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Dear Konark Anand

Centralised Strategic Network Plan: Consultation on framework for identifying and assessing transmission investment options

Natural England welcomes the opportunity to comment on the above consultation.

Natural England is the Government's statutory adviser on the natural environment. Natural England's purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Natural England is a statutory consultee in the land use and marine planning system, a statutory consultation body on environmental assessment (including Habitats Regulations assessments) and regulatory body for protected species licencing.

Natural England welcomes the development of the Centralised Strategic Network Plan (CSNP) and that the new Future System Operator (FSO) will consider the onshore and offshore electricity transmission networks looking to decarbonise the electricity system by 2035, considered critical for meeting the UK's overall 2050 Net Zero target. We are less clear on the timescales for building in other sectors gas, CCU and hydrogen to a holistic plan and would be pleased to engage with this in the future.

We do have concerns about the approach and how the FSO will meet its environmental obligations as a public body contributing to the [Environmental Improvement Plan 2023 - GOV.UK \(www.gov.uk\)](#) targets and the delivery of nature recovery. We need to work to deliver 'high nature, low carbon' infrastructure developments. Indeed policy makers will also be applying environmental principles to support environmental protection and enhancement and [Environmental principles policy statement - GOV.UK \(www.gov.uk\)](#) will become mandatory later this year.

Natural England welcome the engagement we have had so far and would like to continue to discuss with you the following areas:

- **Advice on design standards and criteria**- Natural England would be pleased to engage with work on suitable design standards and criteria. We sit on the National Grid Stakeholder Advisory Group and suggest that they might be a group to help with this work.
- **The approach to assessment** – It is not clear if a plan level Habitats Regulations Assessment (HRA) and Strategic environmental Assessment (SEA) is proposed as part of CSNP. Recommendations from the Electricity Networks Commission Companion Report (Catapult, June 2023) (ME1) notes that an SEA, and marine environmental assessments should be used but further clarity is needed as to whether they will provide the evidence and detail needed. If more detailed strategic environmental assessment, HRA and MCZ is carried out, we consider it more likely that proposals will follow the plan since they will have had high level consideration already and this will help speed up local decision making.
- **Cost Benefit Analysis** – we are unclear whether and how the environment is considered

within this assessment and the methodology and weightings used through a natural capital approach (see answer to Q 15) and how acceptable environmental impacts are to be defined. We would be pleased to engage with you on this as we previously have over the environmental reporting guidance produced for RII0-2.

- **Strategic planning** – How the network design will work within place-making and the local planning system in the needs for transmission around house-building, industrial clusters and across sectors (we couldn't find reference to CO2 for example). What opportunities through this there are to strategically deliver nature recovery.

Natural England's response to the consultation questions is below.

If you wish to discuss our response, please contact: deborah.hall@naturalengland.org.uk, lucy.crooks@naturalengland.org.uk .

Yours faithfully



pp Mike Burke
Director Sustainable Development
Natural England

Consultation Questions	Natural England Response
<p>Q 1. Do you agree with our broad regulatory approach to establishing the FSO's obligations to deliver the CSNP products?</p>	<p>Natural England has repeatedly raised concerns about the approach which doesn't take into account the environment sufficiently including current as well as what will be mandatory requirements. Figure 1 page 5 suggests the environment and community are only to be considered in terms of "have acceptable impacts, in planning terms, on environment and communities". The approach to planning and indeed the Environment Act / Environment Improvement Plan are that development needs to go further to deliver a nature recovery since we are also in the midst of a nature emergency.</p> <p>Ofgem's own annual reporting for businesses in RIIO-2 already provides a mechanism for environmental reporting – see sections 3.70-3.79 of riio-2 environmental reporting guidance v 1 final (5).pdf. We would expect that a public authority regulator when considering how industry is to operate would consider the Duty to protect, conserve and restore European sites - GOV.UK (www.gov.uk), as well as requirements for Complying with the biodiversity duty - GOV.UK (www.gov.uk) As well as the proposed SEA noted later in the documents, Natural England considers that HRA on the CSNP is also required alongside design constraints/principles.</p> <p>Recommendations from the Electricity Networks Commission Companion Report (Catapult, June 2023) (ME1) notes that an SEA, and marine environmental assessments should be used but further clarity is needed as to whether they will provide the evidence and detail needed.</p> <p>This approach needs to factor in existing National Grid landscape and visual commitments to protected landscapes and national planning policy requirements in relation to National Parks (NP) and AONBs. Holford Rules stipulate avoidance of protected landscapes for new grid connections unless that is simply not possible, and there is a default in national planning policy to underground cables through the area where this is unavoidable. There is also a National Grid commitment not to locate substations in these areas. So that provides an established baseline / constraints map which a CSNP cannot override.</p> <p>The settings of protected landscapes also need consideration because energy transmission</p>

	<p>infrastructure within those areas, particularly when on view from within the protected landscape itself, can impact significantly on the area's defined special qualities and therefore delivery of its statutory purpose. National Grid's statutory duty under Section 11A(2) of the National Parks and Access to the Countryside Act 1949, section 17A of the Norfolk and Suffolk Broads Act 1988 and section 85 of the Countryside and Rights of Way Act 2000 require that 'in exercising or performing any functions in relation to, or so as to affect, land' in National Parks and Areas of Outstanding Natural Beauty, relevant authorities 'shall have regard' to their purposes for which these areas are designated.</p> <p>This duty applies to its operations outside NP and AONB boundaries as well as within. This is confirmed by the government's online Planning Practice Guidance. Natural environment - GOV.UK (www.gov.uk) Consequently, the CSNP framework needs to anticipate a need for undergrounding and other mitigation measures in these areas to be factored into investment decisions.</p> <p>In relation to wider landscapes, there are obligations under Section 38 and Schedule 9 of the Electricity Act 1989:</p> <p>(1) In formulating any relevant proposals, a licence holder or a person authorised by exemption to generate, distribute, supply or participate in the transmission of electricity —</p> <p>(a) shall have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and</p> <p>(b) shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.</p> <p>Any framework for identifying and assessing transmission investment options needs to provide some clarity on how this duty will feed into the decision making process and what weight is actually given to 'natural beauty' in the wider countryside in investment decisions.</p>
<p>Q 2. What are your views on the types of system need that we have proposed are covered by the CSNP? Are there any gaps?</p>	<p>Natural England welcomes efforts to move to more holistically consider the energy system needs. It is essential that this links to the infrastructure pipeline being developed across government for NSIPs and all sectors. Any strategic thinking that can consider co-location</p>

	and development in a place including around environmental opportunities to deliver nature recovery would be beneficial to delivering the Environmental Improvement Plan (EIP). This in turn will lead to faster consenting and delivery.
Q 3. Do you agree that the time horizon for system need assessment should be extended to 2050?	Yes – the longer the consideration, the easier to build in the environment from the beginning and nature recovery to the approach with greater opportunities to consider how to incorporate nature-based solutions to climate change providing greater resilience to the network.
Q 4. Do you agree that the FSO should move to a year-round nodal assessment of system need as part of the CSNP?	N/A
Q 5. We welcome stakeholders' views on how the FSO can communicate effectively about future system needs?	Long term thinking should be built into national strategic planning, including marine planning and crown estate leasing rounds and embedded in Local strategic plans where they are also considering how communities will access their energy needs in the future and where allocations of development might be acceptable.
Q 6. What are your views on the FSO establishing minimum design requirements for high-level option designs and are there areas where exceptions are needed?	<p>We would welcome minimum design requirements but this should be framed around best practice such as Natural England's offshore wind and cables best practice available via this blog Hot off the press: Natural England's research to support offshore wind - Natural England (blog.gov.uk). Natural England would be happy to feed in. How will these fit with the existing national and developing local design codes? There are a lot of design principles already in existence in the onshore environment including those developed by the National Infrastructure Commission.</p> <p>Natural England agree that minimum design requirements should be implemented for the environment, and these should include the mitigation hierarchy, and environmental impacts and opportunities to build nature recovery, not just environmental limitations. They will need to refer to compliance with environmental legislation and statutory duties including designated landscapes duty of regard, HRA, SSSIs, biodiversity duty etc</p> <p>The National Grid Strategic Infrastructure Stakeholder Advisory Group may also be able to provide advice on this work.</p> <p>For HNDFUE, we have been strongly suggesting that environmental design principles should be developed as part of HNDFUE which must be implemented at Detailed Network Design (DND),</p>

	<p>project level, to further limit impacts to the environment:</p> <p><u>HNDFUE Environmental Design Principles</u> - A strong steer at plan level (HNDFUE) and mandated mitigation must be passed on to DND stage. Design principles should include (but not be limited to):</p> <ul style="list-style-type: none"> • Minimise environmental impact • Avoid MPAs avoided in HNDFUE • Avoid sensitive features avoided in HNDFUE • Reduce cable lengths • Reduce external cable protection • Reduce cable crossings • Location of offshore infrastructure outside of MPAs/sensitive features • Consideration of sediment processes (to include any additional impacts from external cable protection) • Avoid sensitive periods for MPA features (ie red throated diver) <p>The use of siting criteria (i.e., avoiding protected sites) for onshore developments should also be implemented and this has been communicated in our responses to NG ESO.</p>
<p>Q 7. Do you have any views on our proposals for considering environmental and community impacts as part of high-level design of options?</p>	<p>Yes Natural England agree with this – we would want to see both SEA and plan level HRA (including MCZ assessments) carried out on the overarching plan to ensure that issues are upfront and easier to identify for those seeking to deliver development. These will need to account for Part 6 of the Levelling Up and Regeneration Bill which will secure powers to implement Environmental Outcomes Reports: a new approach to environmental assessment - GOV.UK (www.gov.uk) which places greater focus on delivering government's environmental ambitions. This will also help ensure that options brought forward are more likely to be in line with the higher level consideration. The process will need to seek to avoid and deliver environmental enhancements such as Biodiversity Net Gain.</p> <p>Where necessary and appropriate mitigation and compensation identified upfront can be considered and delivered strategically.</p> <p>High level design option stage should also involve stakeholder engagement and not just at SEA. Natural England would welcome involvement in setting the guidance on minimum requirements so that environmental issues are considered from the earliest possible stage.</p>

	<p>Risks identified early in the process reduce delivery risk and facilitates the best environmental outcome further down the line.</p> <p>Feedback from engagement with HND suggests that there is lack of clarity in how various options are considered against each other. What impacts would be considered significant for example and would cause an alteration in scenario? Are the whole lifecycle environmental costs and benefits including those that cannot be given a monetary value considered including mitigation, compensation etc.</p>
Q 8. Do you have any views on our proposal for the FSO to independently decide which network needs it may lead the high-level design of?	N/A
Q 9. Do you have any views on our proposal for the FSO to set out how and when third parties can be involved within the CSNP?.	<p>Essential that environmental design is built into the solutions from the start and at the earliest stages that this fits within wider strategic plans. and major non-energy projects (transport etc) Natural England welcome that stakeholders are proposed to input to the methodology.</p> <p>National Grid Strategic Infrastructure Stakeholder Advisory Group may be able to play a useful role here?</p> <p>It would be beneficial to ensure that clear roles and responsibilities and their ownership are described. This includes who is doing what assessments both onshore and offshore, how they are brought together and joined up including across sectors.</p>
Q 10. Do you have any views on our proposals on data exchange to enable the implementation of CSNP?	<p>There is a lot of work going on to provide platforms for digitised environmental data and there is a need to ensure they all talk to each other so that they can take advantage of all environmental information being collected. Sharing data would be best practice. For example The Crown Estate has their existing marine data exchange and an offshore wind knowledge hub in development so consideration should be given to how data exchange would work with these marine systems.</p>
Q 11. Do you have any views on our proposals regarding the principles to be followed in the CSNP decision-making framework?	<p>Natural England notes that CSNP will still need to follow the mitigation hierarchy and the overarching SEA and HRA. It will also need to build in enhancements such as Biodiversity Net Gain to contribute to nature recovery. We need to ensure the environment is built in from the beginning and that the resilience of proposals to climate change is also considered including opportunities for nature recovery and nature-</p>

	<p>based solutions. These benefits also will improve health and wellbeing for communities. There are opportunities to work alongside other route corridors to provide a strategic consideration of linking habitats and nature based solutions. CSNP should where possible consider how they can join up with other infrastructure delivery and estates e.g. road and rail estate, water infrastructure etc.</p>
<p>Q 12. Do you have any views on our proposals on the decision-making framework for selecting potential projects to address longer-term system needs?</p>	<p>It is not clear how the framework links to wider strategic planning for example around housing delivery needs and industrial clusters. It will also need to embed nature recovery and wider Environmental Improvement Plan targets as well as addressing cumulative impacts.</p>
<p>Q 13. Do you have any views on the decision-making framework to bring potential projects into the 'delivery pipeline' for nearer-term needs?</p>	<p>We are unsure how this fits with the wider cross government pipeline of projects across sectors being developed for NSIPs.</p>
<p>Q 14. We would welcome views on our proposal to not re-evaluate projects that are in the delivery pipeline, and whether a materiality trigger is appropriate and what criteria might be used</p>	<p>We recognise difficult to re-evaluate but if proposals are particularly damaging to the environment then it may be sensible to consider alternatives if they exist due to the costs involved in resolving the issues and avoiding material changes to NSIPs for example. Agree that a materiality change is probably appropriate.</p>
<p>Q 15. Do you have any views on our proposal on inclusion of environmental and community impacts in the CSNP CBA?</p>	<p>There is need to consider the environment as an asset rather than a cost and the future ability it has to enable in some cases nature-based solutions to climate change. Building the environment in at the beginning will reduce the costs in the long term. It would be beneficial to factor this in.</p> <p>Natural England seek clarity on the weighting of each aspect of the appraisal that can be clearly demonstrated as part of the process</p> <p>We have previously worked with Ofgem on development of their natural capital approach for environmental reporting in RII02 riio-2 environmental reporting guidance v 1 final (5).pdf and there is reference in Appendix 1 to how natural capital reporting should be undertaken. We welcome also reference to the The Green Book (2022) - GOV.UK (www.gov.uk) and refer you to sub section of 6.6 Assessing and valuing effects on the natural environment</p> <p>This would be a better approach for consideration of the environment and which ever approach is chosen natural capital valuation should be compatible with the Green Book. We also note that NIC have considered natural</p>

	capital producing a report and discussion paper Natural capital and environmental net gain - NIC
Q 16. Do you have any views on our proposal for the CSNP to include a methodology for assessing and taking forward system operability solutions?	These will need to ensure environment is not impacted and should include climate resilience and the potential for nature based solutions
Q 17. Do you agree with our proposal for the ESO to review its current approach to assessing short and long term solutions, and for the FSO to set out its approach in the CSNP Methodology?	Suggest with rapidly changing technologies that CSNP methodology will need to ensure suitable for the long term including building in nature recovery which is of benefit to communities.
Q 18. Do you have views on our proposals for FSO to develop capabilities to consider different combinations of options and how this should be implemented?	NE agrees this will be useful but ideally it will be important that any key criteria are included within National Policy Statements and future best practice guidance dealing with NSIPs/NPPF etc. to ensure clear join up.
Q 19. Do you agree with our proposal to introduce a requirement, as part of the new CSNP licence condition, for the FSO to make recommendations on additional interconnection and OHAs opportunities between GB and other markets?	N/A
Q 20. Do you agree with our proposal that the FSO should use reasonable endeavours to support relevant stakeholders as part of the offshore asset development process?	NE agree and support appropriate upfront assessments to reduce consenting risks and to ensure the best environmental outcomes are achieved. (7.14) NE advise that further lessons learnt exercises would be beneficial in order to support the CSNP process (7.15). NE welcome this suggestion (7.16) but advise that the lessons learned are expanded to include engagement from SNCBs. Additionally, transparency as to how lessons learned from the HND/HNDFUE process are implemented is advised. NE would also welcome clarity as to the detail of which assessments will be considered for the proposed strategic marine environmental assessments. HRAs and MCZ assessments should be included.
Q 21. Do you agree with our proposal that the FSO assess third-party options under the CSNP and recommend delivery by competition where proposed solutions meet the relevant competition criteria?	N/A
Q 22. What are your views on whether changes to the SQSS or obligations on licensees are needed to support the CSNP – where specifically are these changes needed and when do they need to happen by?	N/A
Q 23. Do you agree that the FSO should evaluate the climate resilience	Yes - Natural England agree but it is also the actual building of the network with the

of the long-term whole-system CSNP?	environment built in from the beginning that will help ensure greater climate resilience of the infrastructure itself. Designs to building nature-based solutions will also be beneficial.
Q 24. Do you agree with the proposed position on the treatment of connections in the CSNP?	Yes in that the more strategic consideration there is the better the likely environmental outcome. Generation, transmission of sectors is important but also how and where this is to be delivered to major housing and embedded within strategic plans also needs consideration.