



DCUSA Request for Information (RFI)

DCP 268 'DUoS Charging Using HH Settlement Data'

1 PURPOSE

- 1.1 The Distribution Connection and Use of System Agreement (DCUSA) is a multi-party contract between electricity Distributors and electricity Suppliers and large Generators.
- 1.2 This document is a Request for Information (RFI) issued to all DCUSA Parties and the Authority in accordance with Clause 11.14 of the DCUSA seeking industry views on DCP 268 'DUoS Charging Using HH settlement data'.
- 1.3 Parties are invited to consider the questions set out in section 3 below and submit comments using the form attached as Attachment to dcusa@electralink.co.uk by **30 August 2016**.
- 1.4 Respondents are advised to note that the meeting papers for DCP 268 Working Group meeting are available on www.dcusa.co.uk.

Commented [OC1]: Suggest that this date is pushed back until middle of September due to holidays and so all can respond.

2 DCP 268 'DUOS CHARGING USING HH SETTLEMENT DATA ~~RESOLVING~~'

- 2.1 DCP 268 seeks to facilitate a transition to half-hourly (HH) settlement for non-half hourly (NHH) customers by moving to a time band charging basis using the profiled HH consumption values.
- 2.2 The Working Group undertook a consultation associated with this Change Proposal. One of the questions was whether there was a preference for Elexon (via the Supplier Volume Allocation Agent (SVAA)) to provide the pseudo split of consumption data or whether they required Distribution Network Operators Parties to undertake the relevant work on their internal and billing systems.² The response is shown below.

Insufficient Information	Elexon (SVAA)	Distributors	No comment
2 - Suppliers	4 - DNOs, 1 IDNO, 6 Suppliers	23 - DNOs 1 - supplier	1 – Anonymous 1 - Elexon
2	11	3	2

2.3 The Working Group concluded that based on the responses received, and even though there was significant support for the centralised approach, there may have been insufficient detail provided in the consultation to allow Parties to determine whether it was more beneficial for Elexon to provide the pseudo split of consumption data or for Parties to undertake the relevant work on their billing systems. The Working Group agreed to carry out a Request for Information (RFI) for an impact assessment based on a set of proposed options. This document sets out in detail those options being considered by the Working Group and seeks industry views on the suitability of the approaches proposed and which is their preferred option.

2.4 As stated in the previous consultation there are two main options for consideration namely the centralised option (where the work is undertaken by Elexon / SVAA or the Party-DNO option). However, within each option there are four a number of options for the ways in which the data is dealt with, grouped. There are also two options within the Party option for splitting data into time bands.

2.4 Centralised options for Grouping of Data

2.5 ~~In order to understand the centralised option~~ Under current arrangements, the NHH and HH data collectors provide aggregated data to the SVAA. The following data is received by the SVAA. Details of NHH Consumption per Supplier aggregated per GSP Group by Profile Class (PC), Line Loss Factor Class (LLFC) and measurement requirement which includes the Standard Settlement Class (SSC) and Time Pattern Regime (TPR). The SVAA then ensures

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Commented [LW2]: AE - Not sure what the measurement requirement is

Commented [OC3]: Agreed, not a term I have come across before, is this correct?

that the data goes to relevant supplier and distributor on the D0030 flow – ‘Aggregated DUoS Report’.

- 2.6 It is the LLFC/SSC/TPR/PC settlement combination that is being affected by this CP. For ease of reference, in the options below this document will refer to the data items that make up the combination as “settlement combinations”.
- 2.7 ~~It is~~ Under P300¹ the framework introduced to the ~~One proposal is~~ that the framework introduced by the Balancing and Settlement Code (BSC) ~~under P300² could~~ be extended for DCP 268, ~~which~~ ~~This~~ involves creating pseudo D0030³ data flows and providing them to the respective Distributor and Supplier to support the DUoS charging of the aggregated tariffs. Attached as appendix xx is the implementation document for P300 that contains ~~within it~~ the activities undertaken by the SVAA and Distributors in providing ~~pseudo~~ pseudo ~~SSC and Pseudo~~ TPR combinations.
- 2.8 For the centralised option (as undertaken by Elexon) to provide the pseudo split of consumption data, a change to the BSC would need to be raised with a list of detailed changes required to the SVAA in order to populate the D0030 dataflow. ~~The working group reached the view that there are four options under the centralised approach; further details for of three of the options are contained in Attachment 2 due to the more complex nature of the changes required, whilst the fourth is simpler to explain as shown below. Detailed process mapping on the three options for the aggregations to the D0030 data flow is set out in Attachment 2.~~ For each option an example of Supplier X in GSP Group_A is used and all the existing settlement combinations that would appear on the D0030 by the new tariff allocation are colour coded. At the bottom of the data of each sheet it shows how the different colours map to the additional aggregations.
- 2.9 ~~In addition to the above the Working Group added a fourth variant to the centralised option. This option is relatively simple to explain and as such there is no need for an attachment although reference to the settlement combinations are made.~~ The four variants to Option 1 are as follows:
- Option 1a – aggregate the settlement combinations to the proposed new Distribution tariffs.

- Option 1b – aggregate the settlement combinations to the proposed new Distribution tariffs but sub-divide the LV Domestic Aggregated tariff by HH aggregation and NHH aggregation.
- Option 1c – aggregate the settlement combinations by HH aggregation and NHH profiles (PC1-8 and maintain the difference between metered and unmetered profiles).
- Option 1d – retain the existing settlement combinations but replace the TPR of each combination with the distributor time band TPRs.

In summary the effect of each option on what the SVAA receives and then sends out to each Supplier and Distributor based on the settlement combinations for GSP_A in the attachment is as follows:

	SVAA	SVAA	comment
	settlement	settlement	
	combinations	combinations	
	received	sends out on D0030	
Option 1d	161	7	Likely to need to create new LLFCs

Commented [CH4]: Working Group notes on Option 4 -

- Keep existing LLFC and SSC and report against the three pseudo TPRs.
- Produce a table that what comes in to SVAA and what would leave SVAA for each of the three options

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¹ P272 – ‘Introduction of new Measurement Classes to support Half Hourly DCUSA Tariff Changes’ (DCP179)
² P272 – ‘Introduction of new Measurement Classes to support Half Hourly DCUSA Tariff Changes’ (DCP179)
³ D0030 Aggregated DUoS Report

			and use of PC-0, Puesdo SSC, psuado TPR
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2.112.10 This option aggregates the data to the proposed new tariff structure and completely ignores the existing settlement combinations. In doing so the LV Domestic Aggregated tariff and the Non Domestic Aggregated tariff would combine both HH Aggregated (on Measurement Class F and G) and NHH Aggregated data on some of the current settlement combinations identified in attachment 2. Similarly for LV Non Domestic Aggregated on Measurement Class G. The advantages and disadvantages of this option are set out below:

Pros	Cons
Aligns with the distributor tariffs	De-links in its entirety from the settlement combinations thereby losing transparency to of the data received on the D0041
Biggest reduction in the size of the D0030 file	Mixes actual HH consumption data with HH profiled data
Both suppliers and distributors receive the same data	A need to retain the existing LLFCs to match the settlement combinations and create new ones used for billing.
	Fundamental change to the way in which the D0030 is structured requiring central, DNO and supplier system changes.

Commented [LW6]: What about potential double-charging and not billing invalid combinations?

AE – this is now an issue for options 2a-2c

Option 1b

2.122.11 This is the same as option 1a but has a sub-division of data associated with the LV Domestic Aggregated tariffs for Domestic and Non Domestic by keeping the NHH data set separate to the new aggregated HH data for Measurement Classes F and G. The advantages and disadvantages of this option are set out below:

Pros	Cons
Retains the split of HH aggregation and NHH aggregation linked to the new tariffs	De-links in its entirety from the settlement combinations thereby losing transparency to of the data received on the D0041

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Second biggest reduction in the size of the D0030 file	A need to retain the existing LLFCs to match the settlement combinations and create new ones used for billing.
Both suppliers and distributors receive the same data	<u>Fundamental change to the way in which the D0030 is structured requiring central, DNO and supplier system changes.</u>
	<u>Fundamental change to the way in which the D0030 is structured requiring central, DNO and supplier system changes.</u>

Option 1c

2.132.12 This aggregates to each tariff by profile class combinations and retains the separation for the new aggregated HH data for Measurement Classes F and G. The advantages and disadvantages of this option are set out below:

Pros	Cons
Retains the split of HH aggregation and NHH aggregation linked to the new tariffs	De-links in its entirety from the settlement combinations thereby losing transparency to of the data received on the D0041
Third biggest reduction in the size if the D0030 file	A need to retain the existing LLFCs to match the settlement combinations and create new ones used for billing.
<u>Pros</u>	<u>Cons</u>
Both suppliers and distributors receive the same data	
Provides added transparency at profile class level	
<u>Closest to the 'status quo', so likely to have lowest implementation cost</u>	

Commented [LW8]: See comment LW4

Commented [LW9]: See comment LW4

Option 1d

2.142.13 This retains the existing settlement combinations apart from the TPR which is replaced by the distributor pseudo TPRs.

Pros	Cons
Retains each settlement combination apart from the TPR	Loses some transparency to of the data received on the D0041
Both suppliers and distributors receive the same data	A need to retain the existing LLFCs to match the settlement combinations and create new ones used for billing.
<u>Likely to be a simpler change than options 1a, 1b and 1c</u>	<u>No difference in the size of potential expansion of the D0030 file</u>

Commented [LW10]: See comment LW4

Commented [LW11]: AE – I'm not convinced about this

Replicates what the distributor would do under option 2 but provides the data centrally prior to billing so that validation of the DUoS bill is simpler.

Option 2 – DUoS solution – Using Existing Data Flows and MDD⁴ data

DUoS billing – Current Approach: Centralised or Party Option

2.152.14 Currently most DNOs utilise the ~~time pattern regime~~ (TPR) of the supply tariff to determine the units to be charged under any NHH DUoS time of day (year) tariff. This means that the same DUoS charges can be applied to many different time periods.

2.2.15 For example, the Domestic Two ~~R~~Rate tariff will have a single day and night rate, which could apply to all of the following:

- The many 'Economy 7' variations: 22:00 – 05:00; 22:00 – 00:00 and 02:00 – 07:00; 00:00 – 07:00; 23:00 – 01:00 and 03:00 – 08:00 etc.
- The variations on the length of the 'night' period: 'E8', 'E9', 'E10', 'Weathercall' 'Warmwise' and 'Evening/Weekend', afternoon boosts.

2.2.16 There are also two DNO areas that do not use the TPR to determine the units to be charged under a NHH time of day tariff and instead charge on a fixed time period basis i.e. in the East Midlands and West Midlands areas, the Statement of Charges specifies that:

- *For all two rate NHH MPANs night is defined as 00.30 to 07.30 hours.*

2.17 In these areas, the DNO utilises the profiled HH consumption values contained in the D0030 data flow to determine the units to be charged under the NHH DUoS time of day (year) tariff.

2.18 An additional consideration for the changes required to implement DCP 268 is whether one approach should be adopted over the other, i.e. all DNOs would either use the incoming SSC/TPR combination to determine the appropriate unit rate to apply, or all DNOs would

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⁴~~MDD – Market Domain Data~~

use the time period in which the consumption falls to determine which unit rate to apply based on their R/A/G time bands.

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2.19 The working group considers there are three options for this split, and are as follows:

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- Option 2a – utilise existing SSC/TPR mappings with the DNO using the time period in which the consumption falls to determine which unit rate should apply.
- Option 2b – utilise the unrestricted supplier SSC/TPR for all datae with the DNO using the time period in which the consumption falls to determine which unit rate should apply.
- Option 2c – utilise the DNO owned pseudo SSC/TPR combination with the DNO using the SSC/TPR combination to determine which unit rate should apply.

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Commented [OC12]: Is this the 'pseudo SSC/TPRs that were created for P300? If so I think we need to make it clearer.

2.3

DCP 268 – Option 2 Approach (Utilising Existing Data Flows and Process)Option 2a

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2.42.20 Since DCP 268 seeks to introduce a time band charging basis for all NHH customers (regardless of the Supplier TPR), one option for implementing this change is to effectively roll out the DUoS billing approach currently in place in the East Midlands and West Midlands areas across all DNOs. This approach would use the profiled HH consumption values contained in the D0030 data flow to determine the units to be charged in each time band introduced by DCP 268. The D0242 dataflow would present these consumptions and charges per MDD⁵ combination as is currently done, based on the supplier SSC/TPR combination.

⁵ MDD – Market Domain Data

Option 2 Process

Pros	Cons
Both suppliers and distributors receive the same data	No difference in the size of the D0030 file
Requires no central system changes	A single SSC/TPR combination would potentially attract multiple unit rates (e.g. the 'day' element of an E7 tariff would likely attract all three unit rates for some of the consumption), leading to a single line of the DNO invoice showing multiple unit rates
	Potentially requires system changes to DNO-/IDNO and Supplier systems, which could have significant lead times and costsLikely to require a change to DNO and supplier systems

Commented [CH13]: Working Group Notes - Use the 48 HH period of profiled consumption to work what the new rates are to apply to the time period. Validation for Suppliers required. No need for an Exelon change. Suppliers validation required.

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Option 2b

2.21 An alternative Party approach could be to remove the reliance on the SSC/TPR combinations.

2.22 In reality this would involve all LLFCs being mapped to the unrestricted SSC/TPR combination. DNOs would then use the profiled HH consumption values and invoice the supplier for units in the red/amber/green time bands but all against the unrestricted SSC/TPR combination.

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Pros	Cons
Both suppliers and distributors receive the same data	Potentially requires system changes to DNO-/IDNO and Supplier systems, which could have significant lead times and costsNo difference in the size of the D0030 Likely to require a change to DNO and supplier systems
There would be a reduction in the size of the D0030 as (for example) two rate tariffs which currently use two lines on the D0030 would only use a single line.	Supplier and DNO would be responsible for independently splitting data from the D0030 into unit rates, giving potential for validation discrepancies.
No central system changes required.	

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Option 2c

2.23 Under this approach, the SVAA would use the pseudo SSC/TPR combinations currently being used for HH aggregate settlement to report HH profiled data to the DNO.

2.24 The DNO would then invoice the supplier on these SSC/TPR combinations in the existing manner (as introduced under P300).

Pros	Cons
<u>Both suppliers and distributors receive the same data</u>	<u>No difference in the size of the D0030 file</u> <u>Potential expansion to the D0030 as (for example) two rate tariffs which currently use two lines on the D0030 would be split over three.</u>
<u>No central system changes required.</u>	<u>Risk of non-billing – if the SVAA receives an invalid combination with the DNO pseudo SSC/TPR combination, it will not be reported to the DNO</u>
<u>Minimal DNO and supplier system changes required.</u>	

2.25 In order to progress with DCP 268, one of options 1a-1d needs to be selected, along with one of options 2a-2c. The following table outlines the number of lines which would be needed on the D0030 for each combination, along with supporting comments

<u>Count of Combinations SVAA Sends and Receives</u>	<u>Option 2a</u>			<u>Option 2b</u>			<u>Option 2c</u>		
	<u>SVAA receives</u>	<u>SVAA Sends Out</u>	<u>Comments</u>	<u>SVAA receives</u>	<u>SVAA Sends Out</u>	<u>Comments</u>	<u>SVAA receives</u>	<u>SVAA Sends Out</u>	<u>Comments</u>
<u>Option 1a</u>	<u>Not Compatible</u>			<u>161</u>	<u>7</u>	<u>1 line per LLFC</u>	<u>161</u>	<u>21</u>	<u>3 lines per LLFC (1 for each pseudo SSC/TPR combination)</u>
<u>Option 1b</u>	<u>Not Compatible</u>			<u>161</u>	<u>9</u>	<u>1 line per LLFC plus additional line for MC F and G</u>	<u>161</u>	<u>27</u>	<u>3 lines for each LLFC plus 3 lines for each of MC F and G</u>
<u>Option 1c</u>	<u>161</u>	<u>161</u>	<u>This is effectively the status quo option</u>	<u>161</u>	<u>16</u>	<u>1 line per LLFC per profile class</u>	<u>161</u>	<u>48</u>	<u>3 lines for each combination of LLFC/PC</u>
<u>Option 1d</u>	<u>Not Compatible</u>			<u>Not Compatible</u>			<u>161</u>	<u>483</u>	<u>Potentially 3 lines for every incoming combination</u>

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3 REQUEST FOR INFORMATION

3.1 Parties are asked to consider the following RFI questions:

Question Number	General Questions
1.	Please advise which is your preferred option? Please provide your rationale inclusive of any financial, resource or system impact or restriction.
2.	Please provide your comments on <u>all</u> options 1-5 (1a-d and 2a-c) based on your priority of preference for the solution proposed? Please provide your rationale inclusive of any system impacts.
3.	What do you consider is the development timescale required for <u>each-any</u> of these options? Please provide your rationale.
4.	Are there any alternative solutions or unintended consequences that should be considered by the Working Group?

Commented [OC15]: Asking for feedback on 'each' option seems to require each party to have considered each in detail which is unlikely to be the case. We want as much feedback as possible so feel 'any' would be a better approach.

3.2 Responses should be submitted using Attachment 1 to dcusa@electralink.co.uk no later than 30 August 2016.

Commented [OC16]: As mentioned earlier think this needs to be at least the middle of September so that receive as much feedback as possible.

3.3 Responses, or any part thereof, can be provided in confidence. Parties are asked to clearly indicate any parts of a response that are to be treated confidentially.

4 NEXT STEPS

4.1 The DCP 268 Working Group will review the RFI responses with a view to making a recommendation to the DCUSA Panel.

DCUSA RFI

4.2 If you have any questions about this paper or the DCUSA Change Process please contact the DCUSA Help Desk by email to dcusa@electralink.co.uk or telephone 020 7432 3017.

ATTACHMENT

- Attachment 1 - DCP 268 RFI Response Form
- Attachment 2 - Three Options on the D0030 Dataflow
- Attachment 3 – P300 Final Requirements
- Attachment 4 - DCP 268 Change Proposal