DCP 350 'Creation of Embedded Capacity Registers' Collated Consultation Responses with Working Group Comments

Company	Confidential/ Anonymous	1. Are you comfortable with the proposed amendments to the intent statement of this change?	Working Group Comments
Electricity North West Limited	Non-confidential	Yes, we are comfortable with the proposed amendments. Since the intent statement was published DNOs have published, on their websites, data relating to Distributed Energy Resource (DER: generators, storage and demand sites with contract DSR/DSM) connections to their distribution networks. These registers are known as the System Wide Resource Registers (SWRR) and they have significant commonality with the Embedded Capacity Registers (ECR) of this change proposal. The ECR represents an extension to the existing public SWRR registers. Also, as detailed in section 1.1 of this consultation document the DNOs and IDNOs will maintain registers of connected DER with a capacity greater than 1MW where DER includes "*generators, demand sites (that have a contract to provide the DNO or IDNO with DSR/DSM)*". The definition "each connected site" is not specific within the intent statement, and this is of concern as it may imply that the ECR should include all demand sites (with/without DSR/DSM contracts) which we do not believe will further the aims and objectives of the DCUSA or this change proposal. The legal text definition of ECR makes this clear but it should also be in the intent statement for clarity.	
Leep Electricity Networks Limited	Non-confidential	Yes, we are comfortable with the proposed amendments as long as the intention is made clear, should this CP be approved,	

		that DNO's will not collate IDNO information to ensure that embedded capacity information is not double counted.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Since the DCP 350 intent statement was published, DNOs have published, on their websites, data relating to Distributed Energy Resource (DER) connected to their distribution networks. These registers have been produced as part of the Energy Networks Association (ENA) co-ordinated Open Networks (ON) project and are known as System Wide Resource Registers (SWRR). As the SWRR data registers have significant commonality with the proposed Embedded Capacity Registers (ECRs) proposed by DCP 350, the DCP 350 working group should progress its work so that the output of DCP 350 is incorporated into the SWRR, rather than duplicating it. We are comfortable with the two amendments to the intent statement and note that it has been confirmed that the obligations to create and support SWRR type registers are being placed on IDNOs in addition to DNOs. We are comfortable with the proposed amendment to the intent statement in respect of the addition of IDNOs. However the words *'all sites that use their networks and influence the operation of the GB power market'* seem quite wide and so the legal text for the change need to be very clear, with more clarity needed on which customer's sites are to be placed on the register. We would highlight that the proposed definition for the ECR includes reference to '*Demand Side Management*' (capitalized words) and although Demand Side Management is referred to	

		in Schedules 17 and 18 of DCUSA in the context of Demand Side Management (DSM) agreements, Demand Side Management is not in itself a defined Term in DCUSA. Consequently, we believe that more clarity is needed in the definition of ECR so it is clear which, if any non-export, non-generation or demand-only sites need to be included in the register, especially as many demand-only customers manage the demand on their sites e.g. does the ECR include only those demand-only sites with DSM agreements with the relevant DNO or IDNO? Consequently, we believe that it would be more appropriate to exclude all demand only sites at this stage such that the issue can be revisited at a later date.	
On behalf of ENA Open Networks Project	Non-confidential	Since the DCP350 intent statement was published, DNOs have published, on their websites, data relating to Distributed Energy Resource (DER: generators, storage and demand sites with contract DSR/DSM) connections to their distribution networks. These registers have been produced as part of the ENA co-ordinated Open Networks project and are known as System Wide Resource Registers (SWRR). They have significant commonality with the proposed Embedded Capacity Registers (ECR) of this Change Proposal. The ECR would therefore represent an extension to, and the formalisation of, the existing public SWRR registers and, if it is decided that ECR should be produced by DNOs and IDNOs, the SWRR would be for the basis for these. We are comfortable with the two amendments to the intent statement. The amendments, firstly to place a requirement on	

		IDNOs as well as DNOs to create registers, and secondly to oblige DNOs and IDNOs to publish registers on their own websites are in line with the work on SWRR being taken forward by network companies as part of the ENA's Open Networks project. We would like to clarify some further points relating to the intent statement regarding the phrases "*each connected site*" and "*all sites that use their networks and influence the operation of the GB power market*". As detailed in section 1.1 of the consultation document, DNOs and IDNOs will maintain registers of connected DER with a capacity greater than 1MW; where DER includes "*generators, demand sites (that have a contract to provide the DNO or IDNO with DSR/DSM)*". The terms "*each connected site*" and "*all sites that use their networks and influence the operation of the GB power market*" are not specific within the intent statement, and could imply that the ECR should include all demand sites (with/without DSR/DSM contracts) which we do not believe will further the aims and objectives of the DCUSA or this change proposal. The legal text definition of ECR makes this more clear but we believe that it should be included in the intent statement for clarity. Also, in the draft legal text, the proposed definition for the ECR refers to "*Demand Side Management*". While "*Demand Side Management*" is referred to in Schedules 17 and 18 of DCUSA in the context of Demand Side Management (DSM) agreements, "*Demand Side Management*" is not in itself a defined Term in DCUSA. We believe more clarity is needed in the definition of	

		ECR, so it is clear which, if any non-export, non-generation or demand only sites need to be included in the register, especially as many demand customers manage the demand on their sites. We propose to include demand sites in the registers that have contracts to provide flexible services to DNOs or IDNOs.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	The PTE welcomes this change and would like to thank the group for its work on this proposal, in particular Sembcorp for sponsoring the change. We fully support the intent of the proposal and while disappointed that the original scope has been scaled back, so that it no longer includes a national register containing demand as well as generation, we believe it was necessary to reduce the scope to get at least some data in a timely manner. We very much hope that the industry will move forward with a national register and the DNOs will look at how to capture more demand data later in the year. We believe that it is vital for the economic and efficient operation of the market that transparency is improved around the assets connected to the DNOs.	
ScottishPower Renewables	Non-confidential	Yes.	
On behalf of Scottish & Southern	Non-confidential	Since the DCP350 intent statement was published, DNOs have published, on their websites, data relating to Distributed Energy Resource (DER: generators, storage and demand sites with contract DSR/DSM) connections to their distribution networks.	

Electricity Networks		These registers have been produced as part of the ENA co-ordinated Open Networks project and are known as System Wide Resource Registers (SWRR). They have significant commonality with the proposed Embedded Capacity Registers (ECR) of this Change Proposal. The ECR would therefore represent an extension, and the formalisation of to the existing public SWRR registers and, if it is decided that ECR should be produced by DNOs and IDNOs, the SWRR would be for the basis for these. We are comfortable with the two amendments to the intent statement. The amendments, firstly to place a requirement on IDNOs as well as DNOs to create registers, and secondly to oblige DNOs and IDNOs to publish registers on their own websites are in line with the work on SWRR being taken forward by network companies as part of the ENA's Open Networks project. We would like to clarify some further point relating to the intent statement regarding the phrases "each connected site" and "all sites that use their networks and influence the operation of the GB power market". As detailed in section 1.1 of the consultation document, the DNOs and IDNOs will maintain registers of connected DER with a capacity greater than 1MW; where DER includes "*generators, demand sites (that have a contract to provide the DNO or IDNO with DSR/DSM)*". The terms, "each connected site" and "all sites that use their networks and influence the operation of the GB power market are not specific within the intent statement, and could imply that the ECR should include all demand sites (with/without	

		DSR/DSM contracts) which we do not believe will further the aims and objectives of the DCUSA or this change proposal. The legal text definition of ECR makes this more clear but we believe that it should be included in the intent statement for clarity. Also in the draft legal text, the proposed definition for the ECR refers to "Demand Side Management". While "Demand Side Management" is referred to in Schedules 17 and 18 of DCUSA in the context of Demand Side Management (DSM) agreements, "Demand Side Management" is not in itself a defined Term in DCUSA. We believe more clarity is needed in the definition of ECR, so it is clear which, if any non-export, non-generation or demand only sites need to be included in the register, especially as many demand customers manage the demand on their sites. We propose to include demand sites in the registers that have contracts to provide flexible services to DNOs or IDNOs.	
Triton Power	Non-confidential	Triton Power (Triton) welcomes this change proposal as it represents a major step forward in providing greater transparency to the market. Transparency will improve the efficiency of the market and help the transformation to a low carbon economy. However, Triton believes that the national register, including demand as well as generation, as outlined in the original proposal would be a far better way to implement a register. Triton, and other wholesale parties, would find it more useful and efficient, to have a comprehensive view of the whole market rather than being presented with only regional data.	

		The mod seems to meeting the needs or desires of the DNOs and IDNO rather than giving maximum value to the wider market, its investors and its customers.	
Association for Decentralised Energy	Non-confidential	The ADE welcomes the proposed introduction of this capacity register as it will support greater transparency – in line with the proposals of the Energy Data Taskforce and other ongoing work by BEIS, Ofgem and industry. Whilst we support this, it should go further in its ambition towards a comprehensive national register.	
Centrica	Non-confidential	Yes. I'm not convinced that creation of a national register would create complexities for sharing the data but do agree that removing "national" from the intent statement will help ensure the base information is published as soon as possible.	
SP Distribution plc and SP Manweb plc	Non-confidential	Yes the Company is comfortable with the proposed amendments to the intent statement.	
ELEXON	Non-confidential	We agree with creating regional registers but to aid industry users further, there is merit in holding the data all in one place, even if in separate files or as an absolute minimum having a central website page such as Balancing Mechanism Reporting System (BMRS) which then has a link to each separate register.	

		There is likely to be an exponential increase in data being provided to Industry and therefore there is a real danger of fragmentation with regional registers located on separate websites. The amended intent is a pragmatic start but as noted a central location is the optimum solution for the following reasons; • Industry Users can locate all the data/registers in one place. A User may be interested in knowing about assets near Milton Keynes for example. The user may therefore need to locate the regional registers on the following websites, Western Power Distribution, UK Power Networks and Scottish and Southern. • The NETSO would be interested in all the regional registers. • If or when the location of these registers changes, within each owners website this may prove frustrating for Industry Users • Reduces fragmentation Further questions arise over whether each DNO has a separate register for its licensed area or will each amalgamate each licensed area into one file for the Company i.e. will WPD have one register for the four of its licensed areas? There is also merit in including IDNO's which connect into a licence area in a DNO register if they ultimately affect the	

		available headroom of a nearby substation, or if a new participant for example wishes to gauge competition for Balancing Services within a GSP/GSP Group or a DSO seeking flex.	
Energy UK	Non-confidential	Yes	
Flexible Generation Group (FGG)	Non-confidential	The FGG welcomes this proposed DCUSA change as we believe that it will add transparency to the market and help the GB economy make the transformation to a low carbon economy. While we support the intent of the proposal, it is disappointing the original scope has been scaled back so it no longer includes a national register containing demand as well as generation. We believe it would be more useful to have a comprehensive view of the whole market rather than being presented with only regional data. There is a need for companies such as the FGG members to look at all opportunities across the market and not just understand a specific region. We therefore urge Ofgem to consider requiring the DNOs to create a national register as soon as practical and no later than 6 months after implementation. The DNOs also do not have websites that are easy to navigate, and we would therefore ask the ENA provide a page with links to all the registers until a national database is established.	
National Grid ESO	Non-confidential	Yes. It is right for each individual organisation to be responsible for publishing their own data as this is simplest solution from a	

		governance, legal and ownership point of view. If all publishers conform to the same template and ensure that their most up to date information is always available in the same location (a permanent, non-changing URL), then the process of obtaining a collating the registers is simplified. It may be possible for a third party to provide an aggregate version of the register. To facilitate this the DNOs and IDNOs should publish their individual registers as Open Data with a suitable licence. As an example the ESO now publishes data using a licence based on the Open Government Licence v3 (see https://data.nationalgrideso.com/licence). Requiring both DNOs and IDNOs to publish this data will ensure a full picture of embedded assets. To ensure that security of supply is maintained at an affordable level to consumers it is important that assets on both the DNO and IDNO networks are accounted for in setting the target capacity for each delivery year.	
Open Climate Fix	Non-confidential	Yes! Looks great!	
UK Power Reserve Ltd.	Non-confidential	Yes, we agree with the amendments to the intent. While we support and encourage the efforts to publish a single register, we recognise that this will require more time and joint effort by DNOs and IDNOs. As such, in the interest of time, we support the proposed publication of individual registers. These have to be based on a standard template, to facilitate data aggregation.	

Energy Policy Group, University of Exeter	Non-confidential	Yes, with the exception of areas of concern listed below.	
Western Power Distribution	Non-confidential	Since the DCUSA Consolation for DCP350 has been issued (31/01/2020), WPD have published, on our website, data relating to Distributed Energy Resources (DER: generators, storage and demand sites with contract DSR/DSM). This has been done for both connected customers and accepted but not yet connected customers with connection capacities greater than 1MW. This data set is known as the System Wide Resource Register (SWRR) and has been developed through ENA co-ordinated Open Networks project 2019 WS2:P1. It should be noted that all GB DNOs contributed towards the development of the SWRR and have published their respective DER data in a commonly agreed format. The SWRR has significant commonality with the proposed Embedded Capacity Register (ECR) described in this Change Proposal (CP). The ECR would therefore represent an extension to the existing, publically available, SWRR. If it is decided that the ECR should be produced by DNOs and IDNOs, the SWRR should form the basis for the ECR. In regard to the intent statement; the use of "all sites" and "each connected site" is not specific within the intent statement, and could imply that the ECR should include all demand sites (with/without DSR/DSM contracts). We would also like to clarify that DNOs and IDNOs will maintain registers	

		of connected DER with a capacity greater than 1MW, as described in section 1.1 of the consultation document. The legal text definition of ECR makes this clear but it should also be included in the intent statement for clarity. Also, in the draft legal text, the proposed definition for the ECR refers to "*Demand Side Management*". While "*Demand Side Management*" is referred to in Schedules 17 and 18 of DCUSA in the context of Demand Side Management (DSM) agreements, "*Demand Side Management*" is not in itself a defined Term in DCUSA. We believe more clarity is needed in the definition of ECR, so it is clear which, if any non-export, non-generation or demand only sites need to be included in the register, especially as many demand customers manage the demand on their sites. We propose to include demand sites in the registers that have contracts in place to provide flexible services to DNOs or IDNOs.	
Working Group Conclusion:			

Company	Confidential/ Anonymous	2. Do you understand the intent of the CP?	Working Group Comments
Electricity North West Limited	Non-confidential	Yes, we do understand the intent of the change proposal.	

Leep Electricity Networks Limited	Non-confidential	Yes, we understand the intent of the CP.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Yes, We understand the intent of the CP. In supporting the publishing of the SWRR we have also demonstrated our commitment to the principles of Open Data.	
On behalf of ENA Open Networks Project	Non-confidential	We understand the intent of the CP and in publishing System Wide Resource Registers (SWRR), making these available in the public domain, and updating these monthly. DNOs have demonstrated their commitment to publishing data that they hold which might improve market transparency and efficiency. To date, DNOs have published the data that they believe they can reasonably publish given their legal obligations data confidentiality, data privacy and competition including confidentiality obligations under the Utilities Act. A key reason that network companies support the Change Proposal is that, if approved by the Authority, the new obligations will assist in allowing the publication of data that DNOs and IDNOs have redacted in the SWRR due to confidentiality obligations. We believe that correctly worded legal text will assist in facilitating DNOs and IDNOs to publish this data in the ECR.	

BEIS' Panel of Technical Experts (PTE)	Non-confidential	Yes	
ScottishPower Renewables	Non-confidential	Yes.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	We understand the intent of the CP and in publishing System Wide Resource Registers (SWRR), making these available in the public domain, and updating these monthly. DNOs have demonstrated their commitment to publishing data that they hold which might improve market transparency and efficiency. To date, DNOs have published the data that they believe they can reasonably publish given their legal obligations on data confidentiality, data privacy and competition including confidentiality obligations under the Utilities Act. A key reason that network companies support the Change Proposal is that, if approved by the Authority, the new obligations will assist in allowing the publication of data that DNOs and IDNOs have redacted in the SWRR due to confidentiality obligations. We are also aware of the fact that publication of data is equally subject to DIN6, which is separate from this CP. We believe that correctly worded legal text will assist in facilitating DNOs and IDNOs to publish this data in the ECR.	
Triton Power	Non-confidential	Yes	

Association for Decentralised Energy	Non-confidential	Yes	
Centrica	Non-confidential	Yes	
SP Distribution plc and SP Manweb plc	Non-confidential	The intent of the CP is understood, but not the timescales for trying to achieve this change.	
ELEXON	Non-confidential	Yes. As we move to a more decentralised system, information provision is crucial to allow the various Industry Parties to make more informed decisions thus resulting in a reduction in costs be it reinforcement or balancing.	
Energy UK	Non-confidential	Yes	
Flexible Generation Group (FGG)	Non-confidential	Yes	
National Grid ESO	Non-confidential	Yes. Whilst the consultation document focuses on addressing the concerns of the BEIS Panel of Technical Experts in relation to the Capacity Market, there are many other benefits that will result from this change proposal. We have explained some of these in our answer to question 13.	

Open Climate Fix	Non-confidential	Yes	
UK Power Reserve Ltd.	Non-confidential	Yes. UKPR understands and supports the intent of the CP.	
Energy Policy Group, University of Exeter	Non-confidential	Yes	
Western Power Distribution	Non-confidential	Yes – we understand the intent of the Change Proposal. WPD along with other DNOs have already published information relating to DER sites connected to our respective networks. This information is currently known as the SWRR, it is refreshed on a monthly basis and is available in the public domain. By publishing the SWRR, we have demonstrated our commitment to publishing data that we hold which might improve market transparency efficiency. To date, DNOs have published the data that we believe we can reasonably publish given our confidentiality obligations under current legislation and network codes, which include but are not limited to the Utilities Act and Distribution Code. A key reason we support the Change Proposal is that, if approved by the Authority, the new obligations could allow DNOs to publish data fields which have currently been redacted from the SWRR due to confidentiality issues. We believe that correctly worded legal text could enable DNOs and	

		IDNOs to publish a complete data set in the ECR which is currently redacted in the SWRR. Finally, we understand that the publication of DER connection data, which we currently hold, could improve the economic and efficient operation of the wider GB energy system and markets, contribute to the delivery of a lower carbon economy and provide greater transparency to assist with development of Government policies. DNOs and iDNOs already use this DER connection data to operate efficient, co-ordinated, economical, and safe networks as per the Electricity Distribution Licence and Distribution Code and will use new data, from others, as it becomes	
Working Group Conclusion:			

Company	**Confidential/ Anonymous**	**3. Are you supportive of the principles that support this CP, which is to increase the availability of accessible data which is expected to improve the economic and efficient and operation of the energy market, while driving towards a lower carbon economy?**	**Working Group Comments**
Electricity North West Limited	Non-confidential	Yes. Within the working Group we also proposed that this change proposal should seek to appropriately modify the National Terms of Connection (para. 25.5) to provide transparency of our intention to publish their data. We would	

		still like to see this amended as part of the deliverables of DCP350. There is also a consequential need to amend the D-Code (DIN6) to align with the confidentiality implications of DCP350.	
Leep Electricity Networks Limited	Non-confidential	Yes, we support the principles that support the CP providing that the only parties that can access the data are those parties that can influence the economic, efficient and operation of the energy market in order to drive towards a lower carbon economy. We do not support the principle that this data should be made public to all.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Yes, we are supportive of the principles. However, a consequential DCUSA change may be needed to place obligations on suppliers to share some of the data they hold that is relevant to this CP. When connections to generators, storage and DER sites are first established the DNO has a relationship with the customer through the new connection transactions and establishing connection terms, including necessary contact details. As DER sites are known to change hands from the initial developer and funders to new operators or new owners, and the DNO bills suppliers for DUoS charges not the DER customer, so the contact details DNOs hold in respect of many of these sites may become out-dated through time. Suppliers maintain contact with the current site owner through registering the export (and import) MPANs and entering into on-going financial transactions such as striking	

		contracts for power purchase and other services. Consequently, the contact details the supplier's hold are likely to be more accurate and up to date, particularly where sites that have changed owners or operating companies without the DNO being aware. A consequential DCUSA change that would require suppliers to provide periodically refreshed customer contact details should be valuable in assisting DNOs in maintaining registers.	
On behalf of ENA Open Networks Project	Non-confidential	Yes, we are supportive of the principles. There are a wide range of benefits through publishing data on network resources in a complete and consistent way. As well as improved operation of the capacity market these benefits include improved information for project developers to help select sites for new generation and energy infrastructure projects, for industry participants to identify where new services would be of value, for network companies to optimise network investments and for policy makers to understand the effectiveness of policies. These benefits underpinned the decision by the network companies to develop and deliver System Wide Resource Registers (SWRR) as part of the Open Networks project. The delivery of consistently formatted resource registers by individual DNOs and IDNOs ensures that network stakeholders would benefit from more accessible information and that this information would be of high quality. When the decision was made to take forward SWRR, the benefits of registers were considered alongside the expected	

		costs. (When industry stakeholders had previously provided views on the SWRR proposals, they were also keen that these costs should be balanced against the benefits.) The approach of having each DNO and IDNO publish a register was preferred by Open Networks participants as this placed an onus on DNOs and IDNOs to ensure that data is accurate and maintained. This approach also enabled the registers to be produced quickly and at relatively low cost for resources of 1MW and greater. To ensure that DNOs and IDNOs can maintain accurate information on the ownership of connected sites, please could the DCP 350 group consider if a consequential DCUSA change is needed to place obligations on suppliers to share some of the data they hold. When connections to generators, storage and DER sites are first established the DNO has a relationship with the customer through the new connection transactions and establishing connection terms, including necessary contact details. DER sites are known to change hands from the initial developer and funders to new owners (through acquisitions). The DNO bills suppliers for DUoS and not the DER customer, so the contact details DNOs holds may become outdated. Suppliers maintain contact with the current site owner through registering the export (and import) MPANs and striking contracts for power purchase and other services, with ongoing financial transactions. The contact details the supplier's hold are likely to be more accurate, including for those sites that have changed owners or operating	

		companies. A consequential DCUSA change that would require suppliers to provide periodically refreshed customer contact details could be valuable in assisting DNOs in maintaining registers.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	The PTE notes that economic theory is clear that markets operate more efficiently when parties have greater knowledge of the market fundamentals, i.e. transparent markets are more competitive and therefore work better for customers. The role of the PTE is to challenge National Grid ESO's forecasting for the Capacity Market and the report rightly notes that we have had ongoing concerns about the ESO's ability to forecast correctly the CM requirement in an absence of detailed data on embedded generators and DSR. This change proposal will increase transparency for all parties and we therefore believe it will achieve the benefits set out in section 1.5. Further, we believe that the data, and the act of creating the database, will help the DNOs themselves better understand what assets are connected to their networks. Giving parties a route to easily notify changes in sites to a DNO will also make the industry as a whole more responsible for helping clean, and keep up to date, this important market data. As the market moves to one where there is a more active role for DSOs a greater understanding of local system conditions will help identify both issues and solutions as the GB energy market seems fundamental changes such as the take-up of EVs, electric heating, smart meters, etc.	

ScottishPower Renewables	Non-confidential	Yes, we are supportive of the principles underlying this CP. We believe this is a step towards enabling a DSO world where visibility of the assets connecting to the distribution level can provide a degree of understanding of the opportunities regarding flexibility while promoting transparency and competition.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	Yes, we are supportive of the principles. There are a wide range of benefits through publishing data on network resources in a complete and consistent way. As well as improved operation of the capacity market these benefits include improved information for project developers to help select new generation and energy infrastructure projects, for industry participants to identify where new services would be of value, for network companies to optimise network investments and for policy makers to understand the effectiveness of policies. These benefits underpinned the decision by the network companies to develop and deliver System Wide Resource Registers (SWRR) as part of the Open Networks project. The delivery of consistently formatted resource registers by individual DNOs and IDNOs ensures that network stakeholders would benefit from more accessible information and that this information would be of high quality. When the decision was made to take forward SWRR, the benefits of registers were considered alongside the expected costs. (When industry stakeholders had previously provided views on the SWRR proposals, they were also keen that these	

		costs should be balanced against the benefits.) The approach of having each DNO and IDNO publish a register was preferred by Open Networks participants as this placed an onus on DNOs and IDNOs to ensure that data is accurate and maintained. This approach also enabled the registers to be produced quickly and at relatively low cost for resources of 1MW and greater. To ensure that DNOs and IDNOs can maintain accurate information on the ownership of connected sites, please could the DCP 350 group consider if a consequential DCUSA change is needed to place obligations on suppliers to share some of the data they hold. When connections to generators, storage and DER sites are first established the DNO has a relationship with the customer through the new connection transactions and establishing connection terms, including necessary contact details. DER sites are known to change hands from the initial developer and funders to new owners (through acquisitions). The DNO bills suppliers for DUoS and not the DER customer, so the contact details DNOs holds may become outdated. Suppliers maintain contact with the current site owner through registering the export (and import) MPANs and striking contracts for power purchase and other services, with ongoing financial transactions. The contact details the supplier's hold are likely to be more accurate, including for those sites that have changed owners or operating companies. A consequential DCUSA change that would require suppliers to	

		provide periodically refreshed customer contact details could be valuable in assisting DNOs in maintaining registers.	
Triton Power	Non-confidential	The mod report identifies the main benefits of this change. However, the report could draw out more the benefits to the wholesale market. Putting the data into the market on both small and larger players on an equitable basis, especially given the growth in embedded generation, will have a material impact on the market transparency and operations. This will be further enhanced were the data to be provided on a national register. With all due respect to IDNOs, we are not familiar with their names or operations, so it is unclear how we will know if we have found all of their websites and have a complete view of the data. Creating a national register, similar to the TEC Register and ideally combined with the same set of details for TO connected sites, should be created as quickly as possible. In the meantime we would want to see the DNOs provide a link to all IDNO registers in their areas to ensure that parties unfamiliar with the IDNOs can easily check they have correctly identified all assets within a region.	
Association for Decentralised Energy	Non-confidential	We support these principles. As stated above, we consider this points to a national register including both distributed and transmission capacity.	
Centrica	Non-confidential	Yes.	

		We believe the primary objective of the CP should be to improve data availability to market participants using and connecting to the network and facilitate new initiatives such as trading of capacity.	
SP Distribution plc and SP Manweb plc	Non-confidential	While to sentiment to provide greater accessibility to data is commended, we cannot see why the level of detail is being requested, or the speed at which updates are required. We are unable to envisage how the detail being requested improves the economic and efficient operation of the energy market.	
ELEXON	Non-confidential	Yes. It aligns with the Open Data policy.	
Energy UK	Non-confidential	Yes. This is particularly important given the scale of change the industry is undergoing and	
Flexible Generation Group (FGG)	Non-confidential	Markets operate more efficiently when parties have greater knowledge of the market fundamentals, i.e. transparent markets are more competitive and therefore operate in a manner that is more advantageous for customers. A national register, similar to the TEC Register and ideally combined with the TEC Register, would allow parties to understand developments across the networks and to look for new opportunities as the nature of the markets alter. The proposal will therefore achieve the market improvements set out in	

		section 1.5 to the benefit of the market players, its customers and policy makers. Creating a data base will also improve the DNOs knowledge of the assets connected to their networks. This should help them better plan future network investments and system operations. We would also hope that the DNOs will be able to show users which areas they need investment, the type of products and technologies they are looking for.	
National Grid ESO	Non-confidential	Yes. More broadly, National Grid ESO is supportive of increased availability of data in general. This is reflected in our Forward Plans [1], Towards 2030 document [2], RIIO2 business plan [3], and Digitalisation Strategy [4]. We believe that data should shared openly wherever possible to inform competitive and efficient markets, enable innovation and inform change across industry. We agree with the Energy Data Taskforce's recommendation of "presumed open" access to data, with access only ever being restricted to mitigate security, privacy, legal or consumer impact risks. For this CP we believe that the data can and should be shared to improve the economic and efficient and operation of the energy market, while driving towards a lower carbon economy. [1] https://www.nationalgrideso.com/about-us/business-planning-riio/forward-plans-2021 [2] https://www.nationalgrideso.com/document/161996/download [3] https://www.nationalgrideso.com/about-us/business-	

		planning-riio/riio-2-final-business-plan [4] https://www.nationalgrideso.com/document/157931/download	
Open Climate Fix	Non-confidential	Yes. But: Can the 1 MW threshold be lowered to, say, 30 kW (to align with the threshold at which DERs must have half-hourly export MPANs)? As more and more small DERs are installed, these small DERs will add up to a capacity which will be of more and more concern to the ESO. Even if we opt for a 1 MW threshold in 2020, could we specify a timetable at which the capacity threshold will be reduced? For example, to pick some dates out of thin air (!): all DERs over 30 kW should be listed in the ECR starting in 2022; and all DERs over 3 kW should be listed by 2025. (Perhaps 3 kW is too ambitious.) To protect the privacy of individuals, domestic-scale DERs could be spatially aggregated.	
UK Power Reserve Ltd.	Non-confidential	Yes. The CP is key to introducing an obligation for DNOs and IDNOs to compile and publish a consistent and comparable set of information that would improve the understanding of the GB electricity market and its participants.	
Energy Policy Group, University of Exeter	Non-confidential	Yes	

Western Power Distribution	Non-confidential	Yes – we are largely supportive of the principles that underpin this Change Proposal. We recognise that the registers have the potential to provide benefit, through transparent data sharing, to project developers, energy infrastructure projects, industry stake holders, network companies and policy makers, but most notably to the ESO. These benefits underpinned the decision by the network companies to develop and deliver System Wide Resource Registers (SWRR) as part of the Open Networks project. The delivery of consistently formatted resource registers by individual DNOs ensures that network stakeholders would benefit from more accessible information and that this information would be of high quality. When the decision was made to take forward SWRR, the benefits of registers were considered alongside the expected costs. When industry stakeholders had previously provided views on the SWRR proposals, they were also keen that these costs should be balanced against the benefits. The approach of having each DNO publish a register was preferred by Open Networks participants as this placed an onus on DNOs to ensure that data is accurate and maintained. This approach also enabled the registers to be produced quickly and at relatively low cost for resources of 1MW and greater. In terms of increasing the availability of accessible data, WPD have already made many data sets, which we hold, available in	

		the public domain – these are accessible via our Energy Data Hub – www.westernpower.co.uk/energy-data-hub. There are some proposed data fields in this Change Proposal which we do not currently hold, and if we were to collect and populate these fields, there would be an associated cost. A cost based impact analysis should be completed before deciding on collecting addition/different data to what we do already. In addition to this, the financial recovery mechanism should be considered. For example, should the cost be socialised on the distribution use of system charges or should the cost be passed through to the ESO who has a directly measurable financial use case for the additional data fields, which is to make improvements to the Balancing Mechanism and Capacity Market, for which they hold responsibility.	
Working Group Conclusion:			

Company	Confidential/ Anonymous	4. Do you agree with the data items that the Working Group have decided should be included in an ECR? If not, what items would you remove/add and why?	Working Group Comments
Electricity North West Limited	Non-confidential	Where DNOs do not currently collect and hold items of data then there needs to be a rigorous business case relating to the specific item justifying why customers money is spent to retrospectively collect and then maintain that data item.	

		The ECR requires data items Resource Type and Technology/Plant Type. DNOs collect data from their customers at the connection stage; the nationally agreed Requirements for Connection of Generation (EREC G99) and its associated Generator Standard Application Form (ENA ER G99) requires the customer to provide only the Technology Production Type. This is the data that DNOs hold and publish as part of their SWRR. Collecting the disaggregated Resource Type and Technology/Plant Type data specified in this change proposal will be an arduous and costly task. Therefore, these data items should be rigorously justified.	
Leep Electricity Networks Limited	Non-confidential	The information we currently hold regarding our sites is the information captured through the G99 application process therefore providing that the information required is reflective of the G99, we support the data items suggested.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	As noted in the consultation document, many of the data items published in the SWRR align with the data items proposed for the ECRs. We note that Attachment 3 to the consultation document illustrates the proposed ECR data items and the response from the ENA, which we support, has a number of suggestions regarding these data items based of the work DNOs we have done to develop the SWRR and the DNOs' experience of collating the SWRR data items..	
On behalf of ENA Open	Non-confidential	As noted in the consultation document, many of the data items published in the DNO System Wide Resource Registers (SWRR)	

Networks Project		align with the data items proposed for the ECRs. Attachment 3 to the consultation document illustrates which proposed ECR data items are aligned and which are additional. We have a number of suggestions on these data items based of the work we have done to develop the SWRR and on DNO experience of bringing together and publishing the SWRR data items. MPAN – This is not yet published in the SWRR. This data can be sourced by DNOs and IDNOs. If the ECR are approved by the Authority, we propose to include this from July 2020 when the second phase of SWRR work is complete. Address Lines, Town/City, County, Post Code and Locations (X & Y co-ordinates) – This data is not yet published in the SWRR. For many of the resources connected to distribution networks, this information is available and, if the ECR are approved by the Authority, we propose to include this from July 2020 when the second phase of SWRR work is complete. For some of the connected resources, not all of these data items will be available. (Not all of this information is included in legacy connection agreements for example.) In these cases, DNOs and IDNOs would not include the information in the registers but would indicate that the data was not available. Over time, DNOs and IDNOs could look to source the unavailable information and add this to the ECR. The inclusion of certain data items (e.g. MPANs and Addresses) may lead to further issues regarding the use of personal data and data protection legislation including GDPR. For most sites >1MW this is unlikely to be the case, but this may become more relevant if the ECR are expanded over time for resources	

		<1MW. For example a MPAN can be considered as private data where it identifies a domestic customer/actual person's address. However, as sites greater than 1MW are highly likely to be owned by companies rather than individuals this should not be a significant issue. Primary Resource Type, Primary Technology / Plant Type, Resource Type 2, Technology / Plant Type 2, Resource Type 3 and Technology / Plant Type 3. – For Resource and Technology types, the SWRR includes a resource type based on the Technology Production Types provided by generators under the distribution network connection process for generators. This process is covered by Engineering Recommendation ER99. The ER G99 form for connection applications includes a range of 22 production types. In the SWRR, the ER G99 types have been supplemented by an additional resource type to indicate flexible demands. We believe that it would be efficient for the ECRs to align with the ER G99 types as this will allow data already collected from generators to be mapped directly to the ECRs. If alternative resource and technology types are used, then project developers and network companies will need to initiate further work to collect and map data to the alternative resource types. Additional time and costs will be incurred in doing this. NGESO has identified that there may be considerable benefits in capturing resource and technology types not currently collected through the ER G99 process, for example to further improve operation of the Capacity Market. We believe that it will be more effective to modify the ER G99 application form	

		and collect data against the required types going forward. In the meantime, DNOs and IDNOs can work with NGESO to identify specific resource types where additional information on technology type would be helpful for Capacity Market purposes. The use of the Resource Type 2 and Resource Type 3 columns is intended to provide information on different plant types at a single site. Having now published SWRR, it is clear that there are very few sites at present with more than one resource type such that most of the fields associated with the Resource Types 2 and 3 don't contain data. Other approaches to capturing different resource and technology types could be considered such as the use of additional rows to represent different resource types. Connection Queue Management Position – This field is proposed to be included in the SWRR from July 2020 when the second phase of the work to complete delivery of the SWRR is complete. We note the comments in the consultation document (para 3.5) that it could be advantageous to show which prospective generators are interacting with each other. The ongoing work on the SWRR has highlighted that maintaining the Connection Queue Management Position will be time consuming as this can change frequently. As an alternative, we propose that the ECR should identify the connection queue(s) affecting particular generators or other DER but the ECR would not include the queue position. This would meet the objective outlined in para 3.5 and would be more straightforward to implement.	

		In general, where DNOs and IDNOs do not currently collect and hold items of data, there should be a rigorous test to justify the further expenditure to collect and maintain those data items. For example, collecting the disaggregated Resource Type and Technology/Plant Type data currently specified in this Change Proposal outside of the ongoing connection application processes would be an arduous and costly task.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	Line 19 in the spreadsheet – it would be useful to know the type of storage, for example is it storage with a 4 hour duration or 30 minutes? Also tidal stream and tidal range should be two different classes. The PTE also believes that the technology definitions must be kept consistent, so a drop down menu of technology choice is used as a way to ensure consistency. If the text is free form there is a risk technology definitions could start to diverge.	
ScottishPower Renewables	Non-confidential	Yes.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	As noted in the consultation document, many of the data items published in the DNO System Wide Resource Registers (SWRR) align with the data items proposed for the ECRs. Attachment 3 to the consultation document illustrates which proposed ECR data items are aligned and which are additional. We have a number of suggestions on these data items based of the work we have done to develop the SWRR and on DNO experience of bringing together and publishing the SWRR data items.	

		We have a concern over the inclusion of personal data items in the register as this will need to be anonymised or redacted for sole traders. It also raises questions on scalability in respect to GDPR compliance. The inclusion of certain data items (e.g. MPANs and Addresses) may lead to further issues regarding the use of personal data and data protection legislation including GDPR. For most sites >1MW this is unlikely to be the case, but this may become more relevant if the ECR are expanded over time for resources <1MW. For example a MPAN can be considered as private data where it identifies a domestic customer/actual person's address. However, as sites greater than 1MW are highly likely to be owned by companies rather than individuals this should not be a significant issue. Primary Resource Type, Primary Technology / Plant Type, Resource Type 2, Technology / Plant Type 2, Resource Type 3 and Technology / Plant Type 3. – For Resource and Technology types, the SWRR includes a resource type based on the Technology Production Types provided by generators under the distribution network connection process for generators. This process is covered by Engineering Recommendation ER99. The ER G99 form for connection applications includes a range of 22 production types. In the SWRR, the ER G99 types have been supplemented by an additional resource type to indicate flexible demands. We believe that it would be efficient for the ECRs to align with the ER G99 types as this will allow data already collected from generators to be mapped directly to the ECRs. If alternative resource and technology types are used, then project developers and network companies will need to initiate further work to collect and map data to the alternative	

		resource types. Additional time and costs will be incurred in doing this. NGESO has identified that there may be considerable benefits in capturing resource and technology types not currently collected through the ER G99 process, for example to further improve operation of the Capacity Market.We believe that it will be more effective to modify the ER G99 application form and collect data against the required types going forward. In the meantime, DNOs and IDNOs can work with NGESO to identify specific resource types where additional information on technology type would be helpful for Capacity Market purposes. The use of the Resource Type 2 and Resource Type 3 columns is intended to provide information on different plant types at a single site. Having now published SWRR, it is clear that there are very few sites at present with more than one resource type such that most of the fields associated with the Resource Types 2 and 3 don't contain data. Other approaches to capturing different resource and technology types could be considered such as the use of additional rows to represent different resource types. Connection Queue Management Position – This field is proposed to be included in the SWRR from July 2020 when the second phase of the work to complete delivery of the SWRR is complete. We note the comments in the consultation document (para 3.5) that it could be advantageous to show which prospective generators are interacting with each other. The ongoing work on the SWRR has highlighted that	

		maintaining the Connection Queue Management Position will be time consuming as this can change frequently. As an alternative, we propose that the ECR should identify the connection queue(s) affecting particular generators or other DER but the ECR would not include the queue position. This would meet the objective outlined in para 3.5 and would be more straightforward to implement. In general, where DNOs and IDNOs do not currently collect and hold items of data, there should be a rigorous test to justify the further expenditure to collect and maintain those data items. For example, collecting the disaggregated Resource Type and Technology/Plant Type data currently specified in this Change Proposal outside of the ongoing connection application processes would be an arduous and costly task.	
Triton Power	Non-confidential	We assume that the DNOs will only be able to choose from the technologies defined and no free text will lead to a divergence of data and definitions. Storage – it is important that the storage is divided by the duration of the asset. This therefore needs some storage types. While the DNOs will know which sites they have contracted with, the ESO will need to give ancillary services data to the DNOs to make competition of the register consistent with the lists of ancillary services provided. It would be useful for parties to understand when the ESO will provide the DNOs with	

		updates to service providers – when they sign up, on the same day as other updates, etc.?	
Association for Decentralised Energy	Non-confidential	The ADE considers that in places, the data items may be too onerous. There will need to be clear justification for specific OS references compared to addresses and requirements to provide information on contracted services.	
Centrica	Non-confidential	Yes. We would be asking for more information on the network if there were no signs that this could be provided elsewhere. To achieve the principles that underpin this CP market participants need information on both the networks and on embedded capacity We acknowledge that Ofgem and industry is acting elsewhere – for example around the reform to the Long-Term Development Statement (LTDS).	
SP Distribution plc and SP Manweb plc	Non-confidential	No. Why is it necessary to understand if the generation has a firm, or non-firm connection and the level of demand that an individual generation connection requires. The overall level of detail being requested for individual generation sites is too great for the overall benefit trying to be achieved.	
ELEXON	Non-confidential	Balancing and Settlement Code (BSC) Modification Proposal P399 is currently being progressed through our change process.	

		P399 seeks to provide an extra level of data to Industry Parties with regards to Non Balancing Mechanism trades. Currently the trading party is anonymous. The proposed new data items are, a counterparty ID, location and technology type. The MPAN data item could potentially act as the Counterparty ID in the Balancing Services Adjustment Data file (when not provided through an aggregator). If there are going to be numerous new sources of data made available to Industry it's crucial that there is a way of linking the data i.e. through a common data item, rather than having lots of duplicate data sources which slightly contradict each other. If the MPAN was not provided as a data item, as a minimum there should be a unique ID for the site. The NETSO could then choose to adopt that code/MPAN as a Counterparty ID. This would negate the need for the 'Providing Services' data items for the TO as Industry Parties would be able to see whether a site is providing Balancing Services through other data sources. We recommend therefore progressing P399 as a way of deriving whether an Asset is providing a Balancing Service to the TO as opposed to the proposed data item in DCP350. Is there merit in aligning the data item 'resource' with 'fuel type' which is used elsewhere in Industry? There are benefits in having consistency amongst different data sets used in Industry, when reporting. BSC Modification Proposal P375, which is also being progressed through the BSC change process, is intending to allow Asset Meters to be used in Settlement. These will be given a unique	

		code similar to a MPAN/MSID. This may be better suited to a future change but at one stage we can envisage AMSID being used within this register. When registering Asset Meters we have requested similar information to be provided as what's in this register. This may allow assets <1MW or behind the meter to be included In terms of other data items, consideration should also be made of Grid Code Modification GC0139: Enhanced Planning-Data Exchange to Facilitate Whole System Planning.	
Energy UK	Non-confidential	Yes	
Flexible Generation Group (FGG)	Non-confidential	Looking at the spreadsheet: Lines 12 and 13 – FGG is not convinced that the OS reference is necessarily that useful and we note it is not provided on the TEC Register. An address seems sufficient. Line 19 – It would be useful to know the type of storage, for example is it storage with a 4 hour duration of 30 minutes? We suspect that this is an area where technologies may develop in future and propose the definitions around storage are kept under review. Line 54 – we would hope that Ofgem obliges the ESO to provide and update this data. It is possible to find out who is contracted for which services, but it would be easier if the ESO	

		is responsible for notifying their own contracts. We also believe that where a DNO is itself offering ancillary services, such as CLASS, that should be reported on the register. Also all sites providing DSR, even if part of an aggregated portfolio, must be included to give a complete picture of sites active in the energy market.	
National Grid ESO	Non-confidential	Partly. We agree that it makes sense to align to the System Wide Resource Registers (SWRRs) where possible and also agree that there is a need to include additional attributes that are not included in the current SWRRs. We believe that there are several issues that still need addressing and that there is a potential future issue with the way that the proposal deals with co-located assets. For data to be of most value it is important to consider how the data will be used alongside other datasets. In general it should be possible to link your data to other people's data to provide context (this being the fifth star in the 5-star deployment scheme for Linked Open Data [1]). Within the ESO we plan to use the MPAN and location data (address and coordinates) in order to enrich this data by linking it to other data sources. For example, by linking it to weather data or historic generation (by MPAN) it can be used in forecasting and in setting fair Capacity market de-rating factors for each technology type. This CP includes MW in places with the SWRR only included MVA. As it is the de-rated MW continuation to security of supply that is rewarded via the Capacity Market auctions, it is right to include this in the ECR.	

		We disagree with the current list of proposed technology and resource types. We acknowledge that getting this right is difficult and multiple different lists appear in different places. It is important that the final list covers all the important technologies without duplication (or confusion) that could result in reporting differences between each DNO/IDNO. Currently the list of resource types and technology types excludes important technologies for the purpose of security of supply analysis. As an example, it is missing storage duration. This data should be added to ensure that we can calculate de-rating factors for each technology. This will ensure that each technology is appropriately awarded for the contribution it makes to security of supply whilst reducing the risk to consumers of over or under-procurement under the Capacity Market. We are open to working further with DCUSA Ltd and the DNOs/IDNOs on this. It should however be noted that the G99 list is insufficient as this only convers fuels and not technologies. For "Fossil Gas" there are several technologies from CCGTs to Gas Reciprocating Engines. Each operate differently and may therefore have a different contribution towards security of supply. If all are given the same de-rating factor this may result in asset owners not being rewarded correctly and also increased risk to consumers of over or under-procurement under the Capacity Market. For example, in our 2019 Future Energy Scenarios we project up to 10 GW of gas reciprocating engines. A one percentage point change in de-rating factor is therefore equivalent to 100 MW. If lack of data results in the incorrect de-rating factor being used this can	

		result in significant costs being passed on to consumers (over-procurement would cost £2.5 million per year if the Capacity Market clears at £25/kW. The resource and technology list should, as a minimum, cover the technologies that are receiving payments via the Capacity Market or other schemes (Feed-in-Tariff, Renewable Obligation, Contract for Difference). Finally on co-located sites, we accept the current proposal to include extra columns within the table for each component. This does however create a long-term risk that co-location may expand beyond the three resource/technology types allowed for. We believe that a relational database approach (separate but linked tables with the site details in table 1 and the asset details in table 2) makes more sense. [1] https://www.w3.org/DesignIssues/LinkedData.html	
Open Climate Fix	Non-confidential	**Essential additions** Please add a **unique identifier** for each DER, to help identify DERs across each monthly release of the ECR. (MPAN probably isn't a good unique ID as there isn't a one-to-one mapping between DER and MPAN. Customer Name & Customer Site aren't good unique IDs, either, as they could change over time, whilst still referring to the same DER. For example, a business might change its name.) Ideally the unique ID would be globally unique. That is, each ID should be unique even after merging ECR data from all the DNOs. Perhaps each unique ID should start with the DNO's initials. e.g. "WPD_123456". A	

		unique ID is also essential to enable the ECR to be cross-reference with other datasets, such as the ESO's register of which DERs provide ancillary services. Please add a '**decommissioning date**' or some other way to track assets which have been decommissioned, or which will soon be decommissioned. Please add a column for a **Renewable Energy Planning Database ID**; and another column for a **Feed in Tariff ID**, to help data users to de-duplicate DERs when merging ECRs with REPD and FiT datasets. (This will also help satisfy the EDTF's recommendation for linking datasets). For DERs with storage (e.g. batteries), please specify the **total energy storage capacity** in MWh. **<u>Optional changes</u>** Maybe add a "dates of refurbishment / upgrades" column. This could be a comma-separated list of dates when the DER's hardware was upgraded. e.g. a wind turbine whose blades were upgraded once in 2015, and again in 2025; or upgrading a PV inverter. (This information is useful because the DER's power curve might change suddenly after re-powering / upgrading). I could be wrong but I believe that a single DER can have multiple MPANs associated with it, so perhaps the "MPAN" column should allow for either a single MPAN or a comma-separated list of MPANs?	

		For solar PV, specify if the PV panels are over-specified compared to the inverter (e.g. 5 MW of panels connected to a 3 MW inverter). This is becoming increasingly common (because panels are getting so cheap), and this *significantly* changes the power curve. Many DERs will be controlled by an aggregator; and some of those aggregated DERs may be exposed to the ESO as BMUs (after wider-access to the balancing mechanism came into effect last year). It would be useful if these relationships between individual DERs and aggregators could be captured in the ECR (especially where DERs are aggregated together and exposed as a BMU). Specifically, perhaps the ECR could include an 'aggregator ID' column, to associate DERs with aggregators? For the primary resource type and primary technology type, please enforce the use of a standard vocabulary (i.e. so all DNOs use the exact same terms, so the data can be processed automatically). Each ECR file should specify the version of the data schema used to create each ECR file. (This could be specified in the filename of each ECR file; or in a separate sheet within the same Excel file, or a separate metadata file).	
UK Power Reserve Ltd.	Non-confidential	We strongly oppose providing any further data on what services are provided by assets. The indication of yes or no would be sufficient for the purpose of the register. Anything further than that would give away commercially sensitive	

		information regarding the commercial positioning of a given unit. This has to be avoided. With regards to the other data items, we in principle agree with them. There is the opportunity to streamline some of them: for instance, line 1 and postcode would be sufficient to identify the address. On the resource type, the list needs to be consistent with that used in other registers such as the SWRR.	
Energy Policy Group, University of Exeter	Non-confidential	We agree in principle with the data included for embedded generation. However we have two recommendations for future-proofing the development of the register. These recommendations are: to consider <1MW assets and to consider all flexibility assets. <1MW assets: The use of 1MW is in line with many clip sizes for new products, such as those introduced through Project Terre and the new suite of Ancillary Services procured by National Grid ESO. Ee understand why this is the recommended size. However, in a more decentralised system - with increased aggregation mechanisms - assets under 1MW are increasing in quantity and importance. We therefore believe that the panel should also be looking at <1MW assets. The two aforementioned routes to market allow for aggregation of smaller units to fulfil the clip size requirements. As such, considering <1MW assets will provide a beneficial overview of all technologies on the grid that will play an increased role as the GB electricity system decentralises. Incorporating these smaller assets will give the ESO greater visibility for future forecasting; particularly in the case of a	

		rapid uptake of household distributed energy resources (DER) such as household generation, storage, and electric vehicles (EVs). We therefore recommend that the Panel reviews the clip sizes of assets being aggregated into these markets and bases the minimum clip size for registry upon this. As this is explored, care should be taken to align the register with the Energy Data Taskforce's proposal for a national asset register. Case study: We wanted to draw the panel's attention to a development that has been announced in Australia. This comprises a new DER register due to be launched on 1 March: https://aemo.com.au/energy-systems/electricity/der-register. We hope that this model will be of interest and would like to particularly note its granularity, incorporating small-scale DER <1MW. Flexibility assets: It is currently unclear whether assets such as EV chargers and heat pumps are to be included in the register in future development. The register currently toes the line between generation and flexibility assets in several places, but does not go far enough to incorporate all flexibility assets. If the register seeks to comprehensively address DER capacity then inclusion of these items will be necessary. Furthermore, a	

		process for incorporating additional flexibility technologies developed in future is required to ensure the register retains comprehensive reach in future.	
Western Power Distribution	Non-confidential	Many of the data items published in the DNO System Wide Resource Registers (SWRR) align with the data items proposed for the ECRs. Attachment 3 to the consultation document illustrates which proposed ECR data items are aligned and which are additional. We have a number of suggestions on these data items based on the work we have done to develop the SWRR and on DNO experience of bringing together and publishing the SWRR data items. **MPAN** – This is not yet published in the SWRR. This data could be relatively easily sourced by DNOs and IDNOs. If the ECR is approved by the Authority, we propose to include this from July 2020 when the second phase of SWRR work is complete. **Address Lines, Town/City, County, Post Code and Locations (X & Y co-ordinates)** – This data is not yet published in the SWRR. For many of the resources connected to distribution networks, this information is available and, if this is approved by the Authority, we propose to include this from July 2020 when the second phase of SWRR work is complete. For some of the connected resources, this information may not be available, as some of it may be contained in legacy connection agreements for example. In these cases, we would look to source the information and add this to the ECR over time. The inclusion of certain data items (e.g. MPANs and Addresses) may lead to further issues regarding the use of personal data	

		and data protection legislation including GDPR. For most sites >1MW this is unlikely to be the case, but this may become more relevant if the ECR are expanded over time for resources <1MW. For example an MPAN can be considered as private data where it identifies a domestic customer/actual person's address. However, as sites greater than 1MW are highly likely to be owned by companies rather than individuals this should not be a significant issue. **Connection Queue Management Position** – This field is proposed to be included in the SWRR from July 2020 when the second phase of the work to complete delivery of the SWRR is complete. We note the comments in the consultation document (paragraph 3.5) that it could be advantageous to show which prospective generators are interacting with each other. The ongoing work on the SWRR has highlighted that maintaining the Connection Queue Management Position will be time consuming as this can change frequently. As an alternative, we propose that the ECR should identify the connection queue(s) affecting particular generators or other DER but the ECR would not include the queue position. This would meet the objective outlined in paragraph 3.5 and would be more straightforward to implement. **Primary Resource Type, Primary Technology / Plant Type, Resource Type 2, Technology / Plant Type 2, Resource Type 3 and Technology / Plant Type 3**. – For Resource and Technology types, the SWRR includes a resource type based on the Technology Production Types provided by generators under the distribution network	

		connection process for generators. This process is covered by Engineering Recommendation G99. The ER G99 form for connection applications includes a range of 22 production types. In the SWRR, the ER G99 types have been supplemented by an additional resource type to indicate flexible demands. We believe that it would be efficient for the ECRs to align with the ER G99 types as this will allow data already collected from generators to be mapped directly to the ECRs. If alternative resource and technology types are used, then network companies will need to initiate further work to collect and map data to the alternative resource types. The dispatch and utilisation of many connections is not related to the technology type identified, but by the commercial mechanisms it is seeking to access. If it is important to capture resource and technology types not currently collected through the ER G99 process, for example to further improve operation of the Capacity Market and Balancing Mechanism, it would be more effective to modify the ER G99 application form and collect data against the required types going forwards for new connections. The use of the Resource Type 2 and Resource Type 3 columns is intended to provide information on different plant types at a single site. Having now published SWRR, it is clear that there are very few sites at present with more than one resource type such that most of the fields associated with the Resource Types 2 and 3 don't contain data. Other approaches to capturing different resource and technology types could be considered such as the use of additional rows to represent different resource types.	

		With regard to the options of Resource and Technology type categorisation, both options have an associated cost impact as internal data management systems and processes will need to be adjusted/developed. Reference should be made to our response provided in question 3 of this consultation regarding the requirement for a costed impact assessment.	
Working Group Conclusion:			

Company	Confidential/ Anonymous	5. Do you have any comments on the definitions that have been used for each item proposed to be contained in the ECR?	Working Group Comments
Electricity North West Limited	Non-confidential	The definitions of the ECR data fields that are common with the SWRR data fields have been collaboratively agreed by the network companies, through their work within the Open Networks project, they are therefore robust definitions. Where the ECR requires more data fields than the SWRR the definitions will need to have more precise definition to ensure consistency across the DNO/IDNO publications. This is particularly so should the ECR include data items Resource Type and Technology/Plant Type.	
Leep Electricity Networks Limited	Non-confidential	Providing that the definitions are reflective of the G99, we are comfortable with the definitions proposed.	

Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Many of the proposed ECR definitions / descriptions align with those used for the SWRRs. As these definitions have been collaboratively agreed by DNOs, we are keen to maintain the intended consistency. Some of the data fields provide capacities in both MW and MVA. This recognises that the source data, usually picked up from the customer's original connection request and reflected in a connection agreement, could be specified as either a MW or a MVA capacity. A single conversion factor is used for the SWRR and both the MW and MVA values are included in the registers. It would be prudent to maintain a similar approach for the ECR.	
On behalf of ENA Open Networks Project	Non-confidential	Many of the proposed ECR definitions align with the definitions used for the System Wide Resource Registers (SWRR). These definitions have been collaboratively agreed by the network companies through their work on the SWRR and are intended to ensure that there is consistency in providing the data for the registers. For the additional fields noted in the answer to Question 4, the addition definitions appear straightforward and robust. If further fields are included in the ECR, DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by the parties bringing together the data. Some of the data fields provide capacities in both MW and MVA. This recognises that the source data, usually taken from a connection agreement, could be specified as either a MW or an MVA capacity. For the SWRR, a single conversion factor is used	

		and both the MW and MVA values are included in the registers. National Grid ESO have highlighted that capacities in MW are used in the capacity market and that wherever possible, the MW capacity should be used. However, in the absence of a MW value, we propose that a similar approach is used for the ECRs until a MW value is available.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	The PTE has concerns that in future the different nature of different battery types should have a different definition, to allow the ESO to track the duration of the storage on the system. Lithium ion are generally short duration <4 hr batteries, but other storage may have a far longer duration. The PTE would like to see this considered as an enhancement, if not for go live, within a limited time of say 6 months. Likewise tidal stream and tidal range have different operating characteristics and it should be a goal to increase these types of classification. The PTE further note that there are new technologies coming forward under the ESO's Stability Pathfinder projects, and we do not know what the future holds, so we believe the definitions and content should be reviewed on a 6 monthly basis. The management of the register contents was deliberately proposed as being outside the DCUSA to allow changes to be fast and flexible. It would be good to see the DNOs commit to a 6 monthly review process.	
ScottishPower Renewables	Non-confidential	Not at this time	

On behalf of Scottish & Southern Electricity Networks	Non-confidential	Many of the proposed ECR definitions align with the definitions used for the System Wide Resource Registers (SWRR). These definitions have been collaboratively agreed by the network companies through their work on the SWRR and are intended to ensure that there is consistency in providing the data for the registers. For the additional fields noted in the answer to Question 4, the addition definitions appear straightforward and robust. If further fields are included in the ECR, DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by the parties bringing together the data. Some of the data fields provide capacities in both MW and MVA. This recognises that the source data, usually taken from a connection agreement, could be specified as either a MW or an MVA capacity. For the SWRR, a single conversion factor is used and both the MW and MVA values are included in the registers. We propose that a similar approach is used for the ECRs.	
Triton Power	Non-confidential	Storage needs sub-types.	
Association for Decentralised Energy	Non-confidential	The ADE has no comment.	

Centrica	Non-confidential	No	
SP Distribution plc and SP Manweb plc	Non-confidential	No	
ELEXON	Non-confidential	In technology type does the data item need to be as prescriptive as suggested or is there more merit in grouping technologies based on common characteristics i.e. Fast Acting? These registers need to be created and then maintained so consideration over whether the extra level of granularity is actually required will reduce costs and may lead to less 'data not available' or blank cells.	
Energy UK	Non-confidential	Not at this time.	
Flexible Generation Group (FGG)	Non-confidential	FGG would note that there are new technologies we expect to be deployed over the coming years. We are already seeing new services being requested under the ESO's new Stability Pathfinder projects so it is important that the technology definitions and content should be reviewed on a regular [6 monthly] basis. Whilst not for this change proposal, we also believe that it is important that the TEC Register is updated to mirror the data provided in this register. To get a truly national view of the market we would like to see ALL sites across the GB network reported in the same way, with equivalent data, updated as	

		regularly, etc. This is also in line with the views of the Energy Data Task Force and would give a far clearer view of the market, particularly as embedded sites become increasingly important in delivering secure supplies.	
National Grid ESO	Non-confidential	See Above. The Grid Supply Point (GSP) should match those registered within Settlement. National Grid ESO have observed some networks using an alternate list of GSPs (such as creating multiple GSPs in the case of split busbar sites). This poses challenges when using the data with other datasets (linked data). Regarding the section on Providing Services, National Grid ESO is committed to supporting the recommendations of the Energy Data Task Force including improving the transparency and accessibility of its data. This includes our work in Open Networks including working with DNOs to develop the SWRR. We acknowledge the comments in para. 4.18 of this consultation and are actively exploring how the ESO can provide this information.	
Open Climate Fix	Non-confidential	No comments.	
UK Power Reserve Ltd.	Non-confidential	No comments. Seem sensible.	
Energy Policy Group,	Non-confidential	No	

University of Exeter			
Western Power Distribution	Non-confidential	Many of the proposed ECR definitions align with the definitions used for the System Wide Resource Registers (SWRR). These definitions have been collaboratively agreed by the network companies through their work on the SWRR and are intended to ensure that there is consistency in providing the data for the registers. For the additional fields noted in the answer to Question 4, the addition definitions appear straightforward and robust. If further fields are included in the ECR, DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by the parties bringing together the data. Some of the data fields provide capacities in both MW and MVA. This recognises that the source data, usually taken from a connection agreement, could be specified as either a MW or an MVA capacity. For the SWRR, a single conversion factor is used and both the MW and MVA values are included in the registers. We propose that a similar approach is used for the ECRs.	
Working Group Conclusion:			

DCP 350 'Creation of Embedded Capacity Registers' Collated Consultation Responses with Working Group Comments

Company	Confidential/ Anonymous	6. Do you agree with the format chosen by the Working Group for publishing the ECR?	Working Group Comments
Electricity North West Limited	Non-confidential	Yes.	
Leep Electricity Networks Limited	Non-confidential	We do not agree that the registers should be made publicly available. We are happy with the suggestion of a standardised format and we are happy to publish this on our website but would recommend this be password protected or published by a 3rd party where access can be facilitated and authorised for relevant parties who can contribute towards the desired benefits of this change.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Yes, we agree that a simple Excel based format is appropriate at this time.	
On behalf of ENA Open Networks Project	Non-confidential	Yes, we agree that a simple Excel based format is appropriate at this time. As industry work on data registration and accessibility develops, we would expect to further develop the SWRR/ECR registers to ensure continued fitness for purpose.	

BEIS' Panel of Technical Experts (PTE)	Non-confidential	The PTE still supports a national database, but recognise that waiting for a party to deliver this risks a delay to the industry seeing the benefits of the mod. However, we hope that Ofgem will push for a party to create a national database as quickly as possible rather than wait for a third party to bring something forward on a complete solution.	
ScottishPower Renewables	Non-confidential	Yes	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	Yes, we agree that a simple Excel based format is appropriate at this time. As industry work on data registration and accessibility develops, we would expect to further develop the SWRR/ECR registers to ensure continued fitness for purpose.	
Triton Power	Non-confidential	No. Triton would prefer a national database, including TO plants. That would make it far easier for the market to access a comprehensive set of data for the whole market.	
Association for Decentralised Energy	Non-confidential	The ADE has no comment.	
Centrica	Non-confidential	Yes. We agree that the priority should be to get the data published and accessible to users as soon as possible. A national data platform or register should be implemented later.	

SP Distribution plc and SP Manweb plc	Non-confidential	No, using a spreadsheet to accommodate this type of information is time consuming and resource intensive. Updates of the information (if required on a weekly basis as listed in the Change Proposal document) must be handled by some automatic process. The information requested does not sit in a single database within the DNO and will involve huge resource from the DNO to formulate the data into a single document.	
ELEXON	Non-confidential	Yes	
Energy UK	Non-confidential	Yes	
Flexible Generation Group (FGG)	Non-confidential	FGG would rather see a national data base, ideally held on an industry platform that is user friendly. We very much hope that Ofgem requests the DNOs arrange this as soon as possible, but it is important that the data is provided free of charge to all parties so that they can use it to better inform their own decisions.	
National Grid ESO	Non-confidential	We support publication in excel format, however it should be noted that in Open Data it is customary to avoid proprietary file formats such as the excel format. Instead basic CSVs or the OpenDocument Spreadsheet (.ods file) is common. To allow the data to be processed by script merged cells should be avoided in the main data table.	
Open Climate Fix	Non-confidential	It's a great idea to use a standard format for releasing data.	

		But I would be cautious about using Excel files! Excel files can be surprisingly hard for automated software scripts to read if the formatting is complex, and it's easy for humans to accidentally enter malformed data (for example, Excel will try to format MPANs as floating point numbers, and hence cut off many of the digits! This is especially dangerous when exporting CSVs from Excel, because the truncated MPANs will be irreparable in the CSV files.) Please ensure the data is easy for both humans *and* automated scripts to read (e.g. using Python's Pandas library). PSV files (pipe-separated-values) might be a good choice. CSV could also be a good choice, although CSV can be a little tricky for text fields like postal addresses which might contain commas but that's solvable by putting the text into quotes. Excel files will work, but they are a dangerous option, in my humble opinion! If you must use Excel files then please specify the data types for each column (e.g. MPAN should by int64, not float), and ensure that the sheet which contains the main bulk of the data is as simple as possible (no merged cells. Just a header row, and then straight into the data rows.) If you want to put 'human readable' text in the Excel file then please put that on a separate sheet. Also, any 'metadata' (e.g. the date the ECR was last updated; and contact details) should *not* be put on the same sheet as the main dataset. Once you have a draft template, I'd be more than happy to try loading it into an automated script to make sure it's easy to read. Or, if you'd prefer, you could do it yourself by trying to	

		load the Excel file into Python using the pandas.read_excel() function, and make sure that you see the data you were expecting. Here's a discussion of the pros and cons of using Excel files for datascience: https://twitter.com/jack_kelly/status/1227281093474144257 Please specify the format for dates (e.g. ISO 8601 format). I would suggest that it's essential to **specify a data license** with the ECR data. Strict data users will refuse to use data if it lacks a license. Please ensure the license allows re-distribution of the data. Allowing redistribution will allow innovators to re-shape the data into forms that's easier for a range of use cases. An example data license would be the Creative Commons By-Attribution license: https://creativecommons.org/licenses/by/4.0/	
UK Power Reserve Ltd.	Non-confidential	Yes, as a first step it is sensible to keep things simple. Excel file would work as long as all DNOs and IDNOs use consistent fields and the same data fields, and unit of measure.	
Energy Policy Group, University of Exeter	Non-confidential	No. We recommend that data should be published nationally to avoid unnecessary error potential in regional data collation and updating. Although the logic of publishing regionally is understandable in the absence of a 'home' for the national register, this presents a risk of fragmentation and error potential. Publishing separately risks undermining the aim of the	

		modification to bring data together. Despite planned interoperability of regional datasets, publishing these separately pushes the task of data collation onto users working across different scalar contexts. This adds an unnecessary barrier to data accessibility/usability, particularly if it must be done manually every time the databases are updated. Regular manual collation further adds unnecessary increased risk of human error. In the absence of a national register (which would be the preferred publication format), regional databases should at a minimum be machine-readable and published in a format where it is possible to automate national data collation with each update. We further recommend that added value could be unlocked if the register were linked to related data regarding network heat maps. Given that grid constraints can enable or limit the deployment of renewables, the state of the local network is important to investment decisions and forecasting. Linking the networks' heat maps as closely as possible to this register will therefore improve its value. As such, we advocate for the extension of the national collation approach described above to network heat maps.	
Western Power Distribution	Non-confidential	Yes, we agree that a simple Excel based format is appropriate at this time. As industry work on data registration and accessibility develops, we would expect to further develop the SWRR/ECR registers to ensure continued fitness for purpose.	

DCP 350 'Creation of Embedded Capacity Registers' Collated Consultation Responses with Working Group Comments

Working Group Conclusion:

Company	Confidential/ Anonymous	7. Do you agree with the proposal that each DNO and IDNO is to publish a populated version of the common ECR on their individual website? Please provide rationale.	Working Group Comments
Electricity North West Limited	Non-confidential	As already detailed the ECR represents an extension of the SWRRs that the DNOs already collate, maintain and publish. Processes and procedures are in place and well understood. All the individual SWRRs can be accessed centrally through the ENA website. Publishing the data in this manner clearly puts the responsibility for the holder of the data to ensure the quality and timeliness of the data publication.	
Leep Electricity Networks Limited	Non-confidential	As detailed in our response to Question 6, we do not agree that the registers should be publicly available, however we would be happy to publish on our website with the inclusion of restricted access.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern	Non-confidential	Yes, we agree that each DNO and IDNO should be accountable for the data relating to its service area and for publishing the ECR in an agreed form template.	

Powergrid (Yorkshire) plc			
On behalf of ENA Open Networks Project	Non-confidential	Yes, we agree that each DNO and IDNO should be accountable for the data relating to its network and should publish the ECR on its website in an agreed template. The ECR represents an extension of the SWRRs that the DNOs already collate, maintain and publish. Processes and procedures are in place and well understood. All the individual SWRRs can be accessed centrally through the ENA website. Publishing the data in this manner clearly puts the responsibility for the holder of the data to ensure quality and timeliness of the data publication. In addition, as for the SWRRs, for resources >1MW, publication of common ECRs on DNO and IDNO websites will enable the registers to be produced at relatively low cost.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	As noted above, we believe that the majority of the users of this data are interested in the regional and GB wide situation. We would therefore support a national register. The majority or parties will not know which IDNOs are active in a given region, so we would prefer the host DNOs to put the IDNOs in their region on their web-sites. This would still not be as beneficial as a national database, but would make it easier for parties to at least get a full regional view. An alternative may be to require the DNOs to provide links to all the IDNO registers within their region. However, we have a general concern that sometimes providing part of a data set	

		can be more misleading than providing no information. We would urge Ofgem to consider what powers it has to require consolidation of the registers.	
ScottishPower Renewables	Non-confidential	Yes, as an interim solution. The preferred final solution is for the information to be all in one place to further enable clarity and ease of access safeguarded by a third party such as ESO and/or ENA. However, we understand this may be difficult to do in a short term basis and we'd welcome any approach on publication in order to allow access to the information as soon as possible while aiming for a central database in a mid/long term.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	Yes, we agree that each DNO and IDNO should be accountable for the data relating to its network and should publish the ECR on its website in an agreed template. The ECR represents an extension of the SWRRs that the DNOs already collate, maintain and publish. Processes and procedures are in place and well understood. All the individual SWRRs can be accessed centrally through the ENA website. Publishing the data in this manner clearly puts the responsibility for the holder of the data to ensure quality and timeliness of the data publication. In addition, as for the SWRRs, for resources >1MW, publication of common ECRs on DNO and IDNO websites will enable the registers to be produced at relatively low cost.	

Triton Power	Non-confidential	No. We are very disappointed by this proposal. What the market needs is a single data set. At a minimum the IDNOs' data within a DNO area should be held on the DNO register. The IDNO and DNO can agree some form of data access protocol where the IDNO can update their own data, but a profusion of registers held in different place will be inefficient compared to a national register.	
Association for Decentralised Energy	Non-confidential	The eventual ambition should be for a consolidated national register.	
Centrica	Non-confidential	Yes. This model already works, to degree, for other registers such as the SWWR. Links to all the DNO registers should be published in a central location, such as on the "DER Information" page of the ENA website.	
SP Distribution plc and SP Manweb plc	Non-confidential	No, much of the information about embedded generation sites is already published by DNOs in the form of the Long Term Development Statement (LTDS) (for generators greater than 1MW), as indicated. Access to the LTDS is by password but issue of a password in not restricted.	
ELEXON	Non-confidential	As a minimum and a pragmatic start yes, but the locations (url) of each other's registers should be stored in one location with responsibility on each DNO/IDNO to make sure this is up to date when inevitable website changes occur. Two obvious locations are the BMRS website, which provides information on	

		Balancing services and operation of the System, or ESO's website where the TEC and embedded registers are kept.	
Energy UK	Non-confidential	Yes. The preferred solution is for the information to be all in one place to further enable clarity and ease of access. But we understand this may be difficult and this solution is a good interim solution.	
Flexible Generation Group (FGG)	Non-confidential	No. This is a sub-optimal solution. FGG members do not always know which IDNO is where, and it would be far better to at least require the DNOs to host the data for the IDNOs within their regions. An IDNO may operate in a number of regions and at the very least regional registers would be more useful to a party looking at opportunities in a specific region than having to try and match IDNO data into DNO data. Making the data more difficult to use, rather than focus on what the data users will find most helpful is a missed opportunity to take a step forward in improving market transparency. FGG believe that the majority of the users of this data are interested in the regional and GB wide situation, hence our support for a national register covering ALL GB sites.	
National Grid ESO	Non-confidential	Yes. See answer to question 1.	

Open Climate Fix	Non-confidential	Yes, that's fine. It's definitely easier (for the DNOs) than trying to set up a national database. And it shouldn't be too hard to merge these individual files. I wouldn't be surprised if someone in the open-source community builds a simple, free service to aggregate all the assets, and plot them on a map – we might help build such a service in my non-profit, Open Climate Fix. Please ensure each DNO's file is easy for both humans and automated scripts to download and open the ECR files.	
UK Power Reserve Ltd.	Non-confidential	Each DNO should publish their own register on their website – this is a sensible solution as long as when the common register will be created, the information is consistent. With regards to the common ECR, there should be one single. Multiple websites bear the risk of inconsistent registers if data is not automatically updated throughout all the websites where it's published. It would be preferable if each DNO and IDNO had a link on their website, leading directly to the portal where the ECR is published.	
Energy Policy Group, University of Exeter	Non-confidential	No – rationale for national publication is presented in section 6 above. However, we would like to iterate the importance of DNOs undertaking DER Plans within their respective network areas in order to value the DER resource available and to take this resource into account when network planning. DER is one of	

		the vital, inter-related whole system building blocks upon which a smart and flexible energy system rests. The value of DER assets therefore has to be conducted in the context of an expected smart and flexible energy system, rather than calculating the value of DER in the current, conventionally operated system. In this respect the 1MW limit proposed is far too high in order for DNOs to understand and assess the granularity of resource available. This level of DER planning is already underway in California and New York and lessons can be learnt from their example. In addition, DNOs should be regulated to capture this information in order to know in real detail what their areas could provide and this should be monitored via Ofgem to ensure compliance with an agreed assessment methodology. For further information we would point you to a 2017 article by Catherine Mitchell on how DER planning should occur: http://projects.exeter.ac.uk/igov/new-thinking-resetthe-reset-3-der-walking-the-walk/	
Western Power Distribution	Non-confidential	Yes, we agree that each DNO and IDNO should be accountable for the data relating to its service area and should publish the ECR on its website in an agreed template. The ECR represents an extension of the SWRRs that the DNOs already collate, maintain and publish. Processes and procedures are in place and are well understood. All the individual SWRRs can be accessed centrally through the ENA website or through each of the DNO's individual websites.	

		Publishing the data in this manner clearly puts the responsibility for the holder of the data to ensure quality and timeliness of the data publication.	
Working Group Conclusion:			

Company	Confidential/ Anonymous	8. Do you believe that the publication of a national register by a third party in the future would be of most use to all market participants? If so, in what timeframe would you like to see this in place by?	Working Group Comments
Electricity North West Limited	Non-confidential	For ease of access to all the data a national register clearly offers advantages, however establishing this will have costs which will need to be justified against the benefits before proceeding. Once appropriately justified the 12 to 18 months lead time is appropriate.	
Leep Electricity Networks Limited	Non-confidential	We believe that the central co-ordination of a central register could work but we would want to understand further details around any such proposals to assess the cost of such a service across all parties, review the proposed security measures to understand how sensitive data could be protected thereby ensuring only parties who can contribute towards delivering the benefits of this CP could access the information.	

Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	At this stage we support the publication of a commonly formatted ECR by each DNO and IDNO. Stakeholder feedback will be important for any evolution of the registers. Creating and maintaining a national register would have costs. Such costs would need to be justified in terms of the any feedback on the benefits of potential improvements for the ECR. If a third party is to produce a register or provide access to the data then there needs to be a consideration of who pays for any such enhanced (and higher cost) arrangement. Ultimately, these costs are likely to be borne by either all electricity customers or the users of the service. This requires more consideration in terms of the distribution of costs and benefits.	
On behalf of ENA Open Networks Project	Non-confidential	At this stage , we support the publication of a commonly formatted ECR by each DNO and IDNO. Whilst a national register would offer easier access to all of the data, establishing this will have costs which will need to be justified against the benefits before proceeding. There would also be a longer lead time to establish the register. When each DNO's and IDNO's register is published in a common format and to an agreed timescale, all of the GB data will be readily available and can be amalgamated as required by users. A single access point to each DNO and IDNO webpage can be provided in places such as the ENA or DCUSA websites.	

BEIS' Panel of Technical Experts (PTE)	Non-confidential	Yes. However, if it is left for someone to do on a voluntary basis they may charge for access to this data. The rationale for the mod was to give a transparent view of the whole market to the whole market. We believe a national database could be achieved within 6 months and we would like to see Ofgem require a party(s) to achieve this. If other parties want to take the data and use it for services that they sell that is fine, but the aim of the change is to provide a clear view to all parties, including smaller parties and new entrants, who may not have the resources to buy in data services.	
ScottishPower Renewables	Non-confidential	Yes. The proposal that each DNO and IDNO is to publish a populated version of the common ECR on their individual website will be sufficient for the time being. A full national register should be complete as soon as practical. A central database is preferable to multiple registers.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	At this stage, we support the publication of a commonly formatted ECR by each DNO and IDNO. Whilst a national register would offer easier access to all of the data, establishing this will have costs which will need to be justified against the benefits before proceeding. There would also be a longer lead time to establish the register. When each DNO's and IDNO's register is published in a common format and timescale, all of the GB data will be readily available and can be amalgamated as required by users. A single access	

		point to each DNO and IDNO webpage can be provided in places such as the ENA or DCUSA websites.	
Triton Power	Non-confidential	Yes this should be done as soon as possible, for the reasons discussed above. The very latest it should be achieved is 6 months after approval of the change.	
Association for Decentralised Energy	Non-confidential	The ADE supports this proposal.	
Centrica	Non-confidential	Yes. Whilst the register is limited to spreadsheet format, there is no reason why a national register could not be published by a third party like the ENA within 12 months. Especially given the work the ENA has already done on the System Wide Resource Register.	
SP Distribution plc and SP Manweb plc	Non-confidential	While publication nationally may benefit a few groups, the cost of providing the data needs to be assessed by Cost Benefit analysis (CBA) to justify this expenditure by DNO / IDNOs. Publication by a third party should not place any further obligations on the DNO / IDNO. Who is to verify if there is a discrepancy between the DNO / IDNO information and a nationally published document.	
ELEXON	Non-confidential	Managing updates to a central file, from numerous different parties does require careful thought and management	

		therefore added costs and timescales. What is of more importance than a single register, is ensuring that all the registers are contained in one, or accessible from one location, they are version controlled, new or changed data items can easily be identified, and all the registers look identical. This could be achieved in far quicker timescales than one national register. This is a new option in between, one single National Register and Individual Registers located on the DNO/IDNO's website. DNO's and IDNO's are signatories to the BSC so could be obligated through a concurrent BSC modification to send the required data/registers to ELEXON, as a neutral, independent and not for profit third party and then for ELEXON to publish these on BMRS. This will not alter the progress of this modification as the actual data requirements for the registers could be contained in DCUSA and the obligation to send to a central location such as BMRS contained within the BSC. Through modification P399 information on Non BM Trades could be linked to these registers through the MPAN with co-ordination with the NETSO. Through BSC Modification Proposals P375 and P395, new asset metering systems will be created and could become a data item within the register.	
Energy UK	Non-confidential	Yes. The proposal that each DNO and IDNO is to publish a populated version of the common ECR on their individual website will be sufficient for the time being. A full national register should be complete as soon as practical. A central database is preferable to multiple registers.	

Flexible Generation Group (FGG)	Non-confidential	Yes. FGG does not want to see this left unresolved in the hope that a third party may create a national register on a voluntary basis as this may take a long time or they may charge for access to the data. The original proposal foresaw a national register and we believe that it would be the right solution. The change proposal will deliver the greatest benefit if a national register is developed and we therefore hope that Ofgem will require either the DNOs or the ESO to create, and keep updated, a national register. We believe that this should be achieved in a timely manner [6 months] after the registers are established.	
National Grid ESO	Non-confidential	To provide the legal certainty third parties would require to publish this data, Open Data licences should be used. If these are in place, and the files are published in a permanent location (non-changing URL) it is likely that this will happen without further intervention.	
Open Climate Fix	Non-confidential	I don't mind. It shouldn't be a huge amount of work to merge data from each DNO. That said, a national register (which the DNOs could directly edit) would make the data slightly easier to consume, and could validate the data while the DNO is entering the data. To implement this, there is no need to write a huge data platform, instead please consider building a thin wrapper around a managed database-in-the-cloud, such as Google Cloud's Bigtable, which costs $0.026 per GByte per month[1]. Using a	

		cloud-native database would also make it easier for innovators to build new services on top of the ECR data. 1. https://cloud.google.com/bigtable/pricing	
UK Power Reserve Ltd.	Non-confidential	Ideally, in the future it would be a sensible solution if one single entity published the national register. The timeframe depends on how quickly and effectively all the individual registers can be compiled. Considering the scope of the project, we would prefer a solution that is futureproof, rather than one that is rushed and needs continuous amendments.	
Energy Policy Group, University of Exeter	Non-confidential	This does not necessarily need to be undertaken by a third party. Data could instead be published on a website that is run by a decentralised collective of the individual bodies collecting and publishing data. To facilitate this, agreed update schedules and publication format must be established and enforceable	
Western Power Distribution	Non-confidential	At this stage there is no strong evidence to support the publication of a national register. Whilst a national register would offer easier access to all of the data, establishing this will have costs which will need to be justified against the benefits before proceeding. There would also be a longer lead time to establish the register. So long as each DNO and IDNO register is published to a common format and timescale, all of the GB data will be readily available and can be amalgamated as required by users. A single	

		access point to each DNO and IDNO webpage can be provided in places such as the ENA or DCUSA websites. With interoperability enabled through a common format, convergence of these sources into a single dataset can be driven by the market.	
Working Group Conclusion:			

Company	Confidential/ Anonymous	9. Do you agree with the proposal to mandate that the ECR is to be updated on a monthly basis on a set date?	Working Group Comments
Electricity North West Limited	Non-confidential	Yes.	
Leep Electricity Networks Limited	Non-confidential	No, we believe updating this information on a monthly basis would be too frequent given that we only acquire generation assets once a year and some years have been less than that. We would be happy to be mandated to update the register as and when assets of this nature are acquired; coupled with the completion of a formal review and submission on an annual basis.	
Northern Powergrid on	Non-confidential	Yes, we agree that publication on the 10th working day of each month is appropriate.	

behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc			
On behalf of ENA Open Networks Project	Non-confidential	Yes, we agree that publication on the 10th working day of each month is appropriate. Over time, if it proves that the registers are changing rapidly and more frequent publications would be beneficial, the timescales can be adjusted.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	Yes, and we support those updates all being done on the same day so that at given point in time the user of the data will know it was correct at that point across the GB market. Consistency across the registers will be key in making sure that parties can take a "best view" of the state of the market at set points in the year to keep their own forecasts, etc. up to date.	
ScottishPower Renewables	Non-confidential	Yes. A monthly basis seems to be a sensible timeframe.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	Yes, we agree that publication on the 10th working day of each month is appropriate. Over time, if it proves that the registers are changing rapidly and more frequent publications would be beneficial, the timescales can be adjusted.	

Triton Power	Non-confidential	Yes. It is important that parties know when the register(s) are up to date.	
Association for Decentralised Energy	Non-confidential	The ADE supports this proposal.	
Centrica	Non-confidential	Yes	
SP Distribution plc and SP Manweb plc	Non-confidential	Updating on a monthly basis will involve a huge resource unless the updating of information can be handled automatically. It is difficult to see how this can be achieved when so much of the information is handled by different corporate systems that have historically unable to interact. Linking the data provided to heat maps and geographical plans is impractical due to the limitation and original intent for the operation of these systems.	
ELEXON	Non-confidential	Yes as a minimum but more regular updates should not be precluded. When thinking about the set date it will be useful to consider what the data will be used for, by whom and any key Industry dates, such as Capacity Mechanism auctions, Balancing Services tender rounds, network charges etc. If this informs Parties of likely competition, you wouldn't want to see significant changes to the register just after a key date.	

Energy UK	Non-confidential	Yes. A monthly basis should not be burdensome but will ensure that the register is kept sufficiently up-to-date.	
Flexible Generation Group (FGG)	Non-confidential	Yes. Making sure that updates are all being executed on the same day so that at given point in time the user of the data will know it was correct and up to date will be helpful. As noted above, FGG favours a national register, so establishing consistency across the registers will be key in making sure that the national register, in future, can also be updated at the same point in time. We would expect parties to set up their own IT to integrate the data base and draw conclusions from the changes that they are seeing. Running these types of processes at set times is helpful with business planning.	
National Grid ESO	Non-confidential	Yes. We encourage DNOs and IDNOs to publish more frequently in cases where a major change happens. Based on current evidence monthly seems appropriate.	
Open Climate Fix	Non-confidential	Yes	
UK Power Reserve Ltd.	Non-confidential	Yes, monthly is fine. It's important to keep the process streamlined.	
Energy Policy Group, University of Exeter	Non-confidential	Yes	

Western Power Distribution	Non-confidential	Yes we agree the ECR should be updated on a monthly basis, but the publication date should not be a defined day of the month. DNOs and iDNOs will have differing internal processes for collecting and reporting data. Each DNO and iDNO should be able to decide which day is best for them to publish the data. This should be acceptable as there is a proposed "Last Updated" field which would communicate to users of the ECR when the data was refreshed.	
Working Group Conclusion:			

Company	**Confidential/ Anonymous**	**10. Do you believe that the governance arrangements proposed by the Working Group as to how the ECR is populated will lead to DNOs and IDNOs updating it in a consistent manner?**	**Working Group Comments**
Electricity North West Limited	Non-confidential	Provided that the data definitions are clarified then the proposed governance arrangements are appropriate.	
Leep Electricity Networks Limited	Non-confidential	We suggest that the definitions should be extracted from the existing ENA standards to drive a common understanding of the data to be populated. We have no concerns around the proposed governance to manage the template and requirements of the register.	

Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	We agree that the proposed governance arrangements can help ensure that the ECR is updated in a consistent manner. If further items are included in the ECR, then DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are well understood, robust and captured consistently..	
On behalf of ENA Open Networks Project	Non-confidential	We agree that the proposed governance arrangements can help ensure that the ECR is updated in a consistent manner. It is important that different parties can propose changes and that the implications of these changes are fully understood. As noted in the answer to question 5, if further items are included in the ECR, then DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by these parties. Our experience of developing the data items and descriptions for the System Wide Resource Register (SWRR) indicate that it can be time consuming to agree clear definitions that all parties understand.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	We welcome the work that the DNOs have done on defining the fields. We have noted above that there are further enhancements that should take place and we urge the DNOs to keep working on data transparency. There needs to be a group that parties can put changes or clarifications to for discussion by the data collators. However, we suspect there is some learning by doing that will be required.	

		The fundamental design looks robust, but we urge the DNO and IDNOs to review progress in 6 months to see if there are any discrepancies in the data, new technologies to include, etc. The PTE would also hope that within 6 months a national register can be established and that more sites can be added to make the view of a region more detailed. We further believe that this data will start to inform other work, such as Ofgem's charging review, the development of future ancillary services, etc., which should all go towards creating a more efficient market for the customers of today and tomorrow.	
ScottishPower Renewables	Non-confidential	Yes, we believe so.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	We agree that the proposed governance arrangements can help ensure that the ECR is updated in a consistent manner. It is important that different parties can propose changes and that the implications of these changes are fully understood. As noted in the answer to question 5, if further items are included in the ECR, then DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by these parties. Our experience of developing the data items and descriptions for the System Wide Resource Register (SWRR) indicate that it can be time consuming to agree clear definitions that all parties understand.	
Triton Power	Non-confidential	The proposals look sensible, but will need to be reviewed to ensure that they are working.	

DCP 350 'Creation of Embedded Capacity Registers' Collated Consultation Responses with Working Group Comments

Association for Decentralised Energy	Non-confidential	The ADE has no comment.	
Centrica	Non-confidential	Yes	
SP Distribution plc and SP Manweb plc	Non-confidential	The population of a new database by the DNOs will be time consuming and cumbersome. Each DNO shall interpret the ECR and provide the information in a disparate fashion unless clear guidance about the data format is provided.	
ELEXON	Non-confidential	Yes, we agree with the governance arrangements. It is crucial that the registers look exactly the same. When designing the registers, if the order of the columns could also be identical that would be useful when amalgamating data. Legal text requires the data items to be provided but does not require this to be in the same format or order? It doesn't preclude extra data items which although can be welcome can cause problems. When considering a national register or at least a single location for the registers, changes could be made to the BSC, which would put obligations on all the relevant Parties as they are signatories to the BSC.	
Energy UK	Non-confidential	Energy UK currently has no position on this.	

Flexible Generation Group (FGG)	Non-confidential	The DNOs, as part of the Open Networks Project, seem to have tried to create a sensible and clear definition of most of the fields. As with anything new, we expect it may take parties sometime to fully understand the data and it would be helpful to have an e-mail address where queries could be sent if a party is unclear on something. We would suggest that such an e-mail can also be used to allow parties to notify to DNOs when data is wrong, for example a technology change has occurred. The fundamental design looks sensible, and comprehensive for today, but it will be important to keep the design under review. We would propose that after say 6 months the DNOs survey users about changes they may want, areas that could be improved, etc. We would note that the design of good databases is difficult and there will be a need to build in flexibility to future proof the system. For example, we expect new technologies will need to be added, DSR aggregation may change, etc. We also have concerns that Ofgem's charging review may try to alter connection capacity rights and they may need to be reflected in future. FGG therefore believe that the DNOs and IDNOs need to log queries and review the design, update timetables, size of site included, etc. Collating data on issues from day one will help then focus future improvements.	
National Grid ESO	Non-confidential	No. As noted in question 4 the resource/technology types should be changed to avoid any risk of each DNO interpreting the categories differently. Currently there is potential for confusion – for example with CHP sites.	

Open Climate Fix	Non-confidential	Hopefully :)	
UK Power Reserve Ltd.	Non-confidential	Yes, we agree with the proposed governance about setting the obligation in the DCUSA but leaving the specific fields outside the code. This will guarantee that any changes or amendments can be done without the need of raising a CP.	
Energy Policy Group, University of Exeter	Non-confidential	We have some concern regarding the absence of detail included with regards to the 'mechanism' by which data errors could be flagged and corrected. We also have some concern regarding the absence of any penalty for the failing to correct inaccurate information and/or missing update schedules. More fundamentally, we are concerned that there is currently no detail on how the DNOs/IDNOs will be compelled/obliged to comply with this amendment. We recommend that the obligation to share data is written into DNO license agreements to provide a concrete obligation. We also recommend the introduction of an appropriate financial penalty for incursion, with Ofgem as the enforcing body.	
Western Power Distribution	Non-confidential	We agree that the proposed governance arrangements can help ensure that the ECR is updated in a consistent manner. It is important that different parties can propose changes and that the implications of these changes are fully understood. As noted in the answer to question 5, if further items are included in the ECR, then DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well	

		understood by these parties. Our experience of developing the data items and descriptions for the System Wide Resource Register (SWRR) indicate that it can be time consuming to agree clear definitions that all parties understand.	
Working Group Conclusion:			

Company	Confidential/ Anonymous	11. Do you agree with the Working Group's proposed mechanism to deal with future amendments to the structure of the ECR?	Working Group Comments
Electricity North West Limited	Non-confidential	Yes.	
Leep Electricity Networks Limited	Non-confidential	We do agree with the proposed mechanism to manage future amendments.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern	Non-confidential	Yes, the proposal on governance is a reasonable basis to deal with future amendments to the registers.	

Powergrid (Yorkshire) plc			
On behalf of ENA Open Networks Project	Non-confidential	Yes, the proposal is a reasonable basis to deal with future amendments to the ECR. Again, if further items are proposed to be included in the ECR, then DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by these parties.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	Yes as a starting point the process looks robust. However, it may be necessary to reconsider this in light of the number of changes coming forward. It is not obviously a good use of the Panel's time to oversee small changes and, given the expertise involved in designing a useful, robust database, an expert group may be required in the longer term. We note that the BSC uses a number of expert groups to agree the more technical changes via e-mail. Again we would recommend a review after 6 months to check the mechanisms are working as expected.	
ScottishPower Renewables	Non-confidential	Yes, we agree proposed.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	Yes, the proposal is a reasonable basis to deal with future amendments to the ECR. Again, if further items are proposed to be included in the ECR, then DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by these parties.	

Triton Power	Non-confidential	We are not familiar with how such documents are updated under the DCUSA. However, we would note that it will be important than updates are achieved in a timely manner and an informal process for progressing amendments, such as adding new technologies, setting out the timetable for change.	
Association for Decentralised Energy	Non-confidential	The ADE has no comment.	
Centrica	Non-confidential	Yes	
SP Distribution plc and SP Manweb plc	Non-confidential	Yes	
ELEXON	Non-confidential	Yes	
Energy UK	Non-confidential	Energy UK currently has no position on this.	
Flexible Generation Group (FGG)	Non-confidential	In line with the comments above, we feel this needs to be kept under review. For example were we too see Suppliers offering DSR services from numerous EV sites then a way to reflect that capacity in the register needs to be found. Likewise, an aggregate value for domestic solar in an area would also be useful as would information on any services being provided by the DNOs themselves.	

		We would expect that the Panel may want to commission an in-depth review after a relatively short period [6 months] to check that data updates and changes are being achieved in a timely manner. It may also be more appropriate to have some sort of expert group to look at further enhancements as database design is a specialist skill and the Panel may have other issues to address. It will be important that data is correct and up to date as otherwise it will mislead rather than inform the market.	
National Grid ESO	Non-confidential	Yes	
Open Climate Fix	Non-confidential	Yes. Please version each published ECR structure; and ensure that each ECR references the applicable schema version.	
UK Power Reserve Ltd.	Non-confidential	Yes, as long as there is a clear methodology on how any changes should take place, this will give consistency across all DNOs and IDNOs. A review by the Panel and consistent implementation provide a good solution.	
Energy Policy Group, University of Exeter	Non-confidential	There is insufficient detail in this section to be able to definitively comment.	

Western Power Distribution	Non-confidential	Yes, the proposal is a reasonable basis to deal with future amendments to the ECR. Again, if further items are proposed to be included in the ECR, then DNOs and IDNOs should be involved in agreeing the descriptions of the fields to ensure that they are robust and well understood by these parties.	
Working Group Conclusion:			

Company	**Confidential/ Anonymous**	**12. Do you believe that the Working Group has sufficiently covered off concerns related to data privacy regulations and potentially commercially sensitive information, specifically given the range of benefits as described in sections 1 and 3? And if not, then what else do you consider that Working Group needs to do?**	**Working Group Comments**
Electricity North West Limited	Non-confidential	We believe in respect of s.105 UA 2000 concerns have been covered, but we still have reservations in respect of publishing individual people's names as opposed to company / business names / titles (eg "the manager", "the CEO" etc) site or project names so we question whether there is any real need to provide individuals names as opposed to titles? This doesn't seem to provide any benefit to the intent of the change proposal and for example the use of titles would still provide for some anonymity.	

Leep Electricity Networks Limited	Non-confidential	We are still concerned around the requirement for complete public access however fully acknowledge and support the benefits described in sections 1 and 3. We would suggest restricting access to parties who are able to support the delivery of the benefits described as opposed to allowing complete public access to anyone. We appreciate that there may be difficulties in implementing this suggestion however believe password protection controlled by each party (similar to accessing each parties LTDS) or a central function, like DCUSA, maintaining a list of verified parties who must be provided with access; or alternatively register access being granted through a 3rd party website like DCUSA would ensure verified parties are able to freely access the information.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	The issues around data confidentiality, data privacy and commercial sensitivity are complex. DNOs and IDNOs are subject to a range of legislation that may be relevant to the data items being considered for this change proposal, including the Utilities Act, REMIT, Standard Licence Conditions, Network and Information Systems Regulations 2018, Network Codes, Law of Confidence, Privacy and Data Protection Laws and Competition Law. As part of the SWRR assessment, the ON product team worked with the Network Innovation Allowance (NIA) funded RecordDER project to obtain independent legal advice on the proposed data items to be published. A report detailing this advice should be completed shortly and could be made	

		available by the RecorDER project to the DCP 350 working group to assist in this area. There are some data items, as highlighted below, where additional legal consideration may assist Ofgem in its decision making regarding this DCP (for inclusion in the change report). MPAN – the Information Commissioner's Office has stated that, where data is linked to the MPAN of a domestic property (or a commercial property where the business owner is a sole trader), it is likely to be personal data, even if the name of the individual (or individuals) who live there is not known. It is possible that an individual may own a generation site with an export capacity of greater than 1MW but it is highly likely that such a site will be owned by a company, in which case disclosure of the MPAN should not be a data protection compliance issue. Customer Name – it is possible that an individual may own a generation site with an export capacity of greater than 1MW, but as the owner, the customer's name is more likely to be a company or the party that has registered the metering point, rather than an individual person, therefore, disclosure of the customer's name is also unlikely to data protection compliance issues. We can see the relevance of using an actual grid reference for the location of the site. However, it may be prudent to take legal advice regarding any implications such a disclosure may have in respect of compliance with the Network and Information Systems Regulations 2018.	

On behalf of ENA Open Networks Project	Non-confidential	The issues around data confidentiality, data privacy and commercial sensitivity are complex. DNOs and IDNOs are subject to a range of legislation that may be relevant to the data items being considered for the ECR including the Utilities Act, REMIT, Standard Licence Conditions, Network Codes, Law of Confidence, Privacy and Data Protection Laws, Competition Law as well as specific contract provisions that might be in place through connection agreements. For the System Wide Resource Register (SWRR), data confidentiality, data privacy and commercial sensitivities were considered at length before publication of the registers. As a result, some of the data fields will be redacted by DNOs until this network code change is completed. As part of the SWRR assessment, the Open Networks product team also worked with the Network Innovation Allowance (NIA) funded RecordDER project to obtain independent legal advice on the proposed data items to be published. A report detailing this advice should be completed shortly and could be made available by the RecorDER project to the DCP 350 working group to assist in this area. Given the complexity of this area, individual network companies will provide further views in this area in their individual responses to the DCP 350 consultation.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	Yes. Having seen Ofgem's draft opinion and the general support of BEIS, Ofgem and the Energy Data Task Force for	

		greater data transparency, we believe that the mod is very much in line with direction of travel on data policy. It was unfortunate that the DNOs did not share their own legal opinion with the group, but we assume that this was because they were now comfortable with the legal position.	
ScottishPower Renewables	Non-confidential	No comments.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	The issues around data confidentiality, data privacy and commercial sensitivity are complex. DNOs and IDNOs are subject to a range of legislation that may be relevant to the data items being considered for the ECR including the Utilities Act, REMIT, Standard Licence Conditions, Network Codes, Law of Confidence, Privacy and Data Protection Laws, Competition Law as well as specific contract provisions that might be in place through connection agreements. For the System Wide Resource Register (SWRR), data confidentiality, data privacy and commercial sensitivities were considered at length before publication of the registers. As a result, some of the data fields will be redacted by DNOs until this network code change is completed. Such assessments are helpful, however, the current legislation governing the electricity industry is designed fundamentally to encourage customers to share their data (personal and commercial) with network operators, safe in the knowledge that it will always be kept confidential unless they consent to it being shared. Under current legislation network operators	

		hold customer information for the purposes of network operation but not for data sharing. Customer information is not a defined term, but legislation suggests that it is a very wide category comprising all information that a network operator receives from a customer. To enable a comprehensive change to a data sharing culture the legislation needs to be changed, so that it starts with the presumption that all customer information will be shared (except for personal data or data specifically and reasonably marked by the customer as confidential). This wholesale change is best achieved by Ofgem taking a "top down" approach to this issue - carrying out a complete overhaul of the current electrical industry data sharing model and the legislation that governs it. Network operator changes to DCUSA are helpful in the circumstances, but can only ever be a piecemeal, "bottom up" approach, which will need to be regularly revisited. As the changes to the data sharing approach are significant, it may be advisable to explain the changes to customers by an industry wide information campaign, so that increased data sharing is well received.	
Triton Power	Non-confidential	Yes. This is similar data to that the ESO publish on TO plants, that is on the CM, etc and is line with the Energy Data Task Force. We therefore so no issues if Ofgem approve the change proposal.	

Association for Decentralised Energy	Non-confidential	The ADE has no comment.	
Centrica	Non-confidential	Yes mostly – although I was expecting to see a more detailed legal opinion.	
SP Distribution plc and SP Manweb plc	Non-confidential	Data privacy is of greater concern to the generator sites and it is they who should be asked to agree to the publication of the details being proposed. The DNOs shall be provided with clear guidance.	
ELEXON	Non-confidential	Yes. This seems consistent with legal advice we have received for BSC Modification Proposal P399. We also note that DNO's are already voluntarily publishing this data.	
Energy UK	Non-confidential	Energy UK currently has no position on this.	
Flexible Generation Group (FGG)	Non-confidential	Yes. Data privacy is a significant issue, but we believe that BEIS and the Energy Data Task Force have made it clear that transparency of data in the energy market is needed to facilitate the transition to a low carbon economy. Most of the data on the proposed register is available for some, though not all, sites if someone hunts through enough energy data platforms. Having a level playing field will therefore be an improvement on the current situation. However, if there are legal concerns, we assume these will have to be addressed by	

		BEIS, but in the meantime we hope it will not delay provision of better data than the market has access to now.	
National Grid ESO	Non-confidential	Yes	
Open Climate Fix	Non-confidential	Yes, as far as I can tell, the working group has sufficiently covered off concerns relating to data privacy (although this isn't my area of expertise).	
UK Power Reserve Ltd.	Non-confidential	To some extent. We agree with the WG conclusion that MPAN information can be published and we appreciate the legal advice and the Ofgem's direction on the matter. So with regards to privacy, we believe the WG has sought the right guidance. We are concerned about the intention to share information about balancing services: the proposer cannot simply assume that the ESO will be obliged to provide ancillary services information to the DNOs. We don't see this as a piece of information that would make any difference for the purpose of the register and would bear the risk of exposing the commercial position of certain units. This needs to be avoided and we encourage the WG to consider that an indication in the sense of providing balancing services is sufficiently addressed by yes or no.	
Energy Policy Group,	Non-confidential	In point 3.10 there is an assumption that the DNO owns all data that they will be required to publish. This may be the case.	

University of Exeter		However, ownership does not automatically entitle them to publish all data on an open register. There are two key reasons here. Firstly, the issue of commercial sensitivity, and potential dispute-resolution, has not been adequately addressed in this consultation document. The amendment may benefit from dialogue with the Energy Data Taskforce with regards to establishing a triage system if appropriate. Secondly, in other data-sharing initiatives to date, electricity system actors have identified additional barriers to data-sharing written into existing licenses and codes. These can bar data-sharing even when the owner is willing to share. We recommend that Elexon be consulted to review any relevant barriers that could impede the publication of otherwise shareable data. On a separate topic, if the register develops to include more granular data in future, there would need to be a review of where data such as customer name/address may interact with GDPR. For example, it may not be possible to publish the name and address of domestic solar/storage assets without explicit consent from the data owner. It would be useful to explore these items from the outset, as without due consideration these could substantially impede the future development of the register, particularly at the <1MW scale.	
Western Power Distribution	Non-confidential	The issues around data confidentiality, data privacy and commercial sensitivity are complex. DNOs and IDNOs are subject to a range of legislation that may be relevant to the data items being considered for the ECR including the Utilities Act, REMIT, Standard Licence Conditions, Network Codes, Law	

		of Confidence, Privacy and Data Protection Laws, Competition Law as well as specific contract provisions that might be in place through connection agreements. For the System Wide Resource Register (SWRR), data confidentiality, data privacy and commercial sensitivities were considered at length before publication of the registers. As a result, some of the data fields will be redacted by DNOs until this network code change is completed. As part of the SWRR assessment, the Open Networks product team also worked with the Network Innovation Allowance (NIA) funded RecordDER project to obtain independent legal advice on the proposed data items to be published. A report detailing this advice should be completed shortly and could be made available by the RecorDER project to the DCP 350 working group to assist in this area. Given the complexity of this area, the working group should comprehensively map out all of the potential legal issues and identify the associated risks. We believe independent legal advice should be provided to the DCUSA DCP 350 working group to ensure the requirements of this change proposal are achievable, lawful, and do not place network companies at undue risk through noncompliance with network codes, licence conditions and legislation.	
Working Group Conclusion:			

DCP 350 'Creation of Embedded Capacity Registers' Collated Consultation Responses with Working Group Comments

Company	Confidential/ Anonymous	13. Do you consider that DCP 350 better facilitates the DCUSA General Objectives? If so, please detail which of the General Objectives you believe are better facilitated and provide supporting reasons. If not, please provide supporting reasons.	Working Group Comments
Electricity North West Limited	Non-confidential	We believe that DCP350 better facilitates the DCUSA General Objectives as follows: ***1 – The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated and economical Distribution Networks.*** DER connections and the flexibility they offer will drive greater efficiency in the development of Distribution Networks. The transparency of DER connections, that the ECR will provide, will facilitate DER connections identifying and offering service to the DNO/IDNO and will also help to find potential locations for new connections. ***2 – The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity.*** Further to the response to General Objective 1 (above); increasing numbers of DER providers increases the liquidity in the flexibility market and competition in the generation and supply of electricity.	
Leep Electricity Networks Limited	Non-confidential	We agree that the objectives highlighted in the CP may be better facilitated by this change and understand that the information detailed in the register supports wider programmes like Open Networks and the DSO programme	

		which are also focused on achieving efficient and economical networks that drives the promotion of competition.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	We believe that the implementation of DCP 350 should better facilitate DCUSA objectives 1 and 2. For Objective 1 – connecting DER and the flexibility the equipment offers will drive greater efficiency in the development of distribution networks. The transparency of connected DER that the ECR will provide is likely to facilitate the connection of further DER and the identification of opportunities to utilise DER services. For Objective 2 – The increased visibility of DER to wider industry and market participants is likely to assist research around innovative energy solutions and improve energy forecasting and assist flexibility and capacity markets. For Objective 3 – It is unclear from the consultation how the approval of DCP 350 would better facilitate this objective.	
On behalf of ENA Open Networks Project	Non-confidential	We believe that the implementation of DCP 350 should better facilitate DCUSA objectives 1 and 2. For Objective 1 –DER connections and the flexibility they offer will drive greater efficiency in the development of distribution networks. The transparency of DER connections that the ECR will provide will facilitate the connection of further DER and the identification of opportunities to utilise DER services.	

		For Objective 2 – The increased visibility of DER to wider industry and market participants should improve energy forecasting and increase liquidity in flexibility and capacity markets and increase competition in the generation and supply of electricity. On Objective 3, we are less clear that the DCP 350 changes would have a positive impact.	
BEIS' Panel of Technical Experts (PTE)	Non-confidential	Yes. 1. The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks. This objective will be met by the DNOs and IDNOs having better data on assets attached to their networks. The data should be more easily checked and updated by third parties, helping the DNOs and IDNOs efficiently record the nature of connected sites and then manage their networks accordingly. They should also find it easier to signal to investors where spare capacity exists, or specific types of assets would be useful for system support, etc. 2. The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity This objective will be met by allowing all parties to see and asses either the market in their area of the wider market. For	

		example, investors will be able to monitor the role of specific technology types, note the growth/reduction in the need for specific services and identify third parties with which they can transact. In particular, the Capacity Market has seen a lot of site changes and were a site to find its connection delayed it may be able to use the register to identify another party with a site it can move an asset to. 3. The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences The licence obligations on these parties are wide ranging, but the general thrust is to run their systems as economically and efficiently as they can, facilitating competition and benefitting customers. All of the licence requirements will be easier to carry out with additional data, for example the investment in DNO's systems will be more efficient if they can identify trends in the changes to technologies and can more easily approach parties to ask for network management services. Again, we note that information is key to rational and efficient decision make, regardless of the type of party taking those decisions.	
ScottishPower Renewables	Non-confidential	Yes. We believe that the proposal better facilitates DCUSA General Objectives 1 and 2 by improving coordination of IDNO and DNO parties, facilitating competition in the generation and supply of electricity We also believe that visibility of ECRs will be an enabler of DSO worlds and improve the security of supply when giving NGESO enough visualisation of the assets at the distribution level.	

On behalf of Scottish & Southern Electricity Networks	Non-confidential	We believe that the implementation of DCP 350 should better facilitate DCUSA objectives 1 and 2. For Objective 1 –DER connections and the flexibility they offer will drive greater efficiency in the development of distribution networks. The transparency of DER connections that the ECR will provide will facilitate the connection of further DER and the identification of opportunities to utilise DER services. For Objective 2 – The increased visibility of DER to wider industry and market participants should improve energy forecasting and increase liquidity in flexibility and capacity markets and increase competition in the generation and supply of electricity. On Objective 3, we are less clear that the DCP 350 changes would have a positive impact.	
Triton Power	Non-confidential	Yes. 1. The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks. Better data will allow the DNOs to more efficient plan and operate their networks. 2. The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith)	

		the promotion of such competition in the sale, distribution and purchase of electricity Publishing the same data on all plants will help the whole market better understand the market and therefore, in line with economic theory, improve competition. Treating all sites equitably also enhances competition. 3. The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences The key obligation, on DNOs from our perspective, is the achievement of competition between generators and this modification does that for the reasons outline above.	
Association for Decentralised Energy	Non-confidential	Yes	
Centrica	Non-confidential	Yes 1) Agree – Positive – better information on assets connected to DNO and IDNO networks will contribute to more efficient operation and better-informed decisions by network operators. 2) Agree – Positive – will help provide investors with some of the information they need to connect and operate new generation and demand response. Investors in flexibility still need more transparent network information, which is not part of this change.	

		3) Agree – Positive – for the same reasons given above, contributes to more efficient operation of the network and should help support the connection of more low carbon generation. 4) Agree – No impact 5) Partially Disagree – Positive - Is likely to indirectly support ESO reporting and system planning requirements under the EU Network Codes and Guidelines required by the Electricity Directive.	
SP Distribution plc and SP Manweb plc	Non-confidential	No we do not believe it better facilitates the General Objectives as this information is already available through other means, therefore obligations are already met.	
ELEXON	Non-confidential	Yes but as noted, a central location for these registers would be a more optimum solution.	
Energy UK	Non-confidential	Yes. Energy UK agrees with the proposer's justification that DCP350 will better facilitate DCUSA General Objectives 1, 2 and 3. In addition to the DCUSA objectives, visibility of ECRs will not only assist DNOs and IDNOs to maintain an economical and efficient network, it will also better allow National Grid ESO to better balance the GB electricity system.	

		Further, with the ever-changing generation landscape, it will help GB government develop the policy positions to develop the most efficient and economical path to net zero.	
Flexible Generation Group (FGG)	Non-confidential	Yes. 1. The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks. The DNOs and IDNOs having better data on assets attached to their networks should improve their investment in and operation of their networks. This should also allow them to monitor trends, plan for future changes and identify parties who may be able to help with system management. We hope that they will encourage parties to check their data and notify them of changes in a timely manner. 2. The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity Market information is key to effective competition. Having better information on the area in which they operate will allow parties to make decisions about investments and operations that should be more efficient. New investments can also be informed by being able to identify where the DNOs have system requirements, the types of services they need, etc. FGG also believe it may allow parties to trade sites for development,	

		or to allow for the relocation of assets under schemes such as the CM, again adding to the efficiency of delivering new plants. 3. The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences DNO and IDNO licence obligations are broad, but we believe that the efficiency offered by virtue of greater transparency should help them improve the efficiency of their overall operation. For example, as noted above, it may help them better coordinate connections, help the identify parties who have assets that may help manage or resolve local, operational issues, etc.	
National Grid ESO	Non-confidential	Yes, we agree with the assessment shown in 6.2 of the consultation. Accurate forecasting of the underlying electricity demand ensures that the right level of generation is procured in the Capacity Market thereby reducing the cost to the consumer of buying more capacity than needed or conversely a lower level of security of supply if enough hasn't been procured. The consultation includes an example in which a saving of £2.5 million is explained and we provided one way in which this may happen in our answer to question 4. It should be noted that in addition to the direct saving of not procuring surplus capacity, there is an additional benefit if the clearing price is lower when the target capacity is set such that surplus capacity is not procured. This is because all capacity is awarded the same clearing price. If the clearing price reduced by £1 this would	

		deliver an additional saving of £50 million in the T-4 auctions [1]. There are also several benefits beyond the security of supply case set out in this consultation. Excellent knowledge of end consumer demand and generation enables our short-term forecasters to deliver accurate forecasts thereby reducing the number of balancing actions that we need to take. This reduces balancing costs that ultimately feed through to end consumers. Whilst it is difficult to quantify, transparency is essential for efficient markets. Increasing visibility of all generation assets greater than 1 MW is a step which will provide greater consistency in how generation assets are reported to the industry. [1] 50 GW x £1/kW = £50m (assuming the CM delivers 50GW of capacity)	
Open Climate Fix	Non-confidential	Yes	
UK Power Reserve Ltd.	Non-confidential	Yes, we agree with the WG views that the CP better facilitates DCUSA objectives 1, 2, and 3.	
Energy Policy Group, University of Exeter	Non-confidential	(Blank)	

Western Power Distribution	Non-confidential	We believe that the implementation of DCP 350 should better facilitate DCUSA objectives 1 and 2. For Objective 1 –DER connections and the flexibility they offer will drive greater efficiency in the development of distribution networks. The transparency of DER connections that the ECR will provide will facilitate the connection of further DER and the identification of opportunities to utilise DER services. For Objective 2 – The increased visibility of DER to wider industry and market participants should improve energy forecasting and increase liquidity in flexibility and capacity markets and increase competition in the generation and supply of electricity. On Objective 3, we are less clear that the DCP 350 changes would have a positive impact.	
Working Group Conclusion:			

Company	**Confidential/ Anonymous**	**14. Are you supportive of the proposed implementation date being 10 Working Days following Authority approval?**	**Working Group Comments**
Electricity North West Limited	Non-confidential	Yes.	

Leep Electricity Networks Limited	Non-confidential	We could certainly implement the proposal within 10 working days providing we have prior warning on when the final decision is due to be made; this is maintained on DCUSA's website therefore we feel this would be achievable.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	Yes, we support the proposed implementation date. It is our intention to modify the SWRR already being published in order to deliver the requirements of this DCP. It is worth noting (as we have highlighted in our answer to question 3, regarding a potential consequential change on suppliers) some data items may not be available to DNOs and IDNOs or be as current as we would like them to be. Going forward, it is proposed to publish the ECR on the 10th working day of each month. A further development of the SWRR to include additional data items is proposed for July 2020 and, if this CP is approved, we would propose to include in the SWRR as many of the additional data items identified for the ECR as is practicable at this time. If the CP is approved after July 2020 with additional data items, we propose that the modified format should be adopted on the second publication following Authority approval.	
On behalf of ENA Open Networks Project	Non-confidential	Yes, we support the proposed implementation date. It is our intention to modify the System Wide Resource Registers (SWRR) that are already being published to deliver the requirements of this Change Proposal.	

		From April 2020, it is proposed to publish the SWRR on the 10th working day of each month. A further development of the SWRR to include additional data items is proposed for July 2020 and, if this Change Proposal is approved, we propose to include as many of the additional data items identified for the ECR as is practicable at this time. As noted in the responses to other questions, some data items may not be available to DNOs and IDNOs. If this Change Proposal is approved after July with additional data items, we propose that the modified format should be adopted on the second publication following Authority approval. The second phase of the SWRR planned for July 2020 already includes additional data fields, such as network reinforcement information and connection queue information. The reason these data fields are scheduled to be delivered after the first phase of SWRR development, is that this type of data is not held in an easily accessible format. The July 2020 delivery date for some of the SWRR data items recognises that DNOs need time to develop reporting systems and implement new internal processes. For new data fields which are not currently included or proposed to be included in the SWRR (e.g. site X & Y co-ordinates), it is likely to take some time to complete population of the ECR with these items. There will be different impacts on different DNOs and IDNOs and once the ECR data fields have been agreed (post consultation), DNOs and IDNOs should complete individual impact assessments to agree realistic delivery dates for the additional data items.	

BEIS' Panel of Technical Experts (PTE)	Non-confidential	Yes – the sooner the data are made available the quicker the market can benefit from it.	
ScottishPower Renewables	Non-confidential	Yes.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	Yes, we support the proposed implementation date. It is our intention to modify the System Wide Resource Registers (SWRR) that are already being published to deliver the requirements of this Change Proposal. From April 2020, it is proposed to publish the SWRR on the 10th working day of each month. A further development of the SWRR to include additional data items is proposed for July 2020 and, if this Change Proposal is approved, we would propose to include as many of the additional data items identified for the ECR as is practicable at this time. As noted in the responses to other questions, some data items may not be available to DNOs and IDNOs. If this Change Proposal is approved after July with additional data items, we propose that the modified format should be adopted on the second publication following Authority approval. The second phase of the SWRR planned for July 2020 already includes additional data fields, such as network reinforcement information and connection queue information. The reason these data fields are scheduled to be delivered after the first	

		phase of SWRR development, is that this type of data is not held in an easily accessible format. The July 2020 delivery date for some of the SWRR data items recognises that DNOs need time to develop reporting systems and implement new internal processes.	
Triton Power	Non-confidential	Yes.	
Association for Decentralised Energy	Non-confidential	Yes	
Centrica	Non-confidential	Yes	
SP Distribution plc and SP Manweb plc	Non-confidential	No, clear timescales for overall implementation are required.	
ELEXON	Non-confidential	If the existing data is available yes; but the providers of the data are better placed to answer. Will the first register be required to be published 10 days after approval or is this when the legal text becomes live and the actual publication of the registers is a month afterwards?	

Energy UK	Non-confidential	Yes	
Flexible Generation Group (FGG)	Non-confidential	Yes – the quicker the data is provided the sooner the market can benefit from it.	
National Grid ESO	Non-confidential	Yes	
Open Climate Fix	Non-confidential	Yes (The sooner the better, from my perspective!)	
UK Power Reserve Ltd.	Non-confidential	Yes	
Energy Policy Group, University of Exeter	Non-confidential	Yes	
Western Power Distribution	Non-confidential	Yes, we provisionally support the proposed implementation date being 10 working days following Authority approval. Further development of the SWRR to include additional data fields, such as network reinforcement information and connection queue position, is planned for the end of July 2020. The reason these data fields are scheduled to be delivered after the first phase of SWRR development, is that this type of data is not held in an easily accessible format. For example, queue	

		position for new connections is managed by local planning teams across the business and is not stored in a central location or system. Managing queue position in this way is satisfactory for our current business needs but it does not lend itself to regular, centralised, reporting. The July 2020 delivery date for some of the SWRR data items recognises DNOs need time to develop reporting systems and implement new internal processes. For the addition of new data fields which are not currently included or proposed to be included in the SWRR (e.g site X & Y co-ordinates, resource type, technology/plant type, MPAN), consideration needs to be given to the impact this will have on DNOs and IDNOs. Once the ECR data fields have been agreed (post consultation) DNOs and IDNOs will need to complete an individual impact assessment and agree a realistic delivery date for the ECR. If our impact assessment (to include new, additional, data fields to the SWRR) reveals that the required changes to reporting systems and internal processes can be delivered within 10 days following Authority approval, then we would be happy to support this (Question 14) proposed implementation time scale. Where implementation would take longer than 10 days to complete, an implementation date should be agreed by all affected parties. Also see joint network response to this Change Proposal from the ENA.	
Working Group Conclusion:			

DCP 350 'Creation of Embedded Capacity Registers' Collated Consultation Responses with Working Group Comments

Company	Confidential/ Anonymous	15. Do you have any comments on the draft legal text for DCP 350?	Working Group Comments
Electricity North West Limited	Non-confidential	We agree with the proposed text. There are two potential errors in the paragraph referencing as follows: Section 3.4 references Paragraph 2.5.4. Paragraph 2.5.4 of Schedule 31 does not detail how to make representations/objections, so it's either an error or another Paragraph which needs an explicit reference. Section 3.6 references Paragraph 2.7 which does not exist within Schedule 31, so it's either an error or another Paragraph which needs an explicit reference.	
Leep Electricity Networks Limited	Non-confidential	No, we are comfortable with the legal text proposed.	
Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc	Non-confidential	In addition to the response from the ENA (which we support), we have a number of points to highlight regarding parts of the legal text. Clause 35C.4 defines the scope of the ECR. The wording appears to include sites that are applying to connect to a distribution system or that have accepted connection agreements in place (not only those sites already connected). We think this clause should be redrafted as it isn't the intention of the Change Proposal to include sites which are in the process of applying for a connection. Requests from customers for a modified	

		connection should be treated the same as requests for new connection and excluded from the drafting, including the removal of 35C.4 (a) i) *'alter the characteristics of the physical assets on site'* For adherence to the intent and the need to redraft the text to exclude customers and their sites that are in the process of requesting a connection the definition of Embedded Capacity Registers to be change to remove the words *'or are to be connected'.* For the same reason 35C.4 (b) *'applications received'* should also be removed. While this is a point about the legal text in relation to the intent, we would also highlight that customer's requesting connections may regard their commercial activities, at that point, particularly commercially sensitive. Customers who have accepted connection offers may have similar views until they are connected and become visible to energy markets. The sentence at 35C.4 (a) ii) may need reviewing as in may have a missing verb. 35C4 (c) may benefit from a slight redraft '*any necessary changes as a result of* ***the Company (i)*** *being notified that previously held information pertaining to a site was incorrect; and* ***(ii)*** *having been notified of the correct information'.* Does 35C.6 mean the transition period referred to in para 3.5 of Schedule 31? If so it the text would benefit by it being referenced.	

		We have attached some suggested edits to the legal text as tracked changes.	
On behalf of ENA Open Networks Project	Non-confidential	We agree with the proposed text other than the following aspects: • Several of the paragraph references need to be checked and updated. • Clause 35C.4 defines the scope of the ECRs. The wording appears to include sites that are applying to connect to a distribution system as well as sites that are already connected or that have accepted connection agreements in place. We think this clause should be redrafted as it isn't the intention of the Change Proposal to include sites which are in the process of applying for a connection. As noted in the response to Q1, the proposed definition for the ECR includes reference to "*Demand Side Management*". While "*Demand Side Management*" is referred to in Schedules 17 and 18 of DCUSA in the context of Demand Side Management (DSM) agreements, "*Demand Side Management*" is not in itself a defined Term in DCUSA. We believe more clarity is needed in the definition of ECR, so it is clear which, if any non-export, non-generation or demand only sites need to be included in the register, especially as many demand customers manage the demand on their sites.	

BEIS' Panel of Technical Experts (PTE)	Non-confidential	No	
ScottishPower Renewables	Non-confidential	No.	
On behalf of Scottish & Southern Electricity Networks	Non-confidential	We agree with the proposed text other than the following aspects: • Several the paragraph references need to be checked and updated. • Clause 35C.4 defines the scope of the ECRs. The wording appears to include sites that are applying to connect to a distribution system as well as sites that are already connected or that have accepted connection agreements in place. We think this clause should be redrafted as it isn't the intention of the Change Proposal to include sites which are in the process of applying for a connection. As noted in the response to Q1, the proposed definition for the ECR includes reference to "*Demand Side Management*". While "*Demand Side Management*" is referred to in Schedules 17 and 18 of DCUSA in the context of Demand Side Management (DSM) agreements, "*Demand Side Management*" is not in itself a defined Term in DCUSA. We believe more clarity is needed in the definition of ECR, so it is clear which, if any non-export, non-generation or demand only sites need to be included in the	

		register, especially as many demand customers manage the demand on their sites.	
Triton Power	Non-confidential	No	
Association for Decentralised Energy	Non-confidential	No	
Centrica	Non-confidential	No	
SP Distribution plc and SP Manweb plc	Non-confidential	Linking the data provided to heat maps and geographical plans is impractical due to the limitation and original intent for the operation of these systems.	
ELEXON	Non-confidential	They are obligations to publish the data, but are there obligations to publish all new data items as well as requirements to ensure the accuracy of the data published. To meet the obligations, could Parties just publish a new version each month with no changes?	
Energy UK	Non-confidential	No	

Flexible Generation Group (FGG)	Non-confidential	No	
National Grid ESO	Non-confidential	Minor: It may be worth using a different name instead of "Embedded Capacity Register". The acronym (ECR) is already used within the use case this CP has been raised for. As noted in the consultation the BEIS Panel of Technical Experts scrutinise the ESO's Electricity Capacity Report (ECR). Paragraph 2.4 refers to "X.X". Please update with the right reference.	
Open Climate Fix	Non-confidential	No comments!	
UK Power Reserve Ltd.	Non-confidential	No	
Energy Policy Group, University of Exeter	Non-confidential	No	
Western Power Distribution	Non-confidential	We agree with the proposed text other than the following aspects: • Several of the paragraph references need to be checked and updated.	

		• Clause 35C.4 defines the scope of the ECRs. The wording appears to include sites that are applying to connect to a distribution system as well as sites that are already connected or that have accepted connection agreements in place. We think this clause should be redrafted as it isn't the intention of the Change Proposal to include sites which are in the process of applying for a connection. As noted in the response to Q1, the proposed definition for the ECR includes reference to "*Demand Side Management*". While "*Demand Side Management*" is referred to in Schedules 17 and 18 of DCUSA in the context of Demand Side Management (DSM) agreements, "*Demand Side Management*" is not in itself a defined Term in DCUSA. We believe more clarity is needed in the definition of ECR, so it is clear which, if any non-export, non-generation or demand only sites need to be included in the register, especially as many demand customers manage the demand on their sites.	
Working Group Conclusion:			