



# NSAC PAPER SENT TO TENNET 2018 CONCERNS INCLUDED:

- *rapid escalation on an unprecedented scale of wind-generated renewable energy in the wider North Sea region*
- *not all ecological and social risks of the current, rapid and largescale development of offshore wind are taken into account sufficiently and in line with the legal requirements*
- *comments address the sum elements of the hub and spoke model (island, surrounding wind turbines, cabling) but in most respects, have relevance also for any other proposed large-scale grid development by TenneT in the North Sea*
- *we urge TenneT to intensify efforts to conduct a transparent process with proper and timely engagement with NSAC and other stakeholders.*

## North Sea Advisory Council



### NSAC Advice Ref.03-1718

#### NSAC engagement with TenneT proposal for a North Sea Wind Power Hub

This paper was approved by the NSAC Executive Committee on the 19<sup>th</sup> June 2018

#### Executive summary

While recognising the necessity to deploy renewable energy projects, both onshore and offshore, industry and eNGO members of NSAC have significant concerns about the TenneT proposal for development of a potential North Sea Wind Power Hub.

In this paper we address a variety of the technical issues raised by the proposal and its promotion as a sustainable and biodiversity-enhancing project for the North Sea in general and the Dogger Bank in particular.

Moreover, from the perspective of marine spatial planning, we have concerns about the relationship of this particular proposal to the overall planned and rapid escalation on an unprecedented scale of wind-generated renewable energy in the wider North Sea region.

The fundamental spatial planning stage on a North Sea-wide basis, of which the potential siting of the North Sea Wind Power Hub is but a part, is a critical overarching priority from the NSAC's perspective, and one which has so far received insufficient attention. The NSAC calls for synergistic planning for windfarms to the extent possible.

Given the depth and breadth of our concerns and the urgent need for dialogue and transparency, our **key message** to TenneT is a request to increase its level of stakeholder engagement and consultation with NSAC, not just for the North Sea Wind Power proposal but for any future large-scale grid development by TenneT in the North Sea.

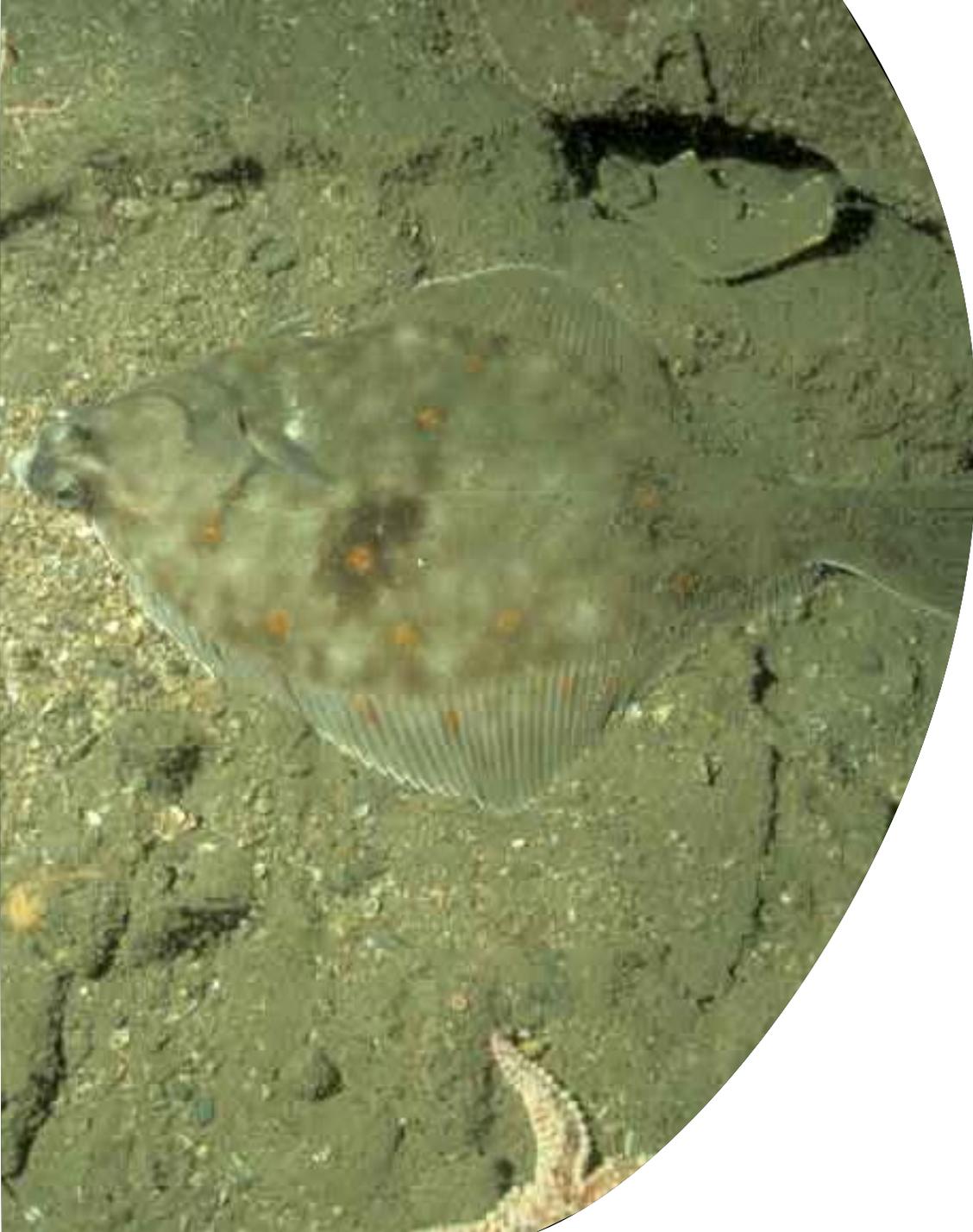
<http://nstrac.org/wp-content/uploads/2018/07/Paper-4.1-03-1718-Engagement-with-TenneT-Proposal-for-NSea-Wind-Power-Hub-For-Info.pdf>





## KEY CONCERNS RAISED BY NSAC

- Hub and spoke must be in line with legal requirements (N2000, MSFD, MSP and EIA, SEA Directive)
- È.g. Art 6 HD: Appropriate Assessment
- In combination, cumulative effects
- NSAC concerned that potential ecological risks are not adequately taken into account including
  - indirect food web effects
  - attraction of birds with high collision risk
  - effects of underwater sound on fish (larvae) and invertebrates
  - electromagnetic fields around cables.



## KEY CONCERNS RAISED BY NSAC

- The absence of analysis of robust, high resolution information on fisheries activity compared with the structured and detailed advice for other uses of the marine environment could result in fisheries being disadvantaged.
- A standard protocol for site investigations should be developed, incl:
  - evidence of fisheries costs and earnings pre-development, at an appropriate resolution (e.g. spatial and temporal patterns, qualifying / reference periods)
  - consideration of areas that are less likely to disrupt or impact significant fishing grounds
  - analysis of the ability of fishing activities to operate in the vicinity of the proposed development and suitable measures to minimise disruption and promote co-existence
  - ground rules for surveying sites for fisheries resources



## *Further discussion between NGOs and Consortium*

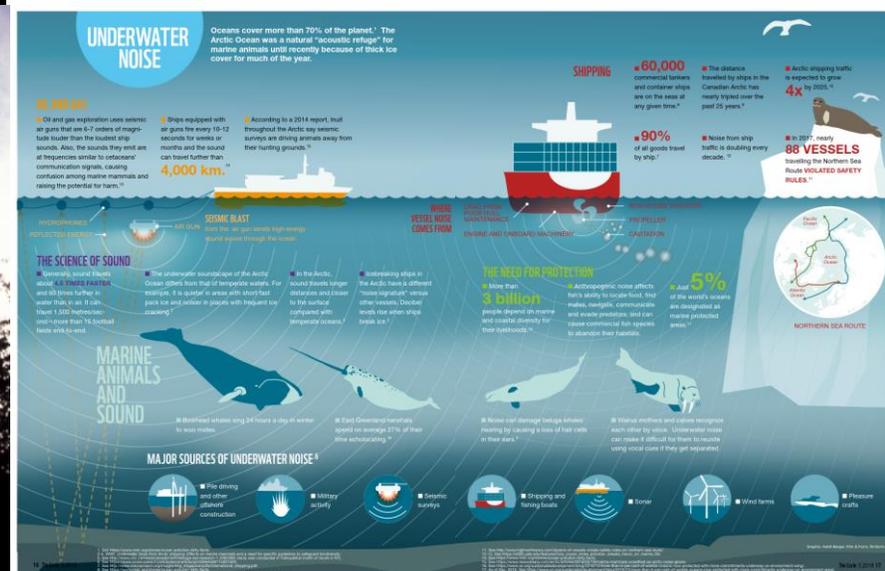
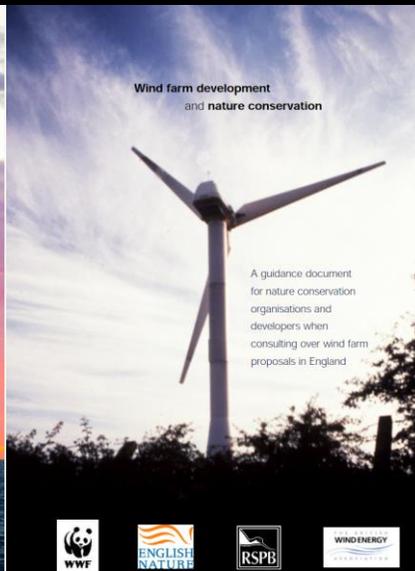
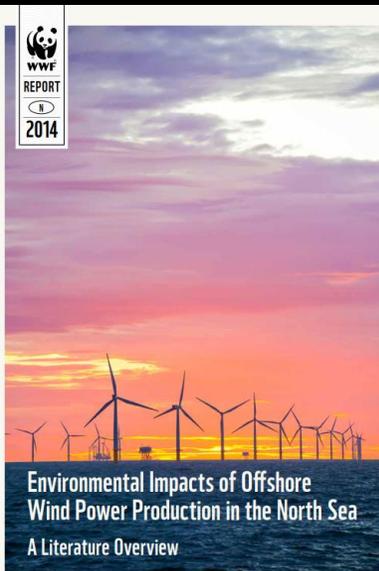
**Key message:**

**Protection of Dogger Bank and large scale infrastructure such as wind parks or farms are incompatible**



# Why are protection Dogger Bank and large-scale windenergy development incompatible?

- HABITAT LOSS
- HABITAT DAMAGE
- INTERFERENCE WITH PROCESSES
  - Ecological
  - Geological
  - Geomorphological
  - Hydrological
- DEATH MARINE SPECIES
- DISTURBANCE MARINE SPECIES
- NOISE POLLUTION
- LACKING OR NO CUMULATIVE IMPACT ASSESSMENT
- SHIFTING BASELINES



**CHECKLIST OF POSSIBLE IMPACTS OF RELEVANCE TO NATURE CONSERVATION**

All - list is not exhaustive

Impact	On Shore	Offshore	Timing
Direct habitat loss (eg on site, cable route, moorings) and associated biological impacts (eg reduced species diversity, loss of feeding/breeding habitat)	-	-	o/c
Habitat damage (eg on site, access roads, cable route, anchoring and associated biological impacts (eg reduced species diversity, loss of feeding/breeding habitat, changes in livestock management regimes)	-	-	p/c/d
Introduction of new substrate habitat	-	-	o/c
Interference with geological geomorphological processes (eg slope processes)	-	-	o/c
Interference with hydrological processes (eg increased run-off from upland sites, erosion of peatlands)	-	-	o/c
Interference with coastal processes (eg increased erosion)	-	-	o/c
Interference with sediment transport	-	-	o/c
Pollution (particularly noise)	-	-	p/c/d
Sediment disturbance (stability, siltation)	-	-	p/c/d
Disturbance to mobile species (eg mammals, birds, fish, including migration, feeding, breeding)			
i) Shadow effects from blades	0	0	0
ii) Noise	0	0	0/c/d
iii) Vibration	0	0	0/c/d
iv) Lighting	0	0	0/c/d
Bird collision	-	-	o
Associated infrastructure including:			
i) Access (tracks/roads, moorings)	0	0	0/c/d
ii) Visitor centre (disturbance)	0	0	0/c/d
iii) Overhead power lines	0	0	0/c/d
iv) Coastal protection	0	0	0/c/d
Vehicle/vessel movements (disturbance)	-	-	p/c/d

p = pre-construction, c = construction phase, o = operation phase, d = decommissioning

In addition to the above impacts, there are landscape/landscape and cultural impacts, and impacts of associated infrastructure, which could be indirectly linked to nature conservation (eg change in land use, restriction on sea use such as navigation or fisheries).

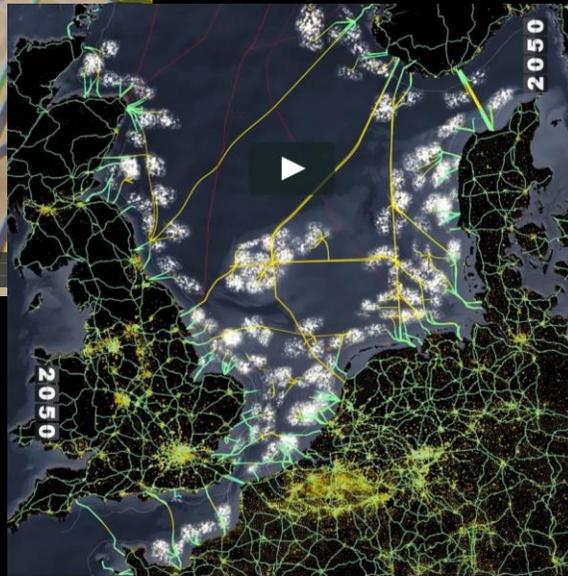




# Key concerns raised during North Sea Energy Forum 2017

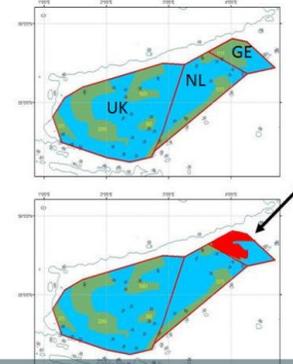
Odyssey 2050 was presented by Tennet et al.

- Questions asked and answers given made clear that no model was used to assess impact on nature in Odyssey 2050 vision
- No reasons provided why islands and windfarms on Dogger Bank were considered the best option to achieve energy vision
- No consultation of NGOs involved in conservation of Dogger Bank for decades



## Proposed plans for the Doggerbank Marine protected area or paper park?

- Closures to protect sandbank and benthic life were - as a result of compromise - proposed to cover 33.8% of Doggerbank. However...
- The United Kingdom (UK) has effectively opened closures on its side of the Doggerbank to large windenergy projects (Forewind) and flyshoot/seine; a fishing technique that bycatches sharks, coldwater coral and other benthic species.
- Netherlands (NL) has also opened proposed closures to flyshoot/seine. Plans for large scale windenergy by Tennet.
- Germany (GE) is the only member state that has proposed closing their closures to bottomtowed gear, therefore only 5% of total Doggerbank will effectively be closed to allow seabed and marine life associated with it to recover



Only effectively 5% of Doggerbank will be closed to allow seabed and associated life to recover





# Key concerns during conversations with Tennet and Energinet, leading up to written input October 2018:

1. Stakeholder engagement process non-transparent / non-existent
2. Collective conversations needed to ensure fully-informed thinking by all stakeholders
3. Offers from WWF and others to participate have been ignored (ToR spatial analysis, AA, EIA, SEA, look for alternatives):
4. Pick best technique and best location: what are the options and set criteria that allow all involved to make an honest comparison between scenarios, which need to include direct and indirect environmental / ecological costs, not just direct monetary costs.
5. Alternative ideas unclear: what exactly is the problem for which this idea is arguably the only solution?
6. WWF et al offered to advise on planned spatial analysis to come up with alternative ideas and locations, to which Tennet responded positively, yet no follow up.

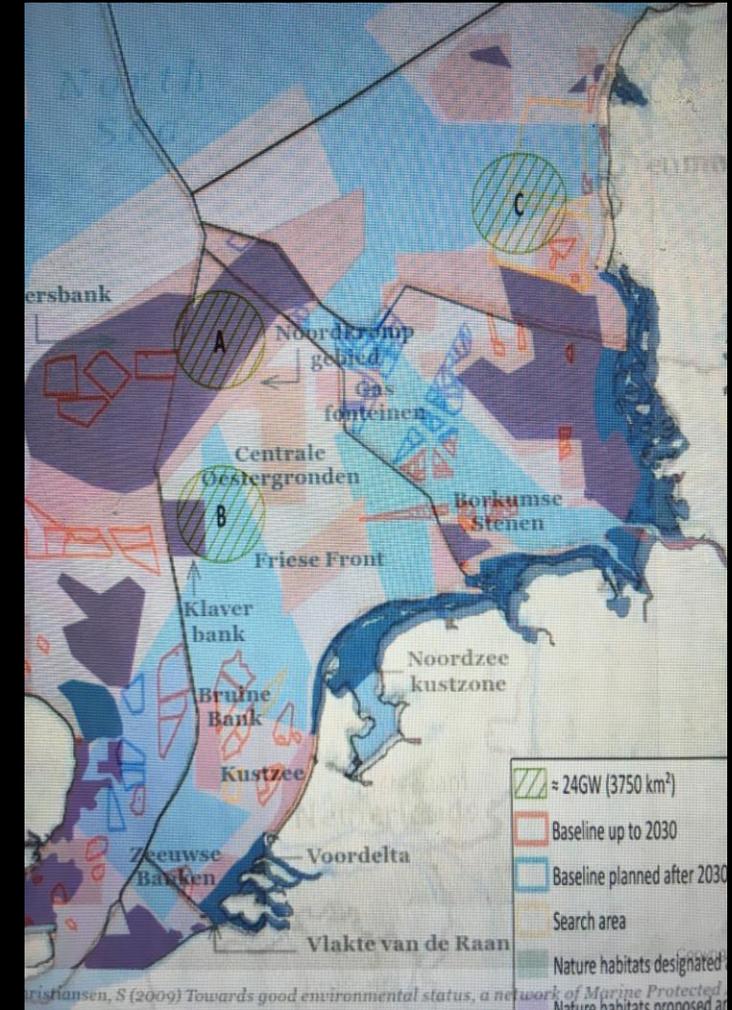


# Key concerns during conversations with Tennet and Energinet, leading up to written input October 2018:

7. Feedback to pre-screening report:
  - a. report is leading and written toward outcome in favour of idea of a Dogger Bank energy-island and windfarm
  - b. risks are not recognized, downplayed and missing data is misconstrued as no effect or no effects expected
  - c. Fails to address and / or actively disregards impacts mentioned on slide “Why are protection Dogger Bank and large-scale windenergy development incompatible?”
8. Yes to clean energy, but not at the expense of nature & biodiversity; Doggerbank MPA should not be footing the climate bill
9. Wind hub energy islands + wind parks cannot be built in North Sea Natura 2000 / other MPA without adverse impact on the integrity of such sites.

# Response to 'Initiating dialogue with NGO's discussed February 2019

1. NGOs are encouraged by the Consortium's new constructive approach, and the proposal for further ecological assessment work
2. NGOs ask for locations to research to be placed outside DB, N2000 et al MPAs -> Consortium contemplating this
3. NGOs ask for consideration of alternative design options for a hub (sand-filled island, jacket structure, floating)
4. Complete transparency needed on criteria for choosing locations to test learn from
5. Be very careful to speak of 'benefits to nature' (for oyster, cod) as scale and (negative) impacts are expected to be unprecedented





# Changes to stakeholder engagement made. Points discussed February 2019

Still to review:

- 'Concept paper 4-Towards North Sea Spatial Planning of Offshore Wind.pdf' (received 21 Feb 2019)
- 'NSWPH-ToR for environmental desktop study.pdf' (received 21 Feb 2019)
- 'Cost Evaluation of North Sea Offshore Wind Post 2030.pdf' (received 21 Feb 2019)

Timelines, capacity remain a concern

Discussion at NSAC level