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### DCP 204 - Smart Metering Related Amendments to Schedule 8

## 1 PURPOSE

- 1.1 This document is issued in accordance with Clause 11.20 of the DCUSA and details DCP 204 'Smart Metering Related Amendments to Schedule 8'.
- 1.2 The voting process for the proposed variation and the timetable of the progression of the Change Proposal (CP) through the DCUSA Change Control Process is set out in this document.
- 1.3 Parties are invited to consider the proposed legal drafting amendments (Attachment 1) and submit their votes using the form attached as Attachment 2 to [dcusa@electralink.co.uk](mailto:dcusa@electralink.co.uk) no later than **date**.

## 2 BACKGROUND

- 2.1 DCUSA Schedule 8 relates to Demand Control measures which can be initiated by Distributors to preserve security of supply and integrity of their networks and/or to avoid or minimise network investment. For network operators, the ability to manage load switching arrangements is central to the effectiveness of this Schedule.
- 2.2 Discussions regarding the implications of the change of switching technology between Ofgem, DNOs and Suppliers, and other discussions at an Energy Networks Association (ENA) Working Group and the Smart Grids Forum Work stream 6 sub group have resulted in DCP 204 being raised by Scottish Hydro Electric Power Distribution plc.
- 2.3 The intent of this Change Proposal (CP) is to amend DCUSA Schedule 8 to reflect the migration of load switching technologies deployed by Suppliers in customer premises from established devices, such as radio teleswitching via the Radio Teleswitch Service (RTS) and timeswitches, to smart metering technologies. It is likely that existing switching devices will become redundant following the completion of the smart metering roll out.
- 2.4 The CP seeks to replicate the existing functionality afforded by existing metering systems (around tariff time switching and load switching) to network operators in a Smart Metering regime and also seeks to clarify and/or simplify aspects of the Schedule. It should be noted that the CP is not seeking to introduce a like for like replacement but rather to replicate the method through smart metering.

**Comment [RT1]:** Add in Executive Summary ACTION ElectraLink

Randomisation is mandated for all meters that support it to a level of 600 seconds.

### 3 SUMMARY OF CHANGE

**Comment [RT2]:** Action – DNOs to provide information on why LMAs exist in the first place (e.g. investment would be needed in new subsea cable). Reducing the need to reinforce the network but counter to this you are restricting customer choices

- 3.1 Following responses received from the DCP 204 consultation (see section 5) and review of these comments by the DCP 204 Working Group, the Working Group has agreed that the following key principles will be incorporated into the DCP 204 legal drafting:

#### Load Switching

- 3.2 The term “Load Switching Regime” has been added to Schedule 8. This amendment has been made to reflect the additional load management functionality that smart meters provide, and which could be utilised to support the demand control processes set out in Schedule 8. This includes, but is not limited to, functions such as changing the Standard Settlement Configuration (SSC), randomisation and load limiting that could be used to control demand in Load Managed Areas.
- 3.3 In addition, the term “Load Switching Device” has been added to Schedule 8, defining such as equipment which switches or has the capability to undertake a Load Switching Regime. ~~A~~Additionally, the term “Auxiliary Load Control Switch” has been added which means a switch which is integral to a Smart Metering System which can switch electrical loads in the premises of a Customer.

#### Simplification and clarification of process and notices

- 3.4 The current notices defined in Schedule 8 and the differences between each type of notice are not currently very clear. The proposed legal text has been revised to replace Provisional SRNs with an advisory notice and remove reference to a ‘Firm’ SRN. The revised proposed legal text for Schedule 8 is structured in way that describes an escalating process supported by the different types of notice.
- 3.5 The following table describes the notices that can be issued by DNOS and the associated obligations, which are reflected in the revised legal text:

Notice	Description	Obligations
Advisory notice	Issued (as per clause 4.2) as an early warning of potential operational constraints on an area of the network.	None specified
Load Managed	Issued (as per clause 5.1) as	<ul style="list-style-type: none"><li>When replacing any metering</li></ul>

Area Notice	a formal notification that changes in demand may affect the security of Supply.	<p>equipment, Suppliers must ensure that the replacement equipment replicates the load switching times of the equipment being removed.</p> <ul style="list-style-type: none"> <li>Where the Supplier is not able to replicate the current switching times or where they wish to change those times they must consult and agree alternative arrangements with the DNO before doing so.</li> </ul>
Security Restriction Notice (SRN)	Issued (as per clause 6.1) as a formal notification that changes in demand will affect the security of Supply.	<p>As for Load Managed Area Notices, additionally:</p> <ul style="list-style-type: none"> <li>The DNO may request that Suppliers make changes to Load Switching Regimes and/or the Randomised Offset Limit in the affected area to reduce the coincidence of demand in the specified area.</li> </ul>
Emergency Security Restriction Notice <sup>1</sup> (Emergency SRN)	Issued (as per clause 7.1) as a formal notification that there is an immediate risk to the security of Supply.	<p>As for SRNs, additionally:</p> <ul style="list-style-type: none"> <li>The DNO may also issue a Compliance Notice.</li> </ul>
Compliance Notice	Issued (as per clause 6.6 & 7.6)	<ul style="list-style-type: none"> <li>DNO requests the supplier to change, at its own cost, Load Switching Regimes and/or the Randomised Offset Limit to another that shall not have a material effect on the security of supply,</li> <li>take such action that the DNO considers reasonable</li> <li>The DNO may, with no prior notice, de-energise metering points in order to maintain the security of supply.</li> </ul>

3.6 It should be noted that the issue of an Emergency Security Restriction Notice need not be restricted to Load Managed Areas.

#### Existing Arrangements Randomisation

3.7 The introduction of smart metering and the Data and Communications Company (DCC) will result in changes to how remote load control and switching instructions (for both static and dynamic arrangements) are issued. Static switching is currently achieved using a mixture of technologies, including; time switches, programmable

<sup>1</sup> This notice can be served at any time i.e. it is not just restricted to Load Managed Areas or areas where an SRN has already been issued.

meters and RTS. Dynamic switching is principally achieved by using the RTS. Across GB approximately 5.6 million customers rely on existing technologies to change tariff registers. Many of these devices also directly switch the customers load at the same time that the tariff rate changes thus ensuring that heating and water heating take advantage of cheaper rate energy. For approximately 1.8 million customers their electrical storage and immersion heating is controlled remotely via the RTS.

**3.8** The RTS is operated by the ENA on behalf of Distribution Companies and typically used to control the switching of Non Half Hourly tariff registers and in many cases directly switch customer's load. Messages are sent via the BBC's 198 kHz long wave network to a teleswitch device located within the customer's property which in turn switches metering registers and may directly control customers load.

#### **Proposed New Arrangements**

~~3.83.9~~ Under proposed smart arrangements, the DCC will process requests from Suppliers to remotely switch registers and control load and will send commands to be applied by the relevant smart meter.

~~3.93.10~~ Existing load which is currently controlled by RTS equipment, time switches and programmable meters will effectively become synchronised as a result of the increased accuracy of smart meters. This will lead to a reduction in the diversity of load switching that the current arrangements deliver (+/- 3.5 minutes either side of the set switching time for RTS controlled devices, unknown for other equipment such as timeswitches and programmable meters). Unless mitigating action is taken network operators (at distribution and grid level) are likely to see additional contributions to network loading around programmed load switching times.

~~3.103.11~~ There are also a range of other reasons why unnecessary load coincidence needs to be avoided and why clarity is required for timeswitching arrangements in smart. These reasons include:

- DNOs need to minimise voltage step change issues associated with simultaneous switching of material load;
- DNOs need to maximise network utilisation by staggering switching times to allow load switched on earlier to fall or drop off before switching on additional load;

- NGET and generators need a predictable load pick up without any material step changes;
- Customers need to know the times when the off peak load is switched -and assurance that ~~they are being charged at the appropriate off-peak rate~~  
~~load switching coincides with tariff/ rate change (this is a requirement in SMETS);~~
- Suppliers and Elexon need to know the times when the off peak load is switched; and the total volume of load switched in each time period for supply volume allocation purposes. These aspects are being considered by the Profiling and Settlement Review Group (PSRG) including via its consultation on Settlement of Dynamically Switched Meters ~~which is available on the Elexon website.~~  
~~[http://www.elexon.co.uk/wp-content/uploads/2014/06/PSRG33\\_01-Dynamic-Switching-Consultation-Response-summary.pdf](http://www.elexon.co.uk/wp-content/uploads/2014/06/PSRG33_01-Dynamic-Switching-Consultation-Response-summary.pdf).~~
- Unnecessary load coincidence around timeswitching can be avoided through the application of timeswitching randomisation to smart metering systems. The ~~W~~working ~~G~~group considers that the key features of appropriate randomisation should include:
  - Randomisation must not be over a period greater than the interval between defined settlement periods (i.e. 30 minutes);
  - Hardcoded limits (in SMETS2 or the GB ~~Companion~~ ~~Specification~~) shouldn't create future restriction in the functionality;
  - DNOs should agree both the basic switching times and the Randomised Offset Limit with Suppliers via DCUSA;
  - The applied Randomised Offset criteria must be capable of amendment as required to satisfy the future requirements of smart grids. The process for agreeing any changes should be via DCUSA;~~;~~
  - The Randomised Offset Limit applied should follow a generic consistent set of rules across the whole of GB. In Load Managed Areas, different rules may be required and these should be governed via DCUSA;
  - Rules need to be applied to all switching regime types i.e. static, semi-static and dynamic regimes; and
  - In future there may be a need to apply randomisation to "inferred" switching times, i.e. where load is affected by customer's response to a price signal via future time-of-use tariffs.

~~3.113.12~~ Attachment 3 to this document is a paper entitled Randomisation Offset Limit. This document was created by the ENA Smart Metering Steering Group and presented to the DECC SMIP Technical and Business Design Group, its purpose is to explore the requirements associated with the application of a randomised offset limit as applied to smart meters. The document explains why randomisation is required and provides options explaining how it could be applied. Following a review of the

responses to the DCP 204 consultation, the DCP 204 legal text sets the randomised offset limit to a value of no less than 600 seconds (10 minutes).

#### **4 DCP 204 WORKING GROUP**

- 4.1 The DCUSA Panel established a Working Group to assess DCP 204. This Working Group consists of DNO, [Supplier](#) and Ofgem representatives. Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website – [www.dcusa.co.uk](http://www.dcusa.co.uk).
- 4.2 The Working Group developed a consultation document (Attachment 4) to gather information and feedback from market participants.

#### **5 DCP 204 CONSULTATION**

- 5.1 The DCP 204 consultation was issued on 25 July 2014 and there were 11 responses received.
- 5.2 A summary of the responses received, and the Working Group's conclusions are set out below. The full set of responses and the Working Group's comments are provided in Attachment 4.

##### **Question 1 - Do you understand the intent of the CP?**

- 5.3 The Working Group noted that all consultation respondents understood the intent of the CP.

##### **Question 2 - Are you supportive of the principles established by this proposal?**

- 5.4 The Working Group noted that ten of the eleven respondents were supportive of the principles established by the CP.
- 5.5 One respondent suggested that whilst they understand the principle of the CP, they believe that there should be a cost benefit been carried out to establish whether the proposed changes to DCUSA are proportionate to the risk. The Working Group discussed this comment and considered whether the Change Report should include information on the costs and benefits. It was agreed that DCP 204 is clarification of existing obligations and seeks to make sure that they are fit for purpose to meet the requirements of changing technologies and, thus, a cost benefit is not required.
- 5.6 Another respondent highlighted that the current Radio Teleswitch metering

technology was developed in the 1980s and expressed their concern that to try and replicate this is unnecessary and disproportionate to the risk. In response, the Working Group acknowledged that DCP 204 is not a like for like replacement of the arrangements that are currently in place. The intent of the CP is to replicate the effect of the current arrangements so that they work under smart metering, the effect being to ensure that the capacity of the network is not exceeded. In defining the proposal, the group has considered the requirements of the various industry parties and has sought to reach a balance between the varying needs of parties.

**Question 3 - Are there any unintended consequences of this proposal?**

- 5.7 The Working Group noted that six respondents identified unintended consequences of the proposal.
- 5.8 A Supplier respondent highlighted that Suppliers would need to understand what switching times are in operation at a particular customer's property before they attend so that they can replicate these. The group noted that Suppliers will seek to replicate the existing set up based on the information available to them (i.e. which switching regime they are on). It was noted that there is a risk that the Supplier may not have accurate information but this is a wider industry issue and data cleansing is being discussed in other industry forums.
- 5.9 The group noted, in response to another Supplier's comment, that the elements of the CP relating to randomisation will not apply to SMETS1 meters as they will not have the appropriate capabilities.
- 5.10 Another respondent cautioned that care needs to be taken to ensure that the proposed changes do not impact on the processes for legacydumb meters, prior to being changed as part of the Smart Meter roll out, which could result in Parties needing to make changes to systems and processes and incur costs relating to legacydumb meters. The Working Group noted the intent of DCP 204 is not to impact upon the existing processes.is comment.
- 5.11 One respondent noted that, whilst it may be out of scope for DCP 204, further work may be required to develop arrangements for embedded networks.
- 5.12 A Supplier respondent cautioned that DCP 204 could lead to costs being reallocated



from DNOs to Suppliers if Load Managed Areas are not managed effectively. This respondent also cautioned that ~~C~~Changes to a customer's load switching times or even the randomisation settings within their meter as a consequence of issues with coincidence of demand will require effective customer communication to ensure customers fully understand the precise timings for any "off peak" periods and when they should switch appliances on or off. The Working Group noted the respondents comments and re-worded the confidentiality clause in Schedule 8 to enable Suppliers to share information with affected customers.

**Question 4 - Do you consider that the proposal better facilitates the DCUSA general objectives?**

- 5.13 The Working Group noted that the majority consultation respondents agreed that the proposal better facilitates the DCUSA objectives. The following table outlines which DCUSA Objectives respondents specifically stated as being better facilitated by the CP:

DCUSA General Objectives	No. Of Respondents that agree it is better facilitated
Objective 1	8
Objective 2	0
Objective 3	0
Objective 4	1
Objective 5	0

- 5.14 The Working Group noted that the majority of respondents agree that objective one will be better met. One respondent also believed that general objective four would be met.

- 5.15 One respondent stated the proposed ~~S~~supplier obligations appear to apply to all Smart Metering Systems which the respondent did not agree was proportionate and therefore would not better facilitate the applicable objectives. The respondent suggested that they believe any ~~S~~supplier obligations should only apply to SMETS 2 meters. The group noted that they agreed with this suggestion and ~~would~~ captured this within the legal text such that –the elements of the CP relating to randomisation will not apply to SMETS1 meters as they will not have the appropriate capabilities.

- 5.16 Another respondent noted that they agree that the CP better facilitates the DCUSA objectives but there is a need for DNOs and Suppliers to work together to manage customer communications if there is a requirement for an LMA. The Working Group

~~reviewed the Schedule 8 confidentiality clause to enable Suppliers to share information with customers. -agreed that this was not within the scope of DCP 204 but an issue has been raised with the DCUSA Standing Issues Group (SIG) asking the SIG to consider which industry code guidance for Suppliers on emerging LMAs should sit under. Such guidance would include customer communications.~~

- 5.17 The ~~W~~working ~~G~~group noted that DCP 204 had the potential to negatively impact competition by increasing market complexity but looking at the CP in the round it better facilitates the DCUSA objectives. Working Group members cautioned that changes to the DCUSA should not discourage innovation and investment in research on new ways of improving security of supply.

**Question 5 - This proposal requires that randomised offset rules are applied to all smart metering systems. Do you agree with this proposal?**

- 5.18 It was noted by the Working Group that eight of the eleven respondents agreed that randomisation should be applied to all metering systems.
- 5.19 Of the respondents that agreed, one DNO respondent noted that they: *“expect the Supplier to take all measures in both its choice of metering systems and in the wording of its contracts with its customers to ensure that no restrictions upon Randomisation occur. This is vitally important for both distribution network operator and for the national electricity transmission system operator in avoiding step changes in consumption that increase system instability risk due to lack of Randomisation.”*
- 5.20 Another respondent that agreed with the proposal to apply randomised offset rules to all smart metering systems stated that *“it will avoid load associated with specific Load Switching Regimes being connected at the same time. Currently with existing technology connection drift occurs”*.
- 5.21 A Supplier respondent cautioned that the DCUSA requirements should not duplicate anything that is contained within the SMETS 2 specification. The Working Group agreed that they would not wish for there to be duplication.
- 5.22 Another Supplier respondent suggested that randomisation should only be applied in load managed areas, not across the whole country. The group discussed this comment and noted that all load is already randomised in the sense that you do not know what the clock settings are.

- 5.23 This respondent also highlighted that the Transitional Security Expert Group (TSEG) is considering randomisation for security reasons and suggested that the group account note this when considering randomisation parameters as part of this CP. The Working Group noted that the main consideration of the TSEG is the impact on the grid. National Grid has fed its views to the DCP 204 Working Group and has not raised any concerns with the 600 second randomisation value chosen.

**Question 6 - Which is the most appropriate Industry Code for the rules associated with randomised offset to be governed under?**

- 5.24 The Working Group noted that the majority of respondents felt that the DCUSA would be the most appropriate code. The following table details the responses split by respondent type.

<b><u>Which is the most appropriate Industry Code for the rules associated with randomised offset to be governed under?</u></b>							
<b>Respondent type</b>	<b>DCUSA</b>	<b>BSC</b>	<b>SEC</b>	<b>Engineering Requirement</b>	<b>Split across codes</b>	<b>No preference</b>	<b>Total</b>
<b>DNO</b>	3	1			1	1	6
<b>Supplier</b>	2		1		1		4
<b>IDNO</b>				1			1
<b>Total</b>	5	1	1	1	2	1	11

- 5.25 Having reviewed the consultation responses, the Working Group noted that the majority of respondents believe the DCUSA is the most appropriate code. The Working Group has also been advised by DECC that their preference would be for the rules to sit within DCUSA.
- 5.26 The Working Group agreed that it is appropriate for the randomisation rules to be the DCUSA rather than the SEC because:
- Communication between Parties and the smart meters only is defined within SEC, how you operate the smart meters is outside of the scope of the SEC
  - Any change the to way in which randomisation is applied is determined by the Network Operators and National Grid where constraints occur.

**Question 7 - What are your views regarding the value (in seconds) that should be defined in DCUSA as the minimum randomised offset limit?**

5.27 The Working Group noted that there were varying responses to this question. These are summarised in the table below.

<b><u>What are your views regarding the value (in seconds) that should be defined in DCUSA as the minimum randomised offset limit?</u></b>							
<b>Respondent type</b>	<b>210 secs</b>	<b>420 secs</b>	<b>600 secs</b>	<b>Analysis required</b>	<b>No minimum</b>	<b>No preference</b>	<b>Total</b>
<b>DNO</b>		1	3	1	1		6
<b>Supplier</b>	1		3				4
<b>IDNO</b>						1	1
<b>Total</b>	1	1	6	1	1	1	11

5.28 The Working Group noted the majority preference for 600 seconds. It was observed that if the value is found not to be appropriate in future then it can be adjusted by means of the DCUSA change process.

**Question 8 - Do you think there may be more Load Managed Areas in the future, potentially due to the increased connection of low carbon technologies? Are the proposed changes to the legal text sufficient to manage any associated issues that may arise?**

5.29 The Working Group noted that all respondents expect that there is a possibility that there will be more load managed areas in the future. It was noted that there was also a common thread that this is a difficult area to predict.

5.30 One respondent highlighted that there is the “*potential for Schedule 8 to be interpreted such that a company only ever requires one per licence area i.e. it just adds or removes post codes & times of day to the single LMA as and when required.*” The Working Group noted that postcodes may not be unique to a distribution area, however, LMA notices are issued by the DNO and the first **two digits number** of the MPAN indicates which DNO area the meter sits. The group developed a template for use by DNOs when notifying Suppliers of LMAs; more information on this is provided in section 6 below. The Working Group noted that Suppliers wish to have more communications from DNOs. Ofgem has oversight of network planning and emerging LMAs.

5.31 Another respondent highlighted that in the future there may be generation managed areas too. The group agreed that this was out of scope for DCP 204.

**Question 9 – Would you see value in creating a central register of Load Managed Areas e.g. on the DCUSA website?**

5.32 The following table provides a summary of the responses to this question.

<b><u>Would you see value in creating a central register of Load Managed Areas e.g. on the DCUSA website?</u></b>				
<b>Respondent type</b>	<b>Yes</b>	<b>No</b>	<b>Unsure</b>	<b>Total</b>
<b>DNO</b>	2	1	3	6
<b>Supplier</b>	4			4
<b>IDNO</b>	1			1
<b>Total</b>	7	1	3	11

5.33 The Working Group observed that the best location for this information would depend of the type of information required. For example, two Suppliers suggested that if the individual sites are identified then this information could be included in ECOES.

5.34 The group noted that if there is a central register then the Supplier could do a pre-registration check to ensure that a customer is not moved on to the wrong tariff and to prevent erroneous transfers.

5.35 It was highlighted that the group had previously discussed including within the register information on why it is a load managed area and an indication of when this is expected to end.

**Comment [RT3]: Action** – Supplier Working Group members to review their position on the provision of MPAN data and feedback back to the Working Group. If a list of MPANs is desired then the feedback should include how this information will be used.

**Question 10 – Do you agree that Provisional SRNs should be replaced by an advisory notice as proposed by the Working Group? An alternative would be that no notice is issued at this stage, what is your preference?**

5.36 The Working Group noted that the majority of respondents to this question agreed with the use of an advisory notice. In response to one consultation respondent's comments, the Working Group agreed that the purpose of the advisory notice should be explained further in the Change Report; this information is provided in section 5 below.

**Question 11 – Do specific considerations for new connections need to be included in Schedule 8? If yes, what additions are required?**

5.37 The Working Group noted that eight of the eleven respondents did not believe specific considerations for new connections need to be included in Schedule 8.

- 5.38 The group noted that if you are looking at taking on a new connection, if it is a significant load then it is likely to trigger a network reinforcement. The Working Group agreed that this was outside of the scope of DCP 204 and would need to be addressed under a future CP. It was noted that any DCUSA Party can raise a CP.

**Question 12 – Should the definition of Capacity Headroom remain as “a margin of 15% below the maximum capacity of the Distribution System supplying a group of Customers”? If not, what should it be and why?**

- 5.39 The Working Group noted that there was a split between DNOs and Suppliers in the responses to this question. It was recognised by the group that Suppliers desire consistency and assurance that DNOs will not create an increasing number of load managed areas and thus would like a defined capacity headroom. Counter to this it was noted that removing the 15% would potentially reduce the number of load managed areas.

- 5.40 The group agreed to amend the definition of capacity headroom to read as follows:

*“means the minimum margin below the maximum capacity of the Distribution System which the Company reasonably believes is necessary and justifiable to maintain Security of Supply and other technical parameters. “*

**Question 13 – Should there be a limit on the frequency at which network operators can request Suppliers to change load switching times?**

- 5.41 The Working Group noted that views were split between Suppliers and DNOs.

<b><u>Should there be a limit on the frequency at which network operators can request Suppliers to change load switching times?</u></b>				
<b>Respondent type</b>	<b>Yes</b>	<b>No</b>	<b>No View/ Undecided</b>	<b>Total</b>
<b>DNO</b>		5	1	6
<b>Supplier</b>	4			4
<b>IDNO</b>			1	1
<b>Total</b>	4	5	2	11

- 5.42 After discussing the consultation responses, the group agreed not to include a limit within the legal text. It was noted that DNOs, with Ofgem’s oversight, would seek to keep them to a minimum. to change the legal text such that there is an obligation to use reasonable endeavours to keep the number of changes to a minimum. It was noted that there is an appeals process should a party wish to raise an appeal.

**Question 14 – In paragraph 6.4 of the legal text is 20 working days an appropriate amount of time? If not, what should this period be?**

5.43 The Working Group noted that the majority of respondents agreed with the 20 working day value. The group, therefore, agreed to keep this value in the legal text.

**Question 15 – Are you supportive of the proposed implementation date of 1 April 2015? If no, please propose an alternate date and explain your rationale.**

5.44 The Working Group noted that the majority of respondents agreed with the proposed implementation date of 1 April 2015.

5.45 It was noted that there are issues around randomisation and direct switching that cannot happen until SMETS2 comes into effect. It was suggested that if the solution is implemented sooner rather than later it is easier for the industry to work towards it.

5.46 The group noted that there is a DCUSA Release Scheduled for June 2015 and agreed to aim for this standard release.

**Question 16 – Are there any additional smart meter related technical, operational or governance issues that need to be considered by the Working Group (in the context of load switching and time switching of smart meters)? If yes, please provide additional information.**

5.47 The Working Group noted one respondent's concern that currently the distributor is involved in the process of defining switching times through the application of Standard Settlement Configuration (SSC) rules under the BSC. Once Settlement moves to Half Hourly SSCs will no longer be in existence and the Distributor will not be involved. The Working Group noted that the removal of SSCs will not be for several years and is therefore not an immediate issue, however, it may be a future unintended consequence of moving to HH settlement. The Working Group advise Ofgem to consider this issue at the appropriate time as failure to consider this issue may increase costs to customers in the form of increased network reinforcement. The Working Group noted that the legal text includes a provision for early notice of potential load managed areas which will help in these situations.

5.48 Another respondent raised a concern around confidentiality that prevents the Supplier from sharing information with the customer. **As a consequence the Working Group reviewed and updated the confidentiality clause in Schedule 8.**

**Question 17 – Are there any specific issues that need to be considered relating to the withdrawal of existing services/ technologies, i.e. RTS, Cyclo Control etc. If yes, please provide additional information.**

- 5.49 One respondent to this question noted that they did not believe there are any discussions happening at present to discuss replacement of the current functionality offered by the Radio Teleswitch System. In response, the Working Group noted that DCP 204 is not a like for like change with the current arrangements. The Working Group does not wish to restrict new technology to the old processes and thus is intentionally developing a change that is not like for like.
- 5.50 Another respondent suggested that it would be prudent for Suppliers to publish load switching regimes with a minimum notice period such that the Distributors may assess the impact of the application of such regimes to all or some of the relevant customer's consumption. The respondent further explained that this comment is in relation to the withdrawal of old tariffs.
- 5.51 The group discussed whether Suppliers should inform DNOs of new products that focus on a certain area and provide the DNO with information on what the switching times are and whether there would be scope to stagger the switching times. It was noted that Suppliers are likely to want to keep this information confidential until it is launched. A Working Group member highlighted that DNOs are required to approve MDD changes and thus would receive notice through this route, however, when the current arrangements are replaced by Half Hourly settlement this information will not be known. Consideration therefore will need to be given to this area in the future when Half Hourly settlement is introduced (see 5.46).
- 5.52 One Working Group member flagged that Suppliers will need a managed approach for closing the RTS system down, including a plan for those customers that will not have smart metering WAN. The Working Group noted that such a process would need to be agreed, however, it was outside of the scope of DCP 204.

**Question 18 – Sections 5.3, 6.3 and 7.3 of the legal text detail the information that should be provided by a DNO issuing Notices. Is this information sufficient, if not what additional information is required?**

- 5.53 The following table summarises the responses to this question.

<p><b><u>Sections 5.3, 6.3 and 7.3 of the legal text detail the information that should be provided by a DNO issuing Notices. Is this information sufficient, if not what additional information is</u></b></p>
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<u>required?</u>						
Respondent type	Yes, this is sufficient	No, MPAN information needed too	No, information on applicable week days needed too	other	No comment	Total
DNO	4		1	1		6
Supplier	2	2				4
IDNO					1	1
Total	6	2	1	1	1	11

5.54 It was observed that the majority of respondents that felt that the information was sufficient were DNOs.

5.55 The Working Group noted that the majority of existing load managed areas are driven by issues with EHV network issues, and currently the DNO would give postcode outcode rather than individual postcode.

5.56 It was observed that the easiest way of matching the notice to specific customers is for the information to be provided on an MPAN level. The group noted that there were reservations about providing this more granular data, as new customers would not be in the MPAN list until the point at which they are registered. As a halfway point it was suggested that there could be a list of MPANs provided to each registered supplier from the DNO, updated once every three months. This would mean that there would be a small number of newly registered customers that would not be on the list for a maximum of three months. The only alternative, if MPAN data is to be provided, would be to notify every time a new customer is added.

5.57 The group reached a consensus that MPAN level data should be provided. There will be one list, rather than a list per Supplier.

**Comment [RT4]:** Update this text once action on Suppliers to reconsider MPAN requirements has been completed

**Question 19 – The Working Group considers that an adequate level of detail to summarise the nature of any Load Managed Area would be: Date Notified, postcode District/out-code (e.g. LS3) and Indicative End Date (if known) do you agree?**

5.58 The following table provides a summary of the responses to this question

<b><u>The Working Group considers that an adequate level of detail to summarise the nature of any Load Managed Area would be: Date Notified, postcode District/out-code (e.g. LS3) and Indicative End Date (if known) do you agree?</u></b>						
Respondent type	Agree	Agree but Provide MPAN too	Agree but Provide reason too	Agree but without end date	Unsure	Total
DNO	3	1		2		6

Supplier	1	1	1		1	4
IDNO					1	1
Total	4	2	1	2	2	11

5.59 The Working Group has prepared a template that would be used by Distributors to provide information on LMAs in a defined file format. This template is provided as Attachment 5.

**Question 20 – Should there be standard templates for:**

**- Load Managed Area Notices**

**- Security Restriction Notices**

**- Emergency Security Restriction Notices**

**If yes, should this be in DCUSA schedule 8?**

5.60 The Working Group noted that all respondents to this question except for one agreed that there should be standard templates. The majority also agreed that the templates should be in DCUSA Schedule 8.

5.61 The sole respondent to disagree with the use of defined templates suggested that having templates within the DCUSA increases the administrative burden of DCUSA should they need to be amended.

**Question 21 – Section 11 of the legal text places an obligation on DNO's to review LMA, SRN and Emergency SRN notices every six months, is this period appropriate? If not can you please provide an alternative period and explain your rationale.**

5.62 The following table provides a summary of the views expressed in response to this question:

<b><u>Section 11 of the legal text places an obligation on DNO's to review LMA, SRN and Emergency SRN notices every six months, is this period appropriate?</u></b>					
Respondent type	Agree with reviewing every six months	Disagree – reviews should be more frequent than every six months	Disagree – reviews should be annual	No comment	Total
DNO	2	1	3		6
Supplier	3	1			4
IDNO				1	1
Total	5	2	3	1	11

5.63 The Working Group discussed the comments received in response to Question 21 and agreed that where a notice is revoked the Distributor should not wait for the six month review period before notifying Suppliers. It was noted that this is captured

within the current version of the DCUSA legal text. The group agreed that wording should be included within the DCP 204 legal text saying that where a constraint is removed notice should be given, i.e. do not wait for the six month review.

5.64 Following the review of the consultation responses, the Working Group updated section 11 of the legal text to provide a compromise position in that the review periods are set as follows :

- Advisory Notice and LMA Notice - every 12 months
- SRN and Emergency SRN - every six months
- Compliance Notice - every three months

**Question 22 – It is proposed that reference to SSCs is removed in the legal text and has been replaced by reference to Load Switching and Load Switching Regimes. Do you agree with these changes, if not please provide your rationale.**

5.65 Following the review of consultation responses, the Working Group agreed that reference SSC should remain as part of the definition of “Load Switching Regime”. It was also subsequently agreed that a definition of “Load Switching” was not required.

**Question 23 – Do you have any other comments on the proposed legal text?**

5.66 The Working Group reviewed the comments on the legal text and agreed to make a number of amendments to the text. The finalised version of the legal text is provided as Attachment 1.

5.67 It should be noted that amendments to the legal text mean that the paragraph numbers referenced by consultation respondents (in Attachment 4) may not line up with the paragraph numbering in the final version of the legal text.

**Question 24 – Are there any alternative solutions or matters that should be considered within the Change Proposal?**

5.68 The majority of respondents to the consultation did not identify any alternative solutions or matters.

5.69 The Working Group noted that in response to this question one Supplier respondent reiterated their caution on ensuring that the CP does not result in a reallocation of costs from DNOs to Suppliers.

5.70 Another respondent suggested that demand control would better sit under the Distribution Code. The Working Group noted the respondent's view.

5.71 A DNO respondent stated that:

*"We consider that some risks may arise in the near future with smart appliances that migrate their consumption to times of low electricity cost. It is not clear at this time to what extent the Supplier will be in control of such smart appliance behaviour, downstream of the meter, or whether control is limited to the variability in any pricing signals conveyed by the Supplier."*

5.72 The Working Group noted the respondent's comments and noted that DCP 204 had been raised to bring Schedule 8 up to date in a world without radio teleswitching. It was subsequently identified that Suppliers are changing their customer offerings as they move towards a smart world that may require future changes to DCUSA and the Balancing and Settlement Code (BSC). It was agreed that much of the changes needed to accommodate the move to smart metering sit outside the scope of DCP 204.

**Question 25 (DNOs/IDNOs only) – Do Load Managed Areas currently exist on your network, and where are they located?**

5.73 The Working Group noted that no IDNOs currently have Load Managed Areas. The following four DNOs currently have Load Managed Areas:

- WPD
- SSEPD
- UKPN
- SP Distribution/ SP Manweb

5.74 Details of these Load Managed Areas are provided as Attachment 6.

**Question 26 (DNOs/IDNOs only) – What additional obligations does there need to be within Schedule 8 of DCUSA to notify other distributors that are associated or may become associated with Load Managed Areas and the other distributor obligations to notify Suppliers connected to their network?**

5.75 The Working Group noted that one respondent to this question suggested that:

*“There may be third party networks (IDNO or private) which have embedded generation connected to them such generation could impact on the need and requirements for demand restriction notices on both the 3rd party network and the upstream DNO network.”*

- 5.76 The Working Group discussed this comment and noted that IDNOs are required to notify DNOs of embedded generation, so that this can be factored into capacity headroom calculations. The group agreed that no changes are required to the DCUSA to further accommodate this area.

**Question 27 (DNOs/IDNOs only) – How often are emergency SRNs used?**

- 5.77 The Working Group noted that respondents indicated that emergency SRNs are used infrequently, with some respondents saying they are never used and others saying they are used rarely.
- 5.78 One respondent suggested that they may become more frequently used in the future.

**Question 28 (Suppliers only) – Are you aware of the existence of load managed areas and do you understand where they are located?**

- 5.79 The Working Group noted that Supplier respondents were generally not aware of the existence of any load managed areas. The group noted that increased awareness is therefore required of LMAs across the industry.
- 5.80 It was observed that DCP 204 may act to highlight the existence of LMAs and improve dialogue between Suppliers and DNOs regarding this issue.

**Question 29 (Suppliers only) – What would a supplier do when they get an advisory notice?**

- 5.81 Three respondents to this question noted the need for Suppliers and DNOs to work collaboratively to resolve the issue. Another respondent explained that they were unable to comment on a specific process.
- 5.82 The Working Group noted that discussion groups could be established to facilitate the flow of information between Suppliers and DNOs as specific network issues arise.

**Question 30 (Suppliers only) – When do suppliers expect to commence removing existing equipment that directly controls customers load and replacing it with smart meters? Are**

**there any specific issues relating to “timing” that need to be considered in the development of this proposal?**

5.83 The Working Group noted that the majority of respondents indicated that this would commence only once SMETS 2 compliant metering becomes available.

**Question 31 (DCC only)– What information will you need from DNO’s regarding the location of Load Managed Areas to enable you and your service providers, especially the communications service providers, to ensure that there is adequate WAN provision in the locations affected?**

5.84 The Working Group noted that the DCC would like postcode level information, which ties in with the discussions of the DCP 204 Working Group.

**Question 32 (DCC only)– How soon will it be known where enduring areas of no WAN will be? How will this information be provided to DCC Users and other interested industry parties?**

5.85 In response to this question, the DCC provided the following information:

*“DCC is planning to publish coverage data during August that will set out by full postcode, for each Communications Service Provider (CSP) Region, where coverage will be available either at the end of 2015, between 2016 and 2020 or where areas may potentially fall into an enduring area of no SMWAN. The data published at this point will be 90% accurate with this accuracy being progressively improved on a quarterly basis until the start of Smart Meter roll-out.*

*More info on enduring ‘no WAN’ is provided in the DCC Statement of Service Exemptions, currently being consulted on here:*

*<https://www.gov.uk/government/consultations/dcc-procurement-strategy-and-statement-of-service-exemptions>”*

5.86 Since providing the above response, the Working Group notes that the DCC has published initial coverage guidance. This cannot be circulated with the DCP 204 change report as it has been published with a confidentiality clause.

5.87 A DCP 204 Working Group member highlighted that a significant number of the permanent no WAN areas are located in the north of Scotland.

**6 ADDITIONAL INDUSTRY FEEDBACK**

6.1 Following the close of the industry consultation, the DCP 204 Working Group received additional feedback from Citizens Advice and National Grid.

**Citizens Advice Feedback**

6.2 Citizens Advice noted their support for the general approach of translating the provisions in schedule 8 to apply to smart metering.

6.3 With regards to the requirement for randomised offsets, Citizens Advice expressed concerns that this could disrupt consumers' ability to rely on a schedule. If, for example, a consumer was to delay their washing until 10 o'clock how would they know that they wouldn't end up in the higher price band by accident if randomised? In response, the Working Group noted that this issue already exists under the current arrangements for randomisation and is not a new issue introduced by DCP 204. The group noted that tariffs are given based on a range rather than a fixed time. This could be built in to the meter installation practice, for instance, literature could be given to the customer explaining the randomisation.

### National Grid Feedback

6.4 In their feedback, National Grid stated that they were reasonably happy that, on the grounds that the CP is a straightforward technology switch that seeks to as a minimum to retain the same functionality, there is no tangible impact.

6.5 National Grid also requested confirmation that there will be sufficient randomisation built in to the switching to avoid spikes. The Working Group discussed this comment and noted that DCP 204 seeks to replicate the current RTS arrangements as best it can, thus the choice to set the randomised offset limit to a value of no less than 600 seconds. It was noted that if 600 seconds is found not to work, then signals can be sent to the meters to vary this randomisation.

6.6 The group also noted that the roll out of smart meters will be over several years, meaning that there will be a gradual move away from RTS rather than a sudden one.

### 6.7 POST CONSULTATION DISCUSSION TOPICS

6.17.1 Following the close of the consultation, the Working Group discussed the CP further in the following areas.

### Why Do Load Managed Areas Exist

6.27.2 The Working Group noted that Load Managed Areas are required because ...

### New Connections

7.3 The current arrangements only apply to existing connections. DCP 204 does not cater for managing new connections. The CP seeks only to replicate the existing arrangements and as such this topic was deemed to be out of scope. The Working Group notes that any DCUSA Party may raise a CP to address this area.

### Management of Load in LMAs

7.4 There is no current guidance on implementing switching times in existing or new Load Managed Areas. This issue has been referred to the standing issues group for further discussion. See Attachment X for more details on this topic (ATTCH CA's Paper).

### Supplier Engagement

**Comment [RT5]:** Add information on the SIG issue to this section. CA to produce paper for SIG which can be attached to the Change Report.

**Comment [RT6]:** Action on DNOs: Provide information on why Load Managed Areas (LMAs) exist so that this information can be captured in the Change Report (e.g. investment would be needed in new subsea cable).

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~~6.37.5~~ It was observed that only four Suppliers had responded to the DCP 204 consultation.

All Suppliers will need to understand the implications of DCP 204 on their systems and processes. It was noted that Suppliers will have an opportunity to comment again on the CP as part of their voting response.

~~6.47.6~~ The Working Group noted that should DCP 204 be implemented, it will create an opportunity for DNOs to communicate the importance of demand control as DNOs will be circulating information on demand controlled areas as part of the requirements of the CP.

~~6.57.7~~ It was noted that it may be sensible for a Smart Metering Installation Code of Practice (SMICoP) change to be raised, to make sure that before a meter exchange is carried out that the customer's heating and switching requirements are left on an appropriate arrangement. The group noted that this is outside of the scope of DCP 204 and would be for a SMICoP party to raise. A Working Group member raised this issue at the SMICoP Governance Board (SGB) meeting on 27 November. The SGB agreed that this area may need to be considered by SMICoP in the future.

#### Information Required by Suppliers

~~6.67.8~~ The group developed a template for use in providing information to Suppliers. This will ensure that such information is provided in a consistent format. The template is provided as **Attachment 5**.

**Comment [RT7]:** To be prepared under action 07/04

~~6.77.9~~ This template will be issued to Users have registered customers, providing a list of the affected MPANs.

#### Capacity headroom

~~6.87.10~~ The Working Group noted that capacity headroom defines when a load managed area should be triggered. The DNO uses LMAs to not only manage load but also security of supply and statutory requirements, such as voltage. It was observed that the use of LMAs has to be balanced against not constraining customers' network usage unnecessarily.

~~6.97.11~~ With regards to capacity headroom, it was highlighted that it is in the Supplier's interest to get as close to the network capacity a possible before declaring a load

managed area. To facilitate this, the Working Group agreed that rather than defining capacity headroom as a fixed value the DCP 204 legal text should instead permit Distributors to determine an appropriate value is believed to be necessary and justifiable to maintain Security of Supply and other technical parameters.

### **Demand Aggregators**

~~6.107.12~~ The Working Group questioned whether Short Term Operating Reserve (STOR) is a load switching programme. The group agreed that this was outside the scope of DCP 204.

~~6.117.13~~ It was noted that the actions of Demand Aggregators, when responding to price signals, may have the effect of creating a need for a load managed area through their actions. The Working Group noted that as Demand Aggregators are not Parties to DCUSA this is not something that DCP 204 can address.

### **The Advisory Note**

~~6.127.14~~ The purpose of an advisory notice is to enable a DNO to advise Suppliers operating within its area that there is a risk that at a specific location that a LMA notice may be issued unless there is a change to the way load is managed with the area in question. The notice would act as a catalyst for Suppliers and the DNO to discuss ways of managing load.

~~6.137.15~~ The Working Group notes that the intent is to prevent an LMA notice being issued.

### **Conflicting Drivers**

~~6.147.16~~ The Working Group notes that there may be a conflict between deriving benefit directly from smart meters versus the way DNO's are being regulated in RIIO-ED1 to minimise or defer network reinforcement using technologies that are available to them.

### **~~7.8~~ PROPOSED LEGAL TEXT**

~~7.18.1~~ The proposed legal drafting of DCP 204 has been considered by the Working Group, and reviewed by Wragge & Co, and is provided as Attachment 1. This text amends

DCUSA Schedule 8.

~~7.28.2~~ In order to achieve the intent of the CP, the main elements of the draft legal text proposes that:

- 1) Existing RTS and timeswitch switching times (and other switching characteristics) are replicated in a Smart Meter on installation, unless otherwise agreed between the Supplier and Distributor, within Load Managed Areas.
- 2) Smart Meter installations are deployed in such a manner, through use of randomised offset capabilities and management of load switching times, that coincidence of load switching is minimised. The proposed legal drafting requires that a Randomised Offset Limit is applied to all smart meters that are installed (except for SMETS1 meters as they will not have the appropriate capabilities). The proposed legal text mandates the setting of a Randomised Offset Limit for all capable meters, and not just those that have directly switched load, as a smart meter can enable customers to automatically switch their own load in response to changes in price (for example on multi-rate tariffs). To mitigate the risk of coincidence of demand there is a need to randomise the switching times for tariffs as well as controlled load and the obligation of setting the Randomised Offset Limit for smart meters achieves this.
- 3) Smart Meter switching times are particularly managed in Load Managed Areas, including changes to existing load switching regimes and new installations.

~~7.38.3~~ The proposals are based on the existing structure of Schedule 8 but seek to specifically refer to the key features and characteristics of load switching devices which are of importance to network operators.

~~7.48.4~~ The text also aims to simplify the process of 'Security Restriction' notifications to Suppliers, by combining the current 'Provisional' and 'Firm' Security Restriction process into one.

## **89 EVALUATION AGAINST THE DCUSA OBJECTIVES**

~~8.19.1~~ The Working Group considers that the following DCUSA Objective is better facilitated by DCP 204.

### **General Objective One - The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Network**

~~8.29.2~~ The purpose of this DCP 204 is to make sure that DCUSA Schedule 8 is suitable for smart metering. It is not mandating any ~~registration~~ system changes or ~~introducing~~ new data flows ~~and thus the CP is an enabling CP~~. Relative to the current

Comment [RT8]:

baseline DCP 204 better facilitates Objective 1 by helping market participants discharge their current obligations more clearly as we move towards smart metering. The CP is a clarification of existing obligations and making sure that they are fit for purpose to meet the requirements of changing technologies. In particular ensuring that where Smart Meters are being rolled out, specifically in Load Managed Areas, Network Operators will maintain the ability to influence the timing of load switching.

**9.3** The timing of load switching is an essential tool for network operators as a means of maintaining security of supply in certain circumstances. The potential for these capabilities to be used to avoid or defer network reinforcement can provide network operators with an economic and efficient alternative to network investment in some situations.

**8.3** The Working Group believes that the CP is neutral against the remaining DCUSA Objectives.

## **9.10 IMPLEMENTATION**

**9.110.1** The proposed implementation date DCP 204 is the June 2015 DCUSA Release, which is on 25 June 2015.

**9.210.2** DCP 204 is classified as a Part 1 matter and therefore will go to the Authority for determination after the voting process has completed.

## **10.11 WORKING GROUP CONCLUSIONS**

**10.111.1** The DCP 204 Working Group has discussed the proposed amendment to DCUSA. The group unanimously agrees that the legal text developed better facilitates the DCUSA Objectives. The Working Group agrees that the CP should be issued for industry voting.

## **11.12 ENGAGEMENT WITH THE AUTHORITY**

**11.112.1** Ofgem has been fully engaged throughout the development of DCP 204 as a member of the Working Group.

## **12.13 ENVIRONMENTAL IMPACT**

**12.113.1** In accordance with DCUSA clause 11.14.6, the Working Group assessed whether there would be a material impact on greenhouse gas emissions if DCP204

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were implemented. The Working Group did not identify any material impact on greenhouse gas emissions from the implementation of this Change Proposal.

#### ~~13.14~~ PANEL RECOMMENDATION

~~13.14.1~~ The Panel approved this Change Report on **DATE**. The Panel considered that the Working Group had carried out the level of analysis required to enable Parties to understand the impact of the proposed amendment and to vote on DCP 204.

~~13.214.2~~ The timetable for the progression of the Change Proposals is set out below:

Activity	Date
Change Report approved by DCUSA Panel	<b>date</b>
Change Report issued for voting	<b>date</b>
Voting closes	<b>date</b>
Change Declaration	<b>date</b>
Authority Decision	<b>date</b>
DCP 204 Implemented	25 June 2015

#### ~~14.15~~ NEXT STEPS

~~14.115.1~~ Parties are invited to consider the proposed amendment (Attachment 1) and submit their votes using the Voting form (Attachment 2) to [DCUSA@electralink.co.uk](mailto:DCUSA@electralink.co.uk) by **date**.

~~14.215.2~~ If you have any questions about this paper or the DCUSA Change Process please contact the DCUSA by email [DCUSA@electralink.co.uk](mailto:DCUSA@electralink.co.uk) to or telephone 020 7432 2842.

#### ATTACHMENTS:

- Attachment 1 – DCP 204 Legal Text
- Attachment 2 – Voting Form
- Attachment 3 – Randomised Offset Value
- Attachment 4 – DCP 204 Consultation Documents
- Attachment 5 – LMA Notification Template
- Attachment 6 – Existing Load Managed Areas
- Attachment 7 – DCP 204 CP Form