Company	Confidential/ Anonymous	1a. Do you agree that the above identifies an appropriate range of private networks?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Yes. ESPE believes that the list of examples has identified an appropriate range.	Noted
British Gas	Non-confidential	Yes	**Noted**
BUUK Infrastructure	Non-confidential	Yes, we feel the list provides an appropriate range.	Noted
Electricity North West Limited	Non-confidential	We believe the above list identifies the majority of private networks types. As acknowledged the list is not exhaustive. The common factor is the existence of a single property owner, with several tenants. Competition in supply on private networks is not yet a common arrangement in our network area so determining the types of network that might arise is open to consideration, rather than informed by extensive experience, at this time. Further potential examples could be shopping centres/malls, a large retail premises (perhaps a supermarket) containing independent shops (e.g. key cutters, hairdressers, travel agency), or train stations. Additionally, we are aware of proposed private wire networks connecting a number of commercial sites with embedded generation, and smaller scale local energy schemes. It may be worth considering these PNO types as we believe they are likely to be increasingly commonplace, and might be more sophisticated in the way they engage with industry arrangements.	**Noted**

		We note that the list is of different sectors of enterprises which might have private networks, but is not a list of different types by commercial, metering, or technical arrangements. As such, whilst we would expect that the list provided would contain a diversity of industry arrangements; we cannot say that this would certainly be the case.	
E.ON energy solutions	Non-confidential	Yes we agree these can be identified as PNO's	**Noted**
Leep Electricity Networks Limited	Non-confidential	We agree, albeit a non-exhaustive list.	**Noted**
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	The consultation identifies a range of private network sites which is useful for context. But there are variants of the sites identified, and will likely be further variants in the future. Hence we think solutions should focus on broad applicability to each of the three metering and Settlement arrangements rather than attempting to cater for specific scenarios.	**Noted**
Power Data Associates Ltd	Non-confidential	Yes	**Noted**
SP Distribution & SP Manweb	Non-confidential	Yes	**Noted**
			Noted

UK Power Networks	Non-confidential	Yes we believe that the range of private networks listed in 1.1 of the consultation document covers a broad range of current types of private networks.	**Noted**
Western Power Distribution	Non-confidential	Yes	**Noted**
Leep Electricity Networks Limited	Non-confidential	We agree, albeit this is a non-exhaustive list.	**Noted**
UK Major Ports Group	Non-confidential	We agree that major ports are examples of PNO operators. We also believe that similar examples could be found in other large industrial sites, such as chemical works or steel works with substantial networks 'inside the fence' and other users such as contractor compounds or tenanted industrial activity.	**Noted**
British Steel Limited	Non-confidential	Yes	**Noted**
Forth Ports Limited	Non-confidential	Yes	**Noted**
Working Group Conclusions: The respondents agreed that an appropriate range of PNOs had been identified by the Working Group, whilst there was acknowledgement that it was not an exhaustive list. Some additional examples were raised, for example other large industrial sites, such as chemical works or steel works with substantial networks 'inside the fence' and other users such as contractor compounds or tenanted industrial activity.			

Company	Confidential/ Anonymous	1b. If you are a PNO please detail which type of network you manage? If you are responding and are not a PNO, please be clear if you are considering a specific example in each section of your response.	Working Group Comments
ESP Electricity Ltd	Non-confidential	Not applicabl	Noted
British Gas	Non-confidential	N/A	Noted
BUUK Infrastructure	Non-confidential	We are not a PNO and will be attempting to consider all private network types throughout our response.	Noted
Electricity North West Limited	Non-confidential	N/A	Noted
E.ON energy solutions	Non-confidential	We are not responding as a PNO.	Noted
Leep Electricity Networks Limited	Non-confidential	As a PNO we operate small business / industrial sites.	Noted
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and	Non-confidential	We are not a PNO. Our response to questions four to eight considers both overarching considerations applicable to all types of private network, along with specific considerations to each of the three metering and Settlement options.	Noted

Northern Powergrid (Yorkshire) plc			
Power Data Associates Ltd	Non-confidential	Not a PNO.	Noted
SP Distribution & SP Manweb	Non-confidential	DNO – Noted	Noted
UK Power Networks	Non-confidential	N/A	Noted
Western Power Distribution	Non-confidential	N/A	Noted
Leep Electricity Networks Limited	Non-confidential	N/A	Noted
UK Major Ports Group	Non-confidential	Throughout this response we will be responding specifically in the context of major ports.	Noted
British Steel Limited	Non-confidential	British Steel operates 2 industrial sites, one simple, one complex, within which it operates as a PNO. Simple site is demand only with power consumed by British Steel and 2 other parties.	Noted

		Complex site is primarily demand but also has embedded generation. Demand consumers are British Steel and 9 other parties. Generation is from 2x CHP stations operated by British Steel, and 2x gas engines operated by a 3rd party.	
Forth Ports Limited	Non-confidential	Port Networks of various scales, from covering a few acres to hundreds of acres. Generally these sites are fed at HV or EHV. This consultation could give the perception that all customers on private networks have invoked third party supplies. This is not the case, a small number have.	Noted
Working Group Conclusions: Four respondents identified that they were PNOs.			

Company	Confidential/ Anonymous	2. Do you understand the intent of DCP 328?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Yes, the intent is to introduce a common approach to applying cost-reflective and proportionate Distribution Use of System (DUoS) charges to customers embedded on private networks who want to take advantage of competition in supply and appoint a Supplier of their choice.	Noted
British Gas	Non-confidential	Yes	Noted
BUUK Infrastructure	Non-confidential	Yes	Noted

Electricity North West Limited	Non-confidential	Yes. We note the intent of the change is related to cost reflectivity only, but as with all changes it has the potential to impact all DCUSA charging objectives.	Noted
E.ON energy solutions	Non-confidential	Yes, we understand the intent of DCP 328.	Noted
Leep Electricity Networks Limited	Non-confidential	We understand the intent of the change proposal.	Noted
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Yes	Noted
Power Data Associates Ltd	Non-confidential	Yes	Noted
SP Distribution & SP Manweb	Non-confidential	Yes	Noted
UK Power Networks	Non-confidential	Yes	Noted

Western Power Distribution	Non-confidential	Yes	Noted
Leep Electricity Networks Limited	Non-confidential	We understand the intent of the change proposal.	Noted
UK Major Ports Group	Non-confidential	Yes	Noted
British Steel Limited	Non-confidential	Yes	Noted
Forth Ports Limited	Non-confidential	Yes	Noted
Working Group Conclusions: All respondents indicated that they understood the intend of DCP 328.			

Company	**Confidential/ Anonymous**	**3. Are you supportive of the principles of DCP 328?**	**Working Group Comments**
ESP Electricity Ltd	Non-confidential	Yes, ESPE is supportive of the principles of DCP 328.	Noted
British Gas	Non-confidential	We agree that a common approach is sensible. We do not agree with the assertion that the use of system charges faced by the multiple suppliers involved when competition in supply is in place should sum to the same total as would be applied if a single supplier were supplying the site as a whole. Use of system charging	Noted

		should provide appropriate forward-looking cost signals to end users of the network. Therefore, to the extent that competition in supply may afford greater transparency and granularity to the DNO about the end users of (part of) its network, we see no reason why this should not facilitate the application of more appropriate forward-looking tariffs (e.g. domestic tariffs to domestic users, small non-domestic tariffs to small non-domestic users etc.). If the application of such charges ultimately does not sum to the amount that would have been charged if no competition in supply were in place, this would seem to us to be the result of more appropriate cost reflective charging of the end users.	
BUUK Infrastructure	Non-confidential	Yes	Noted
Electricity North West Limited	Non-confidential	While we are supportive of the principles our fundamental concern is that competition law requirements do not appear to have been taken into consideration (particularly in relation to margin squeeze). Consequently, we would welcome reassurance from the working group of its assessment of the options against competition law.	The Working Group will consider competition law requirements when considering the options within the CP.
E.ON energy solutions	Non-confidential	No comments	Noted
Leep Electricity Networks Limited	Non-confidential	We support the principles upon which this change has been raised.	Noted
Northern Powergrid on	Non-confidential	Yes	Noted

behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc			
Power Data Associates Ltd	Non-confidential	Yes	Noted
SP Distribution & SP Manweb	Non-confidential	Yes	Noted
UK Power Networks	Non-confidential	Yes we are supportive of the need to review the arrangements covered by DCP328.	Noted
Western Power Distribution	Non-confidential	Yes	Noted
Leep Electricity Networks Limited	Non-confidential	We support the principles upon which this change has been raised.	Noted
UK Major Ports Group	Non-confidential	For the large PNOs, such as major ports, we believe that the high visibility of such PNOs on the DNOs systems means that the	Noted

		dialogue required to resolve the issues raised by the DCP 328. They are sufficiently large, and the operators sufficiently knowledgeable that they form a 'by exception' small (but high volume) set of Distribution Network users.	
British Steel Limited	Non-confidential	Yes	Noted
Forth Ports Limited	Non-confidential	Having participated in the group, I struggle to see the need in relation to larger industrial networks, but can absolutely see the issues the industry faces in the setting where there is a PNO that has no interest or understanding in relation to their network, which could occur at smaller network scales (such as in-building private networks). Our view is that it is unlikely that there is one solution that fits all types of PNO. We obtained the first and second Ofgem Approved Charging methodologies for private network operators and as such we went through many of these issues years ago with the electricity industry, our customers and other interested parties. It seems that these issues keep coming up despite having been resolved years ago (in our view), however it has become clear through this consultation that larger PNOs are being considered alongside smaller (predominantly in-building) PNOs, where the DNO's may have an issue.	The Working Group is aware of the fact that there may not be one solution that fits all PNOs and this will be a consideration throughout the review of the option.
Working Group Conclusions: A majority of the respondents were supportive of the principles of DCP 328. The Working Group will ensure that competition law requirements are appropriately considered for any proposed solution/s. The intent of the CP is to ensure that the proposed solution/s ensures a consistent approach across GB. The Working Group will also ensure that any solution facilitates the application of more forward-looking tariffs.			

Company	Confidential/ Anonymous	4. What are your views on option 1 and would you like the Working Group to consider this option further?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Option 1 - to invoice the Supplier at the private network boundary appears a straight forward approach but does require the distributor to receive/calculate gross DUoS to be charged at the boundary. It will not remove the need for a commercial agreement between the embedded customer and the Private Network Operator (PNO) for proportionate allocation of costs for the use of the PNO's assets. This restricts the ability for the customer to take advantage of competition in supply. This solution does not meet the objective of the proposal in supporting competition on private networks, and ESPE does not believe this option should be progressed	The Working Group will seek some clarity from existing PNOs regarding their existing processes, ie do they bill the supplier or the embedded customer for use of their assets?
British Gas	Non-confidential	In general, we would note that this is a complex area, and we would not wish to rule out any of the options prematurely. With respect to option 1, we note that this option only works for one of the four scenarios. This is likely to hinder the development of a common approach across all scenarios. We also don't believe it is appropriate to invoice a (boundary) Supplier in respect of units which it has not supplied (i.e. the units used by embedded customers for which another Supplier is responsible).	Noted - The Working Group notes that there may not be one option that suits all types of PNOs and scenarios and that more than one solution may be proposed to cater for this.
BUUK Infrastructure	Non-confidential	This option seems to work in most existing cases i.e. if there is a boundary Supplier present. It is not able to apply for how charges from the boundary MPAN are allocated to MPANs (provided by an MPAS provider who may or may not be the upstream electricity distributor) on the private network as this is out of scope of the DCUSA. There is no	Noted

		contractual arrangement in place between suppliers and the electricity distributor for the provision of use of system beyond the boundary in this case. While not a one size fixes all approach the option could prove an effective solution in cases where there is a boundary Supplier. It is therefore felt that this option should be developed and pursued further for a viable solution.	
Electricity North West Limited	Non-confidential	If this option were deemed to be compliant with competition law we would comment as follows: It is not clear how the industry arrangements would be designed to facilitate this option. It is our view that this option could in theory be compatible with full settlement metering arrangements subject to the requirement for an additional boundary meter between the DNO and PNO. For full settlement metering, as with difference metering, the boundary meter data would be used for charging DUoS to the PNO supplier. Nil DNO DUoS charges would be applied to the end customer meters. The PNO could recover its costs through separate commercial agreements with end customers connected to its network. As option 1 requires a boundary meter to be in place, it could potentially distort competition in the distribution of electricity by requiring PNOs to bear additional costs not faced by DNOs. This would only arise in the case of full settlement metering, as a boundary meter is required under difference metering in any event.	Noted - As above the Working Group will ensure that the competition law requirements are considered when proposing a solution/s. In regard to compatibility with full settlement metering, the Working Group will seek clarification as to how there could be a boundary meter between the DNO and PNO as at present there isn't one.

		This option has the clear merit of ensuring DUoS costs for the PNO with competition in supply are the same as for a PNO with no competition in supply. This option would therefore clearly meet the intent of the change and we believe it should be investigated further.	
E.ON energy solutions	Non-confidential	We feel that Option 1 presents difficulties to both the boundary supplier & the PNO, as levying DUoS charging only on the boundary supplier potentially creates an inability for A – supplier to validate the DUoS invoice vs it's settlement data received, which under this scenario is after the metered data has been netted. The boundary supplier could request metered data at the boundary point to support internal validation in similar fashion as to how some LDSOs currently create the charges where the LDSO has stippled this method of DUoS charging in their published LC 14 charging statements. B – for the PNO, as they will not have a full understanding as to where elements of PN should be levied to the to the end customer particularly if the PNO has multiple competitive supply connections. The PNO cannot see the boundary metered data under the current arrangements creating difficulties for them to be agree what element DUoS belongs to them & the consumer receiving competitive supply within their network, so they would need to ensure that they get visibility of all metered data through a PNO connection agreement. It should be noted that this scenario exists today & in practice does work, however it is only suitable for large consumers connected via a PNO. On this basis we feel that this option should be considered further however as such arrangements are already in use, but also has its	Noted – as above the Working Group notes that there may not be one option that suits all types of PNOs and scenarios and that more than one solution may be proposed to cater for this.

		limitations this option can only be progressed if prvide a multiple option solution is tabled.	
Leep Electricity Networks Limited	Non-confidential	PNO Response: Con (for the PNO) This option would result in the utilisation of additional resources to collect / interrogate data. As a result, additional Third-Party Access costs would be generated and have to passed on. Con (for a customer) As PNOs currently sit outside DCUSAs remit, different operators could adopt different charging methodologies; resulting in a lack of consistently, causing confusion for suppliers and customers. Con (for a customer) As PNOs currently sit outside DCUSAs remit, other obligations, such as NTC terms for supply restoration times or payment terms could also differ. Resulting in a lack of consistently, causing confusion for suppliers and customers.	Noted
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Where difference metering is in place, this is our favoured option. ***Overall:*** The consultation identifies that this option is only applicable to sites with difference metering. So the introduction of this option would inevitably result in private networks being treated differently depending on the choice of metering and Settlement options taken. This risks creating perverse incentives for certain Settlement options to be selected over others. However, the use of system charges benefit of using an alternate Settlement approach should be marginal (albeit this depends on the option used for sites with full Settlement or shared	Noted

		metering) and so is likely to be outweighed by other considerations for the site which drive the choice of metering and Settlement option. ***Difference Metering:*** We agree with the advantages of this option which the consultation identifies. There is a further advantage that the DNO is applying capacity charges to the supplier of a customer with which the DNO has a connection agreement specifying that capacity. This is not the case under all other options except option four which the Working Group has discounted. The first three disadvantages which the consultation has identified (the requirements for the DNO to receive boundary data, a need for zero rates to be applied to data received through Settlement and the allocation of appropriate loss factors) can all be resolved through DNOs applying robust internal processes for the identification and treatment of such sites. We are not in a position to comment on how onerous the commercial arrangements required for the redistribution of charges levied on the boundary supplier to the suppliers of embedded customers would be, but we do not think such arrangements should be a reason why this option cannot proceed. In summary, the advantages materially outweigh the disadvantages. ***Full Settlement Metering:*** Not applicable. ***Shared Metering:*** Not applicable.	
Power Data Associates Ltd	Non-confidential	This would be appropriate for some scenarios. Where there is no boundary supplier then this cannot happen.	Noted

SP Distribution & SP Manweb	Non-confidential	This option ensures that all DUOS charges are levied accurately for those customers with the difference metering arrangement. It also has the advantage that the DNO will always invoice the units it has delivered. The DNO is only invoicing in respect of its own assets. From a billing perspective, so long as the DNO can receive gross boundary metering data, and differencing metering is in place for settlements, then there is no issues in billing DUoS and settlements. This is how we currently manage the small number of PNOs we have connected to our network with competition in supply. We would therefore like the working group to consider this option further, and is our preferred solution when difference metering is in place.	Noted
UK Power Networks	Non-confidential	Option 1 presupposes there is a metered boundary. We believe the DCP328 solution should work for all scenarios. This one will not work with full settlement. If there is difference metering then there must be a mechanism for deriving the gross boundary data. The consultation does not show the views of Data Collectors on the practicality of this. Moreover it could prove extremely difficult for the boundary Suppliers to validate the invoices as they would also need the boundary meter data, which will be different to their billing data, and seems to introduce un-necessary additional amount of complexity to the arrangements. There would need to be a dummy MPAN to differentiate the gross data provision from the net data being used in settlement for the boundary. The Data Collector would need to quote this in the D0036 data provided. Can the DC have a one meter to many MPANs relationship? Does the DC's system facilitate the provision of both gross and net data flows? It is not clear whether that could be sent over the DTN? Also the settlement metering would need to be charged zero use of system charges. This may imply a new tariff. As a result we do not believe that option 1 should be developed any further.	The Working Group believes that the benefits of multiple solutions outweigh the benefits of a one solution fits all. The Working Group notes the points regarding data and will ensure that it appropriately reviews how this process currently works in practice to ensure that the process can be as smooth as possible.

Western Power Distribution	Non-confidential	We believe that option 1 is impractical for the majority of CDCM sites as it relies on all embedded connections being measurement class C HH metered. In our opinion this option is limited to specialised sites that have passed through the BSCP514 complex metering process and should not be considered further by the working group.	As stated above, the Working Group notes that there may not be one option that suits all types of PNOs and scenarios and that more than one solution may be proposed to cater for this.
Leep Electricity Networks Limited	Non-confidential	IDNO Response: Pro (for the IDNO) This option works for the IDNO as the relationship appears to be straightforward and logical. It also proposes a less resource intensive option for an IDNO. Pro (for the IDNO) This would result in a standard methodology being developed for IDNOs and DNOs.	Noted
UK Major Ports Group	Non-confidential	We consider option 1 to be most appropriate for major ports who are PNOs. Indeed, it is our understanding that this is the approach generally in place today and operating in a largely satisfactory manner. It reflects the situation on the ground where metering is almost always HH, PNO operator and users are generally active participants and voltage levels are on an industrial scale. In addition the responsibilities and the accountabilities of owner of the boundary MPAN Settlement Meter are clear and transparent, both to the DNO and PNO users. To go further, we consider that the other options add considerable additional complexity and bureaucracy for PNO system owners and operators (and indeed the DNO) without adding materially to the efficiency and accuracy of the settlements. This care for the user experience is obviously important now, but becomes even more so as we as major ports look forward to a future which is likely to have much greater levels of electrification	Noted

		of major ports. This is through a combination of electrification of the ports own activities and the greater use of shore side power by vessels at berth. We understand that in circumstances such as blocks of flats, an example used a number of times in the consultation, the factors that make Option 1 efficient and effective for large industrial grid operators are much less likely to be in place. But we see the solution as a differentiated approach, rather than attempting to force a one side fits all sub-optimal solution on large and (dare I say it) relatively sophisticated operators and users.	
British Steel Limited	Non-confidential	As a PNO this would appear to be the most straightforward option and be simplest to implement as it effectively maintains the status quo, with PNO's continuing to bill 3rd parties a proportion of boundary DUoS and "PNUoS" costs. PN losses could also be covered off within the commercial agreement that would underpin the continued billing of these UoS charges. Maintaining a single DNP/PNO boundary relationship may also bring system wide benefits, with a diversity of loads helping cap the total site capacity requirement and therefore mitigating the need for upstream reinforcement and the associated costs these works may bring forward. Being the simplest solution it would also appear to reduce the need for the additional skills and resources a PNO will need to recruit to support the delivery of a number of the other options. These will no doubt result in increased PNO's costs and these will therefore be passed onto 3rd parties, reducing any commercial benefit being sought by the 3rd party. This appear to run counter	Noted

		to the aims of the Electricity and Gas (internal Markets) Regulations 2011. I would therefore request that the Working Group consider this option further.	
Forth Ports Limited	Non-confidential	Yes – this is the option that is currently adopted at our sites and seems to work well, without the need for too much additional resourcing. It is straightforward and cost effective. This is a fair and reasonable approach and it follows network approach adopted in the licenced areas in that the National Transmission network charges each of the DNO's who pass that onto their customers (whether directly or through an IDNO or PNO). It allows the PNO to remain in control of their site assets and connection agreement, which is critical as we have paid handsomely to secure that capacity and it would be inappropriate to allow others to assume control for that already purchased capacity. This also means that the DNO's invoicing is accurate for the point at which the transmission of electricity leaves their system, with no need for estimation of losses, reactive power or capacity that is within the private network. For larger networks, especially those with voltage transformation and larger industrial users, this solution fits best with DCUSA's and Ofgem's aims. We do accept that this approach may not suit smaller private networks such as blocks of houses, office blocks etc.	Noted
Working Group Conclusions: The PNOs that have responded to this consultation are supported of this option, whilst recognising that the solution is not appropriate for all types of PNOs and that it is likely that more than one solution will be required to cater for all PNO types. The Working Group notes the points regarding data and will ensure that it appropriately reviews how this process currently works in practice to ensure that the process can be as smooth as possible.			

The Working Group concludes that this option should be progressed further.

Company	Confidential/ Anonymous	5. What are your views on option 2 and would you like the Working Group to consider this option further?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Option 2 - to charge customers as if they were directly connected to the distributor and not the PNO. There would be additional administration required to ensure the correct allocation of the fixed, capacity and reactive charges so as to be cost-reflective and proportionate for each customer's usage. Negotiating the agreed capacities with each embedded customer may not reflect the agreed capacity assigned at the boundary for the PNO and could result in the wrong customer being charged for excess capacity. Additionally the distributor has no commercial relationship with the embedded customer on which to determine the agreed capacity. It would require a mechanism for the PNO to recover their costs of operating the network from the embedded customer's Supplier likely resulting in increased charges for the customer. This restricts the ability for the customer to take advantage of competition in supply. Due to the complexities and potential for a negative impact on the customer, we do not believe the WG should progress with this option.	**Noted**
British Gas	Non-confidential	We believe end users should face DUoS charges based on their individual characteristics, and not based on the connection characteristics of the private network they are connected to. This option seems to be predicated on the need to maintain the same overall charge as before competition in supply arose. As set out	Noted

		above, we do not believe that this is necessary, and we consider it may misplace the emphasis for an enduring solution. The option will create new complex tariffs which could reduce Supplier engagement and the extent to which embedded customers benefit from competition.	
BUUK Infrastructure	Non-confidential	Such an approach is not dissimilar to the way DNOs currently charge use of system in respect of MPANs on private networks servicing blocks of flats, however charges need to ensure that they are not billing for use of system on the private network as this is out of scope of the DCUSA. Tariffs in respect of such metering points would need to reflect that use of system is not provided on the same basis as it is to an IDNO; for example, • the need to include charges for licence fees and DCC fees, and • the need to reflect different services provided. If developed further this option could prove effective but potentially only on sites where there is BSC Complex Metering Arrangements, to ensure that adequate data was provided for the calculations. It is therefore felt that this option should be developed and pursued further for a viable solution.	Noted
Electricity North West Limited	Non-confidential	If this option were deemed to be compliant with competition law we would comment as follows: As noted this option is not compatible with any NHH metering. This restricts the freedom of the customer to select NHH metering arrangements.	Noted - As above the Working Group will ensure that the competition law requirements are considered when proposing a solution/s.

		The process of allocating fixed and capacity charges to customers is problematic for the reasons identified. Not all customers have agreed capacities. It is not possible to correctly allocate reactive power charges. This solution would not be compatible with mixed demand and generation PNOs. For these reasons we do not believe this is a satisfactory solution.	
E.ON energy solutions	Non-confidential	We feel that option 2 presents complexities associated to apportioning elements of DUoS charging fairly & appropriately for some of the charging items at each metering point, the resolution of any discrepancies detailed by the working group would need to involve multiple suppliers creating the possibility that disputes, any charges associated to reactive power and capacity charging. On this basis we feel that this option should not be considered by the workgroup any further.	Noted
Leep Electricity Networks Limited	Non-confidential	PNO Response: Con (for the PNO) There may be difficulties encountered as the PNO would need to understand how capacity is allocated and how any other costs are distributed across the boundary meter and the sub-meters. Con (for the PNO) This approach fails to take a view of losses across the network.	Noted

		Pro (for the PNO) From the PNOs perspective this is a preferable option as it focusses on the collection of the PNOs use of system charges (negating the collection of DNO charges).	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Option two should not be taken forward. ***Overall:*** This option would create an administrative burden for suppliers and DNOs, which increases the costs to serve embedded customers: • Without billing system changes, fixed charge allocation would require DNOs to create a tariff for each private network with the appropriate proportion of the fixed charge which would apply to a single customer connected at the DNO to PNO boundary. If the number of customers connected to a private network were to change, the appropriate proportion of the fixed charge would also change, and so the tariff would need to change. This is not practical. So fixed charge allocation would require DNOs to change their billing systems, which would likely be an expensive change as it would impact the calculations in complex billing procedures. The billing procedure would need to identify invoices for customers connected to private networks and divide the fixed charge by the count of customers connected to that network. This would require new standing data to be maintained in billing systems detailing the number of customers connected to each private network, which is likely to change over time. • PNOs would need to engage with DNOs regularly to ensure the correct MPAN count is used. Lack of engagement would lead to inappropriate fixed charge allocation for the end customer.	Noted

		• Suppliers would not be able to validate the fixed charge in invoices using current methods as the invoiced fixed charge will not align with published rates. Suppliers would not receive a dataflow indicating how many customers are connected to the private network so it may not be possible for any automated validation to take place. Despite this increased administrative burden, charges levied will not accurately reflect the impact customers connected to private networks have on the DNO network, due to the excess capacity charging and reactive power charging issues identified. ***Difference Metering:*** This option would introduce an administratively burdensome mechanism by which a less accurate end result would be achieved than under option one. ***Full Settlement Metering:*** The consultation identifies that this option cannot be applied to sites which are non-half-hourly or half-hourly aggregate Settled. Hence this option could only be applied to a subset of sites with full Settlement metering. It is not appropriate to apply this option to only a subset of sites of this type. ***Shared Metering:*** As with difference metering, this option would introduce an administratively burdensome mechanism by which a less accurate end result would be achieved than can be achieved through other options.	

Power Data Associates Ltd	Non-confidential	Could happen but will result in multiple tariffs and some complexity & continual administration by Distributor to determine correct DUoS charges.	Noted
SP Distribution & SP Manweb	Non-confidential	This option bills all suppliers for DUoS charges, for HH sites and does not cater for fully settled sites. The difficulties identified by the working group are regarding splitting the fixed charge and obtaining the capacity for each site within the Private Network. It could also lead to charging some HH MPANS exceeded capacity charges where if only the boundary capacity was charged, (as in option 1); no excess capacity charges are applicable. It will be the same for reactive charges. From a billing perspective, there are no issues in billing DUoS and settlements. For All HH Site Specific Settle with difference metering – our preference is option one. For All HH Sites Specific settled with full settlement metering, there are too many issues outweighing any benefits to this option, i.e. excess capacity and reactive charging accuracy and consistency along with the complexity of managing both the fixed change and capacity allocation, as such we would not want the working group to consider this option further.	Noted
UK Power Networks	Non-confidential	This solution would appear to work for all scenarios. However it would be difficult to actually replicate the boundary tariff as that requires the capacity of the overall site to be split across the customers, which would be extremely difficult / impossible to actually achieve as the distributor is not likely to have any relationship with the embedded customers within the network. It is also unclear how the distributor replicates the boundary tariff where there is a mix of HH and NHH customers connected to the PNO. The additional work to even attempt to make this possible is also likely to increase the	Noted

		administration costs of Suppliers and the Distributors involved. As a result we do not believe that option 2 should be developed any further.	
Western Power Distribution	Non-confidential	We believe that option 2 is impractical for CDCM sites as it relies on embedded sites using site specific line loss factor codes. Option 2 has limited applications where 2 or 3 EDCM sites form a small private network such as an "energy park". In this scenario the embedded sites have full settlement metering a very few metres away from the boundary position, all the meters have site specific LLFCs allocated by the DNO and the small number of parties involved makes it simple to agree how the fixed charges have been divided up. However, we think that these limited scenarios would also be covered under option 5 and therefore that option 2 should not be considered further by the group.	Noted
Leep Electricity Networks Limited	Non-confidential	IDNO Response: Con (for the IDNO) This option would be more resource intensive as the IDNO would need to collect revenue for any costs incurred by customers. Pro (for the IDNO) This option would result in the bad debt risk being minimised as the default risk reduces due to there being multiple suppliers.	Noted
UK Major Ports Group	Non-confidential	We do not believe that this option is suitable for major ports and would be a considerable, unwelcome backward step from option 1. The inaccuracies in data, such as capacity and reactive power charging would clearly be unwelcome and might be considerable. The additional costs of adding / upgrading settlement meters	Noted

		could be considerable. There is clearly additional and unwelcome / inefficient bureaucracy.	
British Steel Limited	Non-confidential	I would request that the Working Group does not consider this option further.	Noted
Forth Ports Limited	Non-confidential	This option may suit smaller networks, but is wholly inappropriate for larger networks, especially if there are industrial users and/or voltage transformation present. This option creates additional administrative burdens and assumes that all points where electricity can leave the network is on a fully settled meter. In the case of ports, the additional capital and administrative costs of this option are not feasible, some of our networks would need quite literally hundreds of additional fully settled meters purchased and installed. Putting aside the administrative cost, this would take years to achieve and flood the electricity industry with hundreds of unnecessary datastreams, each needing billing. It is also unclear how the DNO would allocate these charges to customers that are connected to a private network. It fundamentally goes against the principles currently adopted in the industry. This would be the equivalent to a PNO ignoring the DNO and negotiating directly with the National Transmission Network, the DNO would have to put up with whatever was agreed. DNOs would (quite correctly) not allow this to occur, because they require the ability to charge to incentivise use in line with the best interests of their network. PNO's are no different in this regard.	Noted

		The PNO needs to manage the connections to our networks, in particular capacity, reactive and charging for the transformation changes within the network. This allows us to actively manage our networks and can require us to discuss our needs with the DNO, where we may need to increase capacity agreements or investigate reactive or other adverse events on the network. Capacity and reactive charges by the DNO can only be to the boundary meter, otherwise they are unreliable estimates.	

Working Group Conclusions: A majority of the respondents were not supportive of this option. Concerns were in regard to the process of allocating fixed and capacity charges to customers. Within question 9 of this consultation response UKPN have put forward a potential alternative option, where there is a new tariff structure. An example which they considered was whether all PNO customers, whether boundary or embedded, have a fixed charge and unit charges only or unit charges only, with some smearing of capacity/fixed as appropriate.

The Working Group have therefore agreed to consider this option further to see whether this newly proposed option could be incorporated with option 2 to address the issues raised above.

Company	Confidential/ Anonymous	6. What are your views on option 3 and would you like the Working Group to consider this option further?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Option 3 - charging all customers as if they were connected directly to the distributor using existing tariffs. The distributor would charge each embedded customer for the use of its own and the PNO's assets. For the PNO to recover that cost, there would need to be a commercial agreement between the PNO and distributor on the calculation and recovery of costs (e.g. by way of credit or PNO invoicing the distributor). Any proposed 'formula' to calculate those costs would be difficult to hardcode into DCUSA when the PNO is not a party to the	Noted

		DCUSA. This would move away from the intent to implement a common approach by all distributors. Option 3 introduces further complexities if not all embedded customers are settlement metered. We do not believe the WG should progress with this option.	
British Gas	Non-confidential	This is currently our favoured option, although we acknowledge that further development is required. Suppliers should be able to use existing processes and systems to apply the same charges for embedded customers as for equivalent Distributor connected customers. This should facilitate engagement by Suppliers and so increase the extent to which embedded customers benefit from competition. A single contractual agreement with the Distributor would be required by the PNO to recover UoS charges. This should be more efficient than maintaining multiple contractual agreements with (changing) Suppliers. The option should allow the private network to charge the DNO according to a methodology approved by Ofgem, and the option is also likely to require DNO licence changes to ensure that the DNO is not disadvantaged. We understand and agree with the explanation provided that IDNOs should not, in theory, be disadvantaged by this option, although the workgroup should keep this under review as the option develops.	Noted
BUUK Infrastructure	Non-confidential	This appears to be outside the vires of DCUSA in that it covers charging and payment arrangements in respect of an unlicensed/private distribution network. Payment to unlicensed distributors through a	Noted

		claim back facility implies that DUoS is being charged and collected in respect for and on behalf of the unlicensed distributor which is fundamentally different from charging arrangements in place for IDNOs, where IDNOs collect DUoS for the upstream DNO. There needs to be justification as to why charging arrangements for private networks needs to be different from those in place for IDNOs, and that such arrangements do not result in undue discrimination. It should be reinforced that charges for private networks are not part of DCUSA and therefore not part of CDCM/EDCM. Arrangements in DCUSA only cover connections to the licensee's electricity distribution system. This therefore also does not account for what happens to a private networks revenue where a supplier fails and the subsequent SoLR concerns. Due to these concerns it is not felt that this option should be pursued further as it does not have sufficient merit for continued development.	
Electricity North West Limited	Non-confidential	If this option were deemed to be compliant with competition law we would comment as follows: This option would introduce complexity in calculation of the PNO credit. In the case of reactive power and capacity charges it may not be possible to calculate the correct values to credit to the PNO with sufficient accuracy to ensure charges were the same as if the charges were made at the boundary. It is worth exploring this option further to see if solutions to these issues can be found.	Noted

E.ON energy solutions	Non-confidential	We feel that option 3 presents a more robust mechanism to introduce to PNO UoS system charging regime and it is viable for all scenarios in principle. This model is very similar to the current arrangements in place for DNO to IDNO DUoS charging which in turn limits the impacts on suppliers. However, we do feel that careful consideration needs to be given as the PNO themselves are not subject to the RIIO price control framework. For example, the PNO will not need to revaluate items such as the value of its connected assets which may create differences revenue collection which over time, or include/exclude additional or removed assets in its claim the DNO. On this basis we do feel that the workgroup should give this option further consideration whilst equally recognising the need to ensures network costs are fair & reflective across the DNO & PNO.	Noted
Leep Electricity Networks Limited	Non-confidential	PNO Response: Pro (for the PNO) This option should result in the more efficient recovery of costs. Pro (for the PNO) This option should use less of the PNOs resources. Pro (for all parties) A better option as it advocates the standardisation of contracts for all suppliers. Con (for the PNO) The PNO will need to devise a method to calculate use of system charges. Con (for PNO) The PNO may lose out on diversification revenue.	Noted

Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Where full Settlement metering or shared metering is in place, this is our favoured option. ***Overall:*** This option maintains the standard arrangements between DNOs and suppliers, with suppliers invoiced as though the customer were connected to the distribution network. Hence it will minimise implementation and ongoing costs, thus avoiding creating barriers to competition in supply. PNOs would have the option to claim some use of system revenue from the distributor. In reality, we would expect that only large PNOs would do so, as the PNO to DNO claim is likely to be immaterial for smaller private networks. If introduced, the mechanism by which the amount of use of system revenue the PNO can claim from the DNO should be defined. This cannot be formalised in the DCUSA as PNOs are not DCUSA parties, but we would welcome the publication of guidance which sets out how the calculation should be carried out. Whilst not binding, this guidance could then form the basis of common bilateral arrangements between DNOs and PNOs, improving transparency and commonality. The revenue which the PNO can claim should be determined based on the difference between: • the use of system charges which the DNO has levied in respect of customers connected to the private network; and • the use of system charges which the DNO would have levied if charges had been levied at the DNO to PNO boundary. ***Difference Metering:***	Noted

		This is a more complex mechanism to achieve the outcome of option one. The only benefit of applying this option for difference metering would be that the same approach could be deployed for all three metering and Settlement options, avoiding any perverse incentive to use one type of metering arrangement over another. As noted in response to question four, the use of system charges benefit of using an alternative Settlement approach is likely to be outweighed by other considerations for the site which drive the choice of metering and Settlement option. ***Full Settlement Metering:*** For sites which are either non-half-hourly or half-hourly aggregate Settled, this option is likely to represent the status quo, albeit with a mechanism introduced by which a PNO can claim back some use of system revenue. Hence it maintains the simplicity of the status quo whilst enabling increased cost-reflectivity through the ability of the PNO to claim revenue back from the DNO so that the net position is that the DNO has only charged for its own assets. For sites which are half-hourly site-specific settled, this option would involve the DNO invoicing capacity charges for customers connected to the private network, with whom the DNO has no connection agreement. However, any 'over-charging' which takes place (for example because of diversity within the private network as identified in paragraph 3.21 (e) of the consultation) will be reversed by the DNO to PNO credit. Because there is no boundary supplier, the application of capacity charges to private network customers is unavoidable, with this option representing the most effective way in which any inaccuracy in the total charges levied can be corrected. The consultation notes that reactive power charging would remain inaccurate under this option. We agree with this conclusion. The DNO	

		to PNO credit will be determined based on aggregating meter reads for each of the customers connected to the private network, which will accurately determine active energy flows at the DNO to PNO boundary, but cannot accurately determine reactive energy flows at the DNO to PNO boundary. We think this inaccuracy is an unavoidable consequence of this metering and Settlement option. Given reactive power charges represent a small element of total use of system charges, we think this inaccuracy is not material. For sites which are non-half-hourly or half-hourly aggregate Settled, DNOs do not receive site-specific consumption data. The calculation of the DNO to PNO credit is likely to rely on such data to derive boundary data. As a result, this option would either require the PNO to provide boundary data (either based on non-Settlements boundary metering or aggregation of site-specific consumption data for connected customers) or as a last resort for the DNO to approximate site-specific consumption. Such approximation could be achieved either using Ofgem's published typical consumption values or the average usage of a customer in each customer group in that DNO region. ***Shared Metering:*** The same issues arise as identified above for fully settled sites with half-hourly site-specific settled customers connected.	
Power Data Associates Ltd	Non-confidential	From the Supplier, PNO and Distributor basis this could be the simplest to administer	Noted
SP Distribution & SP Manweb	Non-confidential	This option is the most difficult for the DNO to bill DUoS charges and therefore has significant costs to the DNO to upgrade the billing application. The DNO may not know what capacity value to assign to each HH site and what voltage level it is connected at in order to	Noted

		determine the tariff. The reactive power charging issue identified in option 2 remains under this scenario. This option is complex. Given the difficulties in contractual agreements between the DNO and the PNO, the costs to the DNO to deal with these billing changes, the added complexity and administration around DNOs crediting the PNOs if a licence change is agreed, and the capacity and reactive power charging issues identified, we would not want the working group to consider this option further.	
UK Power Networks	Non-confidential	This option introduces a further complication in that the PNO would be able to claim their 'revenue' back from the distributor. This introduces an administrative burden and validation issues. We do not believe that option 3 should be developed any further.	Noted
Western Power Distribution	Non-confidential	We believe that the difficulties in disaggregating CDCM meter readings rules this option out. There is also the complication of how these costs are treated in the regulated revenues of the DNO. We agree with the statement that option 3 is a "complicated version of option 1" and we do not think that the workgroup should consider this option further.	Noted
Leep Electricity Networks Limited	Non-confidential	IDNO Response: Con (for the IDNO) As a result of all the IDNO undertaking a large amount of the cost collection the bad debt risk sits with the IDNO.	Noted
UK Major Ports Group	Non-confidential	The complexity and significant levels of additional bureaucracy in this option which would, as the consultation notes, merely replicate the outcomes of Option 1 make this a very unwelcome option for major ports.	Noted

British Steel Limited	Non-confidential	I would request that the Working Group does not consider this option further.	Noted
Forth Ports Limited	Non-confidential	This option is wholly inappropriate for the reasons outlined in Option 2 above.	Noted
Working Group Conclusions: The Working Group concluded that whilst this option is not supported by the larger PNOs, it may be appropriate for smaller PNOs and has support from some suppliers who have responded above. The Working Group has decided that it will keep this option open and review further.			

Company	Confidential/ Anonymous	7. What are your views on option 4 and would you like the Working Group to consider this option further?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Option 4 - invoicing the PNO directly, bypassing the Supplier, based on the total consumption recorded at the boundary. We do not agree the WG should progress this option as the PNO is not a party to the DCUSA and would not be covered by payment obligations. This option would require multiple bilateral agreements between distributors and PNOs.	Noted
British Gas	Non-confidential	At this point, given the information provided in the consultation, we don't believe that the need for bilateral agreements to cater for invoice and payment processes with the PNOs is a sufficient reason for discounting this option.	Noted – on balance the Working Group have agreed that the cons outweigh the benefits for this option.
BUUK Infrastructure	Non-confidential	Private Network Operators are not party to the DCUSA which does not cover the charging arrangements of non-DCUSA parties. Therefore, this option does not consider some key points: • Where would the charging arrangements be contained?	Noted

		• How would they be enforced? • How would charges for MPAS provision be covered? This option, like the others, has also not considered what happens if a supplier defaults. Would the private network bear all the risk? It is not felt that this option should be pursued further as it does not have sufficient merit for continued development due to the concerns identified.	
Electricity North West Limited	Non-confidential	If this option were deemed to be compliant with competition law we would comment as follows: We are not comfortable with introducing arrangements for DUoS charges under DCUSA involving the direct billing of non-DCUSA parties. We do not believe this option should be further investigated.	Noted
E.ON energy solutions	Non-confidential	We agree with the workgroup assessments under this option, whilst in practice the option would work it could ultimately lead to forcing a PNO to become a IDNO in any scenario where any single customer obtains a competitive supply agreement.	Noted
Leep Electricity Networks Limited	Non-confidential	PNO Response: We do not support this option.	Noted
Northern Powergrid on behalf of Northern Powergrid	Non-confidential	Option 4 should not be taken forward. We agree with the points noted in the consultation and welcome the Working Group's conclusion that this option should not be considered further.	Noted

(Northeast) Ltd and Northern Powergrid (Yorkshire) plc			
Power Data Associates Ltd	Non-confidential	Draws out financial risk for Distributors. Requires the PNO to develop a method of charging and recovering the charges from each user of their network.	Noted
SP Distribution & SP Manweb	Non-confidential	This option is similar to Option 1, but in this option the PNO is billed and not the supplier at the boundary. The cons identified by the group are the DNO taking on additional risks; they are currently not subject to such as bad debt and PNOs do not accede to the DCUSA. This makes this option undesirable. We would not want the working group to consider this option further.	Noted
UK Power Networks	Non-confidential	We support the view of the working group that as PNOs do not accede to DCUSA this change should not be progressed any further.	Noted
Western Power Distribution	Non-confidential	This option has many of the same complications disaggregating CDCM meter readings as option 3. We do not think that the working group should consider this option further.	Noted
Leep Electricity	Non-confidential	IDNO Response:	Noted

Networks Limited		We do not support this option.	
UK Major Ports Group	Non-confidential	This could be viable for large industrial PNOs like major ports but we're sceptical that the relatively marginal benefits meet the 'why change' threshold. We note the concerns about PNOs not acceding to DCUSA – that's certainly the case and DCUSA coverage is not a situation PNOs are rushing to embrace.	Noted
British Steel Limited	Non-confidential	I would request that the Working Group does not consider this option further.	Noted
Forth Ports Limited	Non-confidential	This option could work for us, however the capacity and reactive elements must remain charged to the boundary of the PNO only, for the reasons stated in option 2 above. It is imperative that the PNO is responsible for these elements at the point at which the customer connects to the private network, this is all part of the responsible management of a network. This section incorrectly states that reactive and capacity would be inaccurate, if this is billed by the PNO at the point where the customer connects to their network, this is the ONLY accurate approach to billing these elements. The PNO is then responsible for dealing with any capacity/reactive issues at the PNO/DNO boundary – this is as it should be (as Option 1 is), and is how we currently operate our networks across the UK.	Noted
Working Group Conclusions: The Working Group concluded that based on the cons of this option it will not be progressed further.			

Company	Confidential/ Anonymous	8. What are your views on option 5 and would you like the Working Group to consider this option further?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Option 5 - introduce new tariffs for Suppliers relating to the appropriate voltage level and use of the distributor's network assets. The allocation and charging of proportionate capacities and reactive power remains an issue with how to appropriately apportion between the embedded customers and PNO. The distributor has no commercial relationship with the embedded customer on which to determine the agreed capacity. If a solution can be found to the capacity and reactive charges issue, and the new tariffs are consistent with the current tariff structure, ESPE believe that Option 5 is the preferred option over Options 1 – 4.	Noted
British Gas		The need for the creation of a large number of new tariffs may make Option 5 an overly complex solution to the issue.	Noted
BUUK Infrastructure	Non-confidential	While this option in its current state does not appear to provide a suitable solution, there is merit in the idea of new tariffs for private networks. Even in the Consultation document it would appear that this option needs further thought as it states: "For capacity charging, some means of capacity allocation may be required to split the agreed capacity at the Distribution network to private network boundary between the connected customers." This suggests that while the impacts have been determined, not their appropriate means of implementation. A suitable approach would appear to be to charge the right tariff for use of the electricity distributors distribution system and leave charges for the private network out of scope.	Noted

		This option should therefore see further work, albeit with changes. Potentially this option would introduce a large degree of increased admin with Line Loss Factors used to help identify the networks and tariffs put in place among other considerations.	
Electricity North West Limited	Non-confidential	If this option were deemed to be compliant with competition law we would comment as follows: This option has superficial similarities to the approach for IDNO portfolio billing. This approach may result in charges that are higher or lower than the same as would be the case with a boundary meter. The same problems remain as with option 2-4 around the allocation of fixed and capacity charges. Under current arrangements the fixed charge "is recovered in respect of service assets which would always be owned by the PNO and so the Distributor would not be charging a fixed charge", however, in the future this could change due to the ongoing TCR. If the residual charge is recovered in part via fixed charges in the future then there would be a need to recover all or part of this from PNO charges, and the issue of multiple fixed charges would remain. We are not comfortable that the arrangements for capacity charges are satisfactory. The assignment of capacity to customers (who may not have agreed capacities) is problematic and would not give the same overall charge as a single MPAN at the site boundary. In effect, this hypothetical allocation of fixed charges and capacity by the distributor is setting individual custom tariffs, in addition to the multiple tariffs required under this option. Reactive power charges would be inaccurate under this option. For the reasons above, we do not think this option should be investigated further.	Noted - As above the Working Group will ensure that the competition law requirements are considered when proposing a solution/s.

E.ON energy solutions	Non-confidential	This option feels very similar to option 2 with the only exception being that DNO discounts for assets that are not it's responsibility. This also presents complexities associated to apportioning elements of DUoS charging fairly & appropriately for some of the charging items at each metering point as outlined under Q5, On this basis we feel that this option should not be considered by the workgroup any further.	Noted
Leep Electricity Networks Limited	Non-confidential	PNO Response: We do not support this option.	Noted
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc		Option 5 should not be taken forward. ***Overall:*** This option would create a large suite of new distribution tariffs used by a small number of customers. DNOs would be responsible for ensuring the correct boundary tariff is allocated, which would be an entirely manual process, and it is not clear what type of validation would be in place for suppliers to verify the allocation and so validate their use of system invoices. The issue of multiple fixed charges may be resolved by this option, as fixed charges typically relate only to the service assets and so are likely to be excluded from the new tariffs. But many of the other issues identified (e.g. capacity and reactive power charging) remain unresolved.	Noted

Power Data Associates Ltd	Non-confidential	Could happen but will result in multiple tariffs and some complexity & continual administration by Distributor to determine correct DUoS charges.	Noted
SP Distribution & SP Manweb	Non-confidential	This option has the same capacity and reactive charging issues as option 2. It also requires a large number of new tariffs to be created which adds further complexity, and requires the DNO to become responsible for some capacity allocation at the DNO to PNO boundary. We would not want the working group to consider this option further.	Noted
UK Power Networks	Non-confidential	This option has the same issues with the allocation of capacity which are there in option 2. However this change also requires a great number of additional tariffs to be created, which only increases the complexity of the arrangements for those involved, as a result we do not believe that option 5 should be developed any further.	Noted
Western Power Distribution	Non-confidential	This option has the merit that it is similar to the existing relationship between DNOs and IDNOs. In our opinion the working group should consider further along these lines.	Noted
Leep Electricity Networks Limited	Non-confidential	IDNO Response: We do not support this option.	Noted
UK Major Ports Group	Non-confidential	This seems horrifically complicated and it's unclear to major ports that the (potentially spurious) levels of additional 'accuracy' would in fact be accurate or meaningful. We certainly do not support this option.	Noted

British Steel Limited	Non-confidential	I would request that the Working Group does not consider this option further.	Noted
Forth Ports Limited	Non-confidential	This seems an unnecessary approach and irrelevant for the industrial networks we have. It seems an overly burdensome approach to deal with the perceived issue.	Noted

Working Group Conclusions: As per option 2, a majority of the respondents were not supportive of this option. Concerns were in regard to the process of allocating fixed and capacity charges to customers. Within question 9 of this consultation response UKPN have put forward a potential alternative option, where there is a new tariff structure. An example which they considered was whether all PNO customers, whether boundary or embedded, have a fixed charge and unit charges only or unit charges only, with some smearing of capacity/fixed as appropriate.

The Working Group have therefore agreed to consider this option further to see whether this newly proposed option could be incorporated with option 5 to address the issues raised above.

Company	Confidential/ Anonymous	9. Are there any other options which the Working Group has not identified? Please provide full details.	Working Group Comments
ESP Electricity Ltd	Non-confidential	ESPE has not identified an alternative option to those proposed.	Noted
British Gas	Non-confidential	No comments	Noted
BUUK Infrastructure	Non-confidential	None identified.	Noted
Electricity North West Limited	Non-confidential	It may be necessary for the working group to investigate other options should none of the current options be deemed to be compliant with competition law.	Noted

E.ON energy solutions	Non-confidential	No	Noted
Leep Electricity Networks Limited	Non-confidential	No	Noted
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	The consultation identifies a good range of options for consideration. We have no further options to propose.	Noted
Power Data Associates Ltd	Non-confidential	Enough already identified.	Noted
SP Distribution & SP Manweb	Non-confidential	None that we have identified, but we are keen to see any other suggestions made as part of this consultation.	Noted
UK Power Networks	Non-confidential	The working group appears to have focussed on assigning existing tariffs to this matter. Maybe a new tariff structure needs to be considered. An example which we have considered was whether all PNO customers, whether boundary or embedded, have a fixed charge and unit charges only or unit charges only, with some smearing of capacity/fixed as appropriate. This would largely address the issues of allocating the capacity and other specific elements of the change(s), the DNO would still invoice the Supplier rather than the PNO, which would remove the need to introduce	The Working Group concluded that this proposed option should be considered further. The Working Group will review whether this is an option that could be progressed alone or whether there is an opportunity to combine this proposal with options 2 or 5 to address the issue raised in regard to reactive and capacity charging.

		new parties into the DCUSA arrangements. Such an averaging approach could be extended to being unconcerned about the voltage of the boundary connection, which would further simplify the arrangements but would impact cost reflectivity. Although charges within the CDCM and certainly for customers within PNOs already contain an element of averaging. This approach would be practical and largely address the majority of the risks and issues which some of the other options put forward would introduce.	
Western Power Distribution	Non-confidential	No	Noted
Leep Electricity Networks Limited	Non-confidential	N/A	Noted
UK Major Ports Group	Non-confidential	Not that we are aware of.	Noted
British Steel Limited	Non-confidential	No comments	Noted
Forth Ports Limited	Non-confidential	None significantly different.	Noted
Working Group Conclusions: The Working Group concluded that they would review the proposed option from UKPN further. UKPN have put forward a potential alternative option, where there is a new tariff structure. An example which they considered was whether all PNO customers, whether boundary or embedded, have a fixed charge and unit charges only or unit charges only, with some smearing of capacity/fixed as appropriate. The Working Group agreed to consider this option further and also consider whether this could be incorporated with option 2 or 5.			

Company	Confidential/ Anonymous	10. Do you agree with the Working Group's pros and cons against each of the options and do you have any additions pros or cons you would like to make the group aware of?	Working Group Comments
ESP Electricity Ltd	Non-confidential	ESPE agrees with the WG's review of pros and cons and at the time of this response, have not identified additional pros and cons	Noted
British Gas	Non-confidential	No comments	Noted
BUUK Infrastructure	Non-confidential	Nothing else to add.	Noted
Electricity North West Limited	Non-confidential	We generally agree with the pros and cons, where otherwise we have explained in our response to the questions on each of the options. The options need to be assessed for compliance with competition law.	Noted
E.ON energy solutions	Non-confidential	Yes – we feel the Pros & cons list has considered an exhaustive list for each scenerio.	Noted
Leep Electricity Networks Limited	Non-confidential	Please see our responses to the options.	Noted
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and	Non-confidential	We have commented on the pros and cons of each option in our response to questions four to eight. Most notably, the Working Group has understated the significant changes to DNO billing systems and supplier validation systems required for option two.	Noted

Northern Powergrid (Yorkshire) plc			
Power Data Associates Ltd	Non-confidential	Yes	Noted
SP Distribution & SP Manweb	Non-confidential	Yes	Noted
UK Power Networks	Non-confidential	We are not aware of any additional pros or cons at this time for any of the options as currently drafted.	Noted
Western Power Distribution	Non-confidential	We agree with the Working group's list of pros and cons and can think of no others.	Noted
Leep Electricity Networks Limited	Non-confidential	Please see our comments above.	Noted
UK Major Ports Group	Non-confidential	Broadly speaking, although we would have liked more coverage of the PNO operator and user experience.	Noted
British Steel Limited	Non-confidential	Yes	Noted

Forth Ports Limited	Non-confidential	Mostly, unless commented above, though the Pros and Cons are very much from a DNO perspective, not a PNO perspective. If the latter they would look very different.	Noted
Working Group Conclusions: The Working Group concluded that in general, unless stated in their responses to questions four to eight, respondents agreed with the pros and cons against each of the options.			

Company	**Confidential/ Anonymous**	**11. Do you believe that the DCUSA Charging Objectives are better facilitated by this CP? Please provide your rationale.**	**Working Group Comments**
ESP Electricity Ltd	Non-confidential	ESPE believe that Charging Objective 2, 3 and 4 are better facilitated: • Obj 2: it ensures customers on embedded networks are not subjected to different charges from those customers who are directly connected to the distributor; • Obj 3 & 4: new tariffs in line with the Charging Methodologies better reflect the costs associated with embedded customers on private networks.	Noted
British Gas	Non-confidential	Unable to assess at this point.	Noted
BUUK Infrastructure	Non-confidential	It is felt that the DCUSA Charging Objectives are better facilitated (particularly two and three) by this change because it aims to better reflect and apply use of system charges on private networks, which would therefore provide more accurate proportions for the industry, while also preventing distortion of competition on private networks.	Noted

Electricity North West Limited	Non-confidential	This is difficult to evaluate until the assessment in respect of competition law has taken place together with the complexity of the broad range of options. In general, we agree with the potential issue in cost reflectivity identified and believe a change could potentially address this issue. We believe the range of change options identified could better facilitate charging objective 3 (cost reflectivity), and charging objective 4 (developments in business). Our view in respect of these objectives is aligned to the working group. We are not sure of the impact on charging objective 2 (competition), this will be clearer once competition law assessment has taken place and solutions are further developed. We believe that the changes would be neutral against other charging objectives. We disagree with the working group's assessment against objective 6 (efficiency). We do not believe introducing necessary appropriate arrangements to better facilitate other objectives constitutes inefficiency, regardless of possible higher complexity and industry cost.	Noted
E.ON energy solutions	Non-confidential	We agree with charging objectives set out by the proposer.	Noted
Leep Electricity Networks Limited	Non-confidential	No comments	Noted

Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	As proposer of this change our assessment against the DCUSA Charging Objectives (listed in section six of the consultation document) remains unchanged.	Noted
Power Data Associates Ltd	Non-confidential	Yes	Noted
SP Distribution & SP Manweb	Non-confidential	The options available could partially better facilitate the following DCUSA Charging Objectives: Charging objective 2, 3 & 4 only. However, further development would be required for this CP to fully meet these objectives.	Noted
UK Power Networks	Non-confidential	It is not possible to put forward a view on the objectives at this time as a final solution has not been proposed.	Noted
Western Power Distribution	Non-confidential	We agree with the assessment of compliance against the DCUSA charging objectives as given by the proposer.	Noted

Leep Electricity Networks Limited	Non-confidential	As far as is reasonably practicable.	Noted
UK Major Ports Group	Non-confidential	No comments	Noted
British Steel Limited	Non-confidential	No comments	Noted
Forth Ports Limited	Non-confidential	No – in the case of larger industrial/port networks, this seems to counter the current approach with is light touch administratively whilst still allowing the DNO to fully recover costs and in a time efficient and appropriate way.	Noted
Working Group Conclusions: The Working Group will review the DCUSA Charging Objectives throughout the duration of this CP to ensure that any proposed solution/s better facilitate these objectives.			

Company	**Confidential/ Anonymous**	**12. Are you aware of any wider industry developments that may impact upon or be impacted by this CP?**	**Working Group Comments**
ESP Electricity Ltd	Non-confidential	If the process for the administration of complex metered sites is proposed to change e.g. how consumption data is gathered and reported in Settlements, BSC Procedure 514 (SVA Metering Operations for Metering Systems Registered in SMRS) will need to be adapted to reflect the amended complex metering process. Additionally, with the current industry review of mandating HH settlement for all customers and the Targeted Charging Review, this change proposal should also be reviewed against that body of work.	Noted

British Gas	Non-confidential	No comments	Noted
BUUK Infrastructure	Non-confidential	As already identified by the workgroup, there may be an impact to the BSC with correlating changes required. Likewise, the ongoing BSC change P379 may have developments which impact the future progression and solution developed for this change proposal.	Noted
Electricity North West Limited	Non-confidential	As noted previously in our response, the change to the allocation of residual charges under the TCR could influence the selection of options.	Noted
E.ON energy solutions	Non-confidential	BSC Issue 72 'Ensuring measurement transformer assets installed by a Non-BSC Party are successfully Commissioned within BSC timescales. This effect CT operated sites more so and many barriers have been found that prevent accurate meter commissioning due to asset ownership with a PNO. This has an impact on some of the scenarios set out DCP 328 and would ultimately impact DUoS cost recovery if metered data is either recorded or enters settlements inaccurately due to a lack of meter commissioning. We are also aware that the MRA switching group, FSEG were originally proposing an indicator in MPAS under the faster switching arrangements however this was discounted. whilst FSEG recognized the problem the this was not deemed to a sizeable barrier to switching's proposed to move this into IREGs remit in November 2018 however no formal MIF's or further discussions appear to have been made in this regard.	Noted

Leep Electricity Networks Limited	Non-confidential	No comments	Noted
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Ofgem's Network Access and Forward-Looking Charges Review Significant Code Review (the 'Access SCR') is conducting a 'wide-ranging' review of DUoS charges. Hence any changes to use of system charges inevitably impact on the Access SCR to a certain extent. However, this CP is primarily focussed on the application of existing use of system charges rather than introducing fundamental changes to the charges themselves, and so the overlap is not significant. Regardless of the outcome of the Access SCR, the charging issues which this CP seeks to resolve will remain for private networks with competition in supply, so the change should proceed despite the minor overlap.	Noted
Power Data Associates Ltd	Non-confidential	DCP268 if ever approved. Market wide HH settlement. A joint MRA/BSC workshop on Licensed Exempt Distributors (LENs) is about to occur, one aspect which is focused on the identification of LENs.	Noted
SP Distribution & SP Manweb	Non-confidential	None that we are aware of.	Noted
UK Power Networks	Non-confidential	It is possible that the work under the SCR could address some / all of these issues but at this time this cannot be certain, as a result we do not believe that any current developments will impact this CP.	Noted
Leep Electricity Networks Limited	Non-confidential	N/A	Noted

UK Major Ports Group	Non-confidential	In terms of the major ports sector we are facing a likely inflexion point in terms of demand, load and usage patterns of electricity consumption (and those of the users of the PNOs we operate). Ports, particularly major ports, tend to be experienced private network operators. The operation of these networks in a safe and efficient manner, in many cases as a the 'landlord' of a port estate comprising tenants, supply chain partner operations etc. is an important part of the port operator role. Therefore, there is a current driver for ensuring appropriate charging arrangements. But our interest is also forward looking and driven in many ways with our interaction with customers, the Government (through, for example, our engagement in the Clean Maritime Council) and other sustainability focused stakeholders. The port of the future is very likely to be a much larger consumer of electricity with an increased distribution of demand sources and possibly much more of a peaking load profile on top of a raised baseload. This is through increased electrification of port's own operations (e.g. non-road mobile machinery), similar for port tenants and – particularly – shoreside power supply to vessels. The need for fit-for purpose network charging (and metering) arrangements therefore becomes even more important. There is a concern in the major ports community that some of the options being considered are not appropriate and therefore act as a barrier towards a transition to a much lower emissions maritime sector for the UK – the current coal of Government policy. We would very much like to reflect these points in the review of DCP 328. We also appreciate that this is likely to be one part of a much broader dialogue with the energy sector – suppliers,	Noted

		network providers and regulators – on moving towards a zero emissions maritime sector.	
British Steel Limited	Non-confidential	Ofgem's Targeted Charging Review (residual cost) and Significant Code Review (access and forward looking charges) would both appear to have implications in this space, depending upon the option chosen. For example, the minded to option under TCR proposes an "average" residual paid by each connection. At the margin this may result in a 3rd party seeing a significant increase in the costs they face.	Noted
Forth Ports Limited	Non-confidential	No	Noted
Working Group Conclusions: The Working Group will ensure that appropriate consideration is given to wider industry developments that may impact upon or be impacted by this CP throughout the duration of the Working Group.			

Company	Confidential/ Anonymous	13. Do you have any other comments?	Working Group Comments
ESP Electricity Ltd	Non-confidential	Unless the issues relating to agreeing capacities and charging the appropriate customer(s) for reactive power are resolved, ESPE do not believe that any of the proposed options provide a clean solution to the issue of charging embedded customers on private networks and that alternative options should continue to be explored.	Noted
British Gas	Non-confidential	No comments	Noted

BUUK Infrastructure	Non-confidential	It is important to note for this change that private networks are out of scope of the DCUSA, as well as associated licenced electricity distributor obligations. Their duty under the Electricity Act is restricted to conveying electricity to premises or distribution systems connected to its own distribution system. Also, the provision of MPAS is separate from providing use of system. An IDNO is not obligated to offer MPAS services in respect of a private network, this obligation falling to the distribution services provider operating in its area. Arrangements for MPANs on unlicensed network are outside the scope of DCUSA with Clause 15.3.3 of the DCUSA setting out that Section 2A, and the schedules relating to it, shall: "…only create obligations between a Company and a User to the extent that, and in relation to those periods for which, that User is (or was) or is seeking to be Registered in respect of a Metering Point or Metering System relating to an Entry Point or an Exit Point on that Company's Distribution System." Scope of the DCUSA is limited to entry and exit points on the electricity distribution system; i.e. exit points and entry points on a private network are out of scope.	Noted
Electricity North West Limited	Non-confidential	None	Noted
E.ON energy solutions	Non-confidential	No further comments.	Noted
Leep Electricity	Non-confidential	Where there is behind the meter generation for reducing the exported onto the private network and how this is reconciled. Although BSCP 314 covers complex site map	Noted

Networks Limited		Where there is behind the meter generation for reducing cost of import against the main meter, we currently cannot see how under any of these options we would recover our existing saving when the main settlement meters consumption is reduced lower than the total generated on site.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	No	Noted
Power Data Associates Ltd	Non-confidential	Nope	Noted
SP Distribution & SP Manweb	Non-confidential	Whilst we are supportive of the principles of this CP, the options 1-5 tackle some of the issues currently experience, but not all of them identified. One issue that was prevalent in many of the options, is the requirement for DNOs to allocate capacities between connected customers, this is not the responsibly of the DNO, and we would not be comfortable for this to become so. Currently the suggested options result in added complexity, and/or challenging hurdles which result in onerous obligations being adopted by various parties. Some of the options being discussed do not	Noted

		address all types of customers and those that do, do not have the desired outcome. We believe the options discussed do not full achieve the intent of 'cost reflective' UoS charges when competition in supply is in place on a private network, however if it is thought by the working group that one or more of these options (perhaps combined) could be developed further to address the issues identified, that may be the way forward.	
UK Power Networks	Non-confidential	We need a solution that is simple to understand, simple to apply, applies in clear circumstances, and which works for all scenarios, with no added risk to the distributor and an example of such a solution is detailed in response to Q9.	Noted
Western Power Distribution	Non-confidential	No	Noted
Leep Electricity Networks Limited	Non-confidential	Please see comments on our PNO Response.	Noted
UK Major Ports Group	Non-confidential	See our response to question 12.	Noted
British Steel Limited	Non-confidential	Whilst accepting the principles of competition and access to 3rd party supply across a PN, issues around metering and meter data, especially in cases of NHH metering, could be resolved by requiring all 3rd parties taking up offers of supply to move to HH metering irrelevant of the connection level or consumer type.	Noted

		Issues around access to this data from domestic consumers, may need to be address with the regulator.	
Forth Ports Limited	Non-confidential	We have been involved in the consultation development, we have put forward our points through that process. Though our answer to question 10 is particularly relevant. In our view, this CP would have been better suited to a particular cluster of types of PNO, rather than trying to solve all variations of PNO with one document. As the introduction makes clear, shapes of PNO are many and varied. We were the only PNO to be engaged with the process, despite having been very active (as an organisation and personally) through the early days of third party access and having the first two Ofgem charging statements it is particularly disappointing that we were not contacted about this, neither was our industry body. We found out about this CP through a chance conversation rather than by invite. As with previous attempts to push through similar CP's, I fear that not enough PNOs are aware of the intent of this, even where there is an awareness, there may not be the understanding.	Noted
Working Group Conclusions: The Working Group notes the comments above.			