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SECMP0067 'Service Request Traffic Management'

Annex F

Refinement Consultation responses

About this document

This document contains the full non-confidential collated responses received to the SECMP0067 Refinement Consultation.

Question 1: Do you agree with the solution put forward?

Question 1			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	No	Given the impacts assessed, there is a potential detrimental effect on systems and processes.
E.ON	Large Supplier	Yes	E.ON is broadly in favour of the proposed solution put forward but have concerns in the following areas: 1. How this solution will work with individual/supplier specific retry strategies in the event of a HTTP503 response being received when commands are being throttled. E.ONs retry strategy is currently designed to be specific to SR types and associated DSP timeout values, which would require a high degree of rework to accommodate throttling of unknown duration that this change will introduce. 2. The absence of most installation and commissioning commands from the list of exempt SRs. Join and unjoin commands have been included in the list, but that might be academic if commands before and after unjoin are not included. For example, the orchestration may never make it to the join/unjoin activity causing higher volumes of manual intervention and/or much higher volumes of alerts being generated depending on where the orchestration was stalled due to throttling. 3. The lack of detail regarding backlog management following DSP outages.

Question 1			
Respondent	**Category**	**Response**	**Rationale**
			Planned maintenance activity often completes at around 2am, which coincides with other scheduled metering tasks such as checking for available OTA images as well as Supplier scheduled tasks. We don't currently have a high degree of confidence that this would not trigger throttling and much higher failure rates when the DSP comes back online. 4. The impact on PAYG installs has not been fully considered if I&C commands are not included in the exempt list, particularly when SMETS2 installs are the only option available.
SSEN	Electricity Network Party	Yes	The Modification proposed looks to provide a suitable solution for providing reliable and predictable system behaviour under extreme load conditions.
EDF Energy	Large Supplier	No	We do not agree with the solution provided, as it does not seem to fully meet the business requirements. Specifically, requirement 5 requires that 'the DCC will provide a transparent reporting process to update Service Users on when throttling has taken place". The solution to this within the DCC's Preliminary Assessment is that: "Users will receive synchronous responses to Service Requests, and if the request is subject to throttling an HTTP 503 response will be received." An HTTP 503 response only indicates that the service is unavailable, not why – it does not indicate that throttling has taken place. In this situation Service Users will not know why the Service Request are not being processed, or that they could take actions to remedy the situation. This is not transparent, or fit for purpose.

Question 1			
Respondent	**Category**	**Response**	**Rationale**
			The solution also doesn't provide an early warning system to notify Service Users before capacity allocations are breached, although it is noted that this will be investigated further. This would seem to be an important requirement as it would enable Users to take action to prevent the overload scenario for occurring in the first place. Given the potential impacts that throttling of Service Requests has on Users preventing the problem from occurring in the first place should be more prominent within the solution. The Mechanism Service Capacity Allocation Formula detailed in references Pre-Payment Multiplier to give additional weighting to Users that manage Pre-Payment meters. While this is broadly reasonable it is not clear how DCC will determine whether a meter is in prepayment mode or not and apply this to the allocation. As far as we are aware DCC does not hold the payment mode of each smart in the Inventory, so it is not clear how this calculation will be undertaken and relevant thresholds determined.
Electricity North West Limited	Electricity Network Party	No	We have a concern that this proposal results in a significant spend (£1.6m) without any clear volumetric / performance analysis and has the potential to restrict network operators use of the system during extreme weather events. Our understanding is that capacity issues are mostly associated with spurious alerts sent from non-compliant / defective devices. Focussing initially on the root cause around a perceived lack of compliance testing by manufacturers and suppliers may be more beneficial at this stage than progressing this proposed modification. The proposal references "the beast from the east" as an example of how traffic management would protect the DDC network – the implication clearly being that DCC would want to restrict network operators ability to check the Supply Status of customers. When

Question 1			
Respondent	**Category**	**Response**	**Rationale**
			extreme weather events do occur then it is exactly this functionality that network operators need to ensure that we can bring the networks back and ensure that we get customers back on supply. Is it worth considering whether such funds would be better spent by the DCC carrying out a study finding out whether refreshing hardware or adding additional capacity could mitigate any risks around traffic management? Additionally, the traffic management mechanism gives preference to Pre-payment commands but no preference to the ability of the DNO's to read the Supply Status. We already cannot rely on the Power Outage solution alone due to compromises made by the DCC and CSP's without consultation/agreement from network operators and therefore using the option to Read Supply Status is the only effective tool we have.
Western Power Distribution	Electricity Network Party	No	Whilst we agree that it is sensible to have some protection for the DSP in the event of extreme circumstances, we question if this is the best solution. We have concerns that this solution is potentially not addressing the root cause. We would expect this mechanism to be used rarely (if ever) due to the DCC being designed to cope with Users expected traffic and existing protection mechanisms that are in place. We are unsure if using the standard HTTP503 response is the best solution as from a User perspective it will be unclear whether the DCC System is down or if a breach has occurred, and each scenario could require different actions by the users. Also we seek clarification as to how the solution will protect the DSP if their capacity is breached and Users are sending Priority Service Requests? We have concerns as to whether the proposed solution is the most efficient and financially appropriate solution (see comments in Question 10).

Question 1			
Respondent	**Category**	**Response**	**Rationale**
Npower	Large Supplier	No	Whilst we understand the concerns, we feel that this proposed solution is a step too far. This is a near draconian resolution to a problem that could have adverse impacts to commissioning, and therefore the smart rollout. Prior to this step, npower would want to see alternatives that include process controls to prevent this, analysis of the key at risk periods, the points at which differences could be seen in future data SR's and immediate - etc. We feel until these alternatives and proactive approaches are thoroughly investigated, we would be unable to support this kind of throttling. DCC to explore better ways to organise the traffic We would like the DCC to explore other ways to organise the traffic.

Question 2: Will there be any impact on your organisation to implement SECMP0067?

Question 2			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	Yes	Our operational teams have assessed the impacts and believe the throttling down of SRs would impact internal systems and processes as each SR has an associated time which would time-out and stop the activities. This would require a re-trigger the SR which impacts the threshold (System Capacity & Service User Capacity), with expenditure costs due to time and resources to resolve the SR issue.
E.ON	Large Supplier	Yes	A full review of automated retry actions would be required to determine the impact during a throttling event and any required changes developed/tested/implemented.
SSEN	Electricity Network Party	Yes	From the modification report, the repurpose of HTTP response code 503 will potentially require some internal system changes.
EDF Energy	Large Supplier	Yes	As a DCC User we would be subject to the Service Request Management Mechanism and so would need to implement business process changes to be able to manage the impact. Depending on the final technical solution we may also need to make changes to our User systems; for example if there is an 'early warning' mechanism and this is sent as a form of alert or other DUIS message.
Electricity North West Limited	Electricity Network Party	Yes	We do feel that more information would help identify the potential impacts, for example: • Has the DCC already established at what point a capacity breach may occur? • Have any breaches occurred to date, if yes when and under what circumstances. If no, then when does the DCC forecast reaching capacity given the next phase of the smart meter rollout is up to 2024? • At what point would the solution be expected to actually kick in, what would be the optimum time to implement such a change – if at all?

Question 2			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Electricity Network Party	Yes	Western Power Distribution will be impacted by this change should there be breaches in the DCC system capacity, as we will need to handle the HTTP503 error differently.
Npower	Large Supplier	Yes	This has the potential to disrupt our field and back office services.

Question 3: Will your organisation incur any costs in implementing SECMP0067?

Question 3			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	Yes	There will be costs associated with the potential changes to systems and processes however we are unable to ascertain the full extent at this time.
E.ON	Large Supplier	Yes	Analysis, design, development and delivery costs for any required changes to retry capability based on receipt of HTTP503 responses
SSEN	Electricity Network Party	Yes	The costs that would be incurred are currently unknown
EDF Energy	Large Supplier	Yes	Again this will depend on the exact nature of the final solution and whether any system/DUIS changes are required. As currently proposed the costs for implementing SECMP0067 would be relatively low, however as noted in our response to question 1 would do not believe that the current solution is fit for purpose.
Electricity North West Limited	Electricity Network Party	Yes	The proposal mentions “fair share” and we would be interested in additional details of how this has been defined / calculated. Network Users are required to pay DCC charges based upon their respective share of MPANs – we are paying for 2.4m MPANs (smart and non-smart) but only 60k have been enrolled. Our customers would find it difficult to accept continuing to foot the bill while giving the DCC a licence to restrict our use of the system.
Western Power Distribution	Electricity Network Party	Yes	In addition to the implementation costs we will incur if this modification is approved, we will need to update our systems to handle the HTTP503 differently. We don’t believe that these costs will be significant.

Question 3			
Respondent	**Category**	**Response**	**Rationale**
Npower	Large Supplier	Yes	Potentially this would impact cost from a install perspective and a number of our teams. Costs tbc.

Question 4: Do you believe that SECMP0067 would better facilitate the General SEC Objectives?

Question 4			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	No	There may be merit to this improving the operation of Smart Meter services, objective (a). We disagree that this better facilitates SEC Objective (e) regarding security of supply for end consumers.
E.ON	Large Supplier	Yes	
SSEN	Electricity Network Party	Yes	SSEN agree that this modification would better facilitate General SEC Objective (a)
EDF Energy	Large Supplier	Yes	We agree that SECMP0067 would better facilitate SEC Objective (a) as it should reduce the amount of DCC system downtime that Users that operate within their allocations experience. We do not agree that this change better facilitates SEC Objective (e). We would welcome clarification as to the intent of this SEC Objective as this is not the first time DCC has noted that a change to their systems would better facilitate this Objective. In our view the DCC systems are not an “energy network” as referenced in this SEC Objective.
Electricity North West Limited	Electricity Network Party	No	While we understand the intent of this proposed modification we are not convinced that any General SEC Objectives will be better facilitated by its implementation.
Western Power Distribution	Electricity Network Party	No	We don’t agree that this modification would better facilitate SEC Objective (a) by ensuring an efficient operation of Smart Metering Systems as we don’t feel that it fully addresses the problem.

Question 4			
Respondent	**Category**	**Response**	**Rationale**
			We disagree that this modification better facilitates SEC Objective (e) as we do not feel that it facilitates Network Operators in innovating the design and operation of their networks to ensure a secure and sustainable supply of energy, especially as Network Operators cannot send SRVs that control the supply to a premise.
Npower	Large Supplier		

Question 5: Noting the costs and benefits of this modification, do you believe SECMP0067 should be approved?

Question 5			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	No	We believe that further analysis is required to understand the likelihood of these rare events occurring and whether this would justify the costs of the modification. At current assessment, we do not believe SECMP0067 should be approved.
E.ON	Large Supplier	No	Without additional details provided on the areas of concern outlined in response to Question 1, we would not recommend approval of this proposal.
SSEN	Electricity Network Party	Yes	SSEN agree that this modification should be approved. However, from the illustrative examples in the appendices, it is not clear how much impact this will have on SSEN. Noting the implementation costs, SSEN would also like to understand the current capacity levels and how often this new functionality would potentially be invoked. This would allow SSEN to understand if this is the best solution to address the issue, noting the costs and benefits.
EDF Energy	Large Supplier	No	As noted in our response to question 1 there are a number of issues that would need to be addressed before this Modification should be approved.
Electricity North West Limited	Electricity Network Party	No	Please see our response to Question 1.
Western Power Distribution	Electricity Network Party	No	We are currently unsure whether this modification should be approved. There is a significant cost to implement this modification and there is not a clear benefit case detailed. We can also see that the DCC were asked to advise how often they believe that this throttling would be used but that is unanswered.

Question 5			
Respondent	**Category**	**Response**	**Rationale**
			We question if this is the best solution and whether all other options have been considered, i.e. User ADTs (which are designed to protect against a DoS), or gateway restrictions into the DSP. There have also been no details around the DCC capacity and how much of this is being used to provide any perspective. Finally, due to not knowing the DCC capacity, amongst other factors, (all the values in the legal text are for illustrative purposes only) it is difficult to understand exactly how this modification might impact us.
Npower	Large Supplier	No	As per our comments to question 1.

Question 6: How long from the point of approval would your organisation need to implement SECMP0067?

Question 6			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	12 months	There will be lead time associated with systems and processes.
E.ON	Large Supplier	Unknown at this stage	
SSEN	Electricity Network Party	Minimal	The time needed to implement is currently unknown
EDF Energy	Large Supplier	Dependent on final solution	As noted previously this would depend on the exact nature of the final technical solution and whether any system/DUIS changes might be required, for example for 'early warning' alerts. If not then a minimum lead time of three months would be required.
Electricity North West Limited	Electricity Network Party	At least 6 months	Based on any final solution we would need to review our systems and processes and complete any relevant changes.
Western Power Distribution	Electricity Network Party	12 months	Due to potential system changes to handle the HTTP503 error code we require a 12 month lead time.
Npower	Large Supplier		

Question 7: Do you agree with the proposed implementation approach?

Question 7			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	No	Given the lead time required to undertake full impact assessment and delivery of any changes, eight months to implementation date will not be sufficient.
E.ON	Large Supplier	Yes	
SSEN	Electricity Network Party	Yes	Understanding the changes required, SSEN agree with the implementation approach
EDF Energy	Large Supplier	Yes	We agree that this change should be implemented as early as possible subject to a final technical solution being agreed.
Electricity North West Limited	Electricity Network Party	Yes	This does seem a reasonable approach to take.
Western Power Distribution	Electricity Network Party	No	See Question 6.
Npower	Large Supplier	No	We are not supportive of the solution

Question 8: Do you agree that the legal text will deliver SECMP0067?

Question 8			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	No	As we do not agree with the actual change being proposed, we are unable to agree that the legal text will deliver SECMP0067 as it currently stands.
E.ON	Large Supplier	Yes	
SSEN	Electricity Network Party	Yes	SSEN agree that the legal text changes are adequate in delivering SECMP067.
EDF Energy	Large Supplier	No	While we broadly agree with the content of the legal text, we note the following comments: • The use of the word 'throttle' seems out of place within this legal text – would it be more appropriate to use a term like 'manage' or 'control'. • The legal text does not place any of the obligations on the DCC that are noted in the business requirements – specifically the obligations on providing reporting as to when throttling has taken place. These should be included for completeness.
Electricity North West Limited	Electricity Network Party	Yes	We believe the legal text will deliver the modification as drafted.
Western Power Distribution	Electricity Network Party	No	We believe that there is a misprint on page five of the Traffic Management Mechanism Document, under Table 6 it states 'by the total available capacity from table 6 (e.g. 270)' and we believe that this should read 'by the total available capacity from ~~t~~Table ~~6~~ 5 (e.g. 270)'.

Question 8			
Respondent	**Category**	**Response**	**Rationale**
			Also according to DUIS there is a Service Reference Variant for all Service Requests and therefore for consistency these should be included in all rows in the Prioritised Service Requests List.
Npower	Large Supplier		

Question 9: Do you have any Service Requests you want added or removed from the list of prioritised Service Requests?

Question 9			
Respondent	**Category**	**Response**	**Rationale**
SSE	Large Supplier	No	These seem reasonable and given that there should be a process by which this SR list can be modified in the future, we have no amendments at this time.
E.ON	Large Supplier	Yes	Additional SRs involved in HAN creation/device join completion as a minimum e.g. 8.11 8.1.1 Configuration can be completed later and would not require a further site visit
SSEN	Electricity Network Party	Potentially	Looking forward, with the uptake of EV, alongside SEC Mod's 25 and 46. It may be required that any SRV's relating to ALCS/HCALCS (7.6, 7.7 & 7.8) may need to be added to the prioritised Service Requests list.
EDF Energy	Large Supplier	Yes	It would have been useful to have the logic for why these prioritised Service Requests have been included on the list as in many cases it is not clear. Where something should be included on this priority list should be driven by the critical nature of sending the relevant command – for example to complete a meter installation while an installer is on site or to put a customer back on supply. It is not clear why the following Service Requests have been included as they do not seem to meet these criteria: • SRV1.5 (Update meter balance) – we can understand why SRV 2.2 would be included but it is not clear why this one would be time critical. • SRV 6.25 (Set electricity supply tamper state) – it is not clear why this would be a priority or what the impacts of delaying sending this SRV would be.

Question 9			
Respondent	**Category**	**Response**	**Rationale**
			• SRVs 8.14.1 and 8.14.2 – We really don't understand the logic behind allocating these as a priority given that there is a time window in which they can be sent in the first place and a short delay will not have any material impact. Consideration should be given to including SRVs 7.5 (Activate Auxiliary Load) and 7.6 (Deactivate Auxiliary Load) as the logic is the similar to enablement and disablement, these SRVs might also be used as part of a time critical demand control event.
Electricity North West Limited	Electricity Network Party	Yes	We would want Service Request SR7.4 Read Supply Status' adding as our requirement. We were concerned that without first agreeing what the likely candidate list is and analysing the impact of those service request volumes on the DCC that it would be difficult to go ahead and develop system changes.
Western Power Distribution	Electricity Network Party	No	We are happy with the SRVs that are currently included on the list. We would like to highlight that if SECMP0046 were to be approved then SRV 7.6 Deactivate Auxiliary Load should be added to the list as this SRV would be used by Network Operators in a situation where the networks are on the verge of being overloaded and would enable supplies to remain on. Please note that we have concerns about Prioritised Service Requests (as per Question 1).
Npower	Large Supplier		

Question 10: Please provide any further comments you may have

Question 10		
Respondent	**Category**	**Comments**
SSE	Large Supplier	SSE has been actively involved in all stages of the development of this Mod and have repeatedly challenged both the requirements and the proposed solution as they do not seem to align to the actual problems being faced and place changes upon DCC Users to resolve problems within the DCC Total System. All the changes are toward protecting the DCC without achieving any such protections to those connected to them whilst placing additional obligations upon Users.
E.ON	Large Supplier	N/A
SSEN	Electricity Network Party	
EDF Energy	Large Supplier	There seems to be misalignment between the solution expressed in the Modification Report and that detailed in the DCC's Preliminary Impact Assessment which has made it difficult to understand the exact nature of the technical solution. For example the PIA notes that "The DCC will investigate whether it can provide an early warning system to notify Service Users before capacity allocations are breached so that a User can't exceed their defined capacity unknowingly" – this early warning system is not referenced at all in the Modification Report so it is not clear whether it will ever form part of the actual solution.
Electricity North West Limited	Electricity Network Party	
Western Power Distribution	Electricity Network Party	Western Power Distribution would like to understand if the reports that will be provided to the SEC Panel will only be in the event of a User and/or DCC capacity breach and if so question if there is a need for the SEC Panel to have a monthly report showing capacity compared to usage, even if there has not been a breach event. It would also help highlight if there are concerns regarding capacity prior to a breach event happening.

Question 10		
Respondent	**Category**	**Comments**
		As per our responses to Questions 1 and 5 we have some questions and concerns that we feel should be addressed. We would also like to understand the comment in the DCC PIA that states: ***Dependency Management/Feature Switch*** *DSP will implement this CR with the 'Feature Switch' mechanism in order to allow flexibility in enabling the traffic management functionality during Integration Testing and in Production.* Does this mean that the DCC are planning to release the code with the switch 'OFF', possibly prior to a modification approval in the same way that they have with SECMP0062? If not can this statement be explained? Finally, there is nothing in this proposal that explains the course of action taken to User(s) that constantly breach their capacity allowance. What is the process for addressing the issue at the root cause and not just acting when the situation arises?
Npower	Large Supplier	