



Update Offshore Grid

July 9 2020

C1 - Public Information



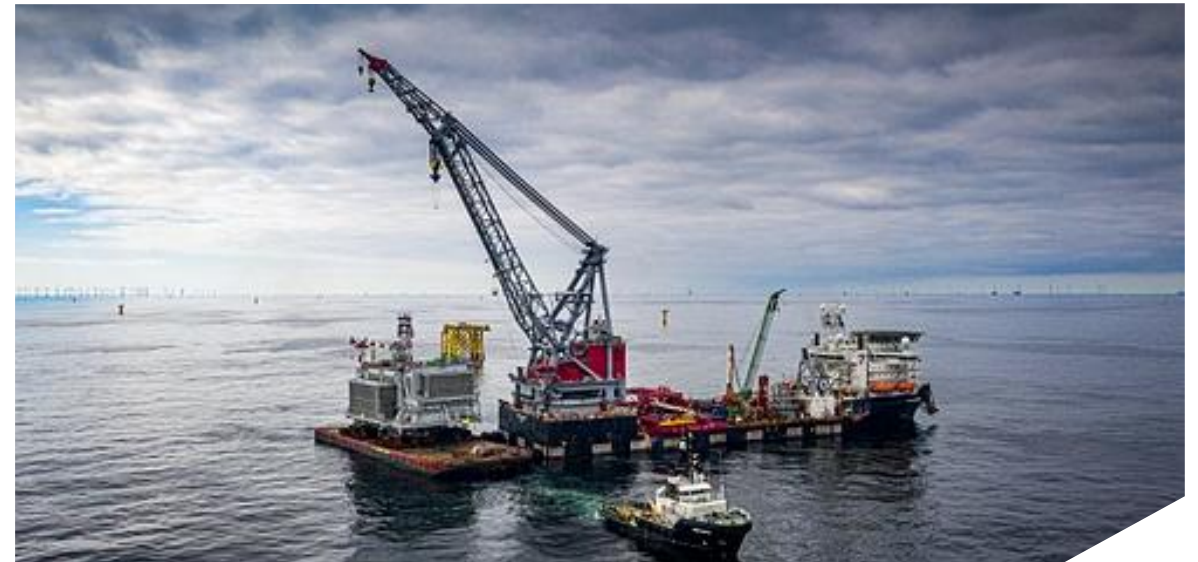
Update Offshore Grid

General:

- Development Framework for Offshore Wind Energy updated 20.05.2020
- Investment Plan for the Offshore Grid published 01.07.2020
- <https://www.tennet.eu/nl/bedrijf/publicaties/investeringsplannen/>

Project updates:

- Borssele
- Hollandse Kust (zuid)
- Hollandse Kust (noord)
- Hollandse Kust (west)



Borssele

2 x 700 MW, AC

Alpha:

- Grid readiness achieved 23.08.2019;
- Pull in and energisation Orsted ongoing.

Beta:

- Trial operation successfully completed;
- Grid Readiness Certification expected prior to the delivery date of 31.08.2020;
- Early cable pull-in for Blauwwind supported and ongoing;
- Multiple mitigation measures regarding COVID19. So far, no impact, no contaminations;
- Nature enhancement under investigation.



Hollandse Kust (zuid)

2 x 700 MW, AC

- Land station: Civil works reaching final stage. Installation of electrical equipment on site almost completed. Finalisation of land station aiming for a gull friendly design.
- Land cable: ducts and cables installed.
- Sea cable Alpha on its way from Greece for installation this summer, using new trencher VOC Deep Dig-it.
- Cable crossings export cables outside wind area will be installed H2 2020 applying both the standard and an ecological advanced design, anticipating future governmental requirements.



Hollandse Kust (zuid)

2 x 700 MW, AC

- Jacket Alpha load out to transportation vessel completed and preparing sail away. Topside Alpha fabrication ongoing.
- Fabrication jacket and topside Beta started.
- Delivery data updated in Development Framework for Offshore Wind by MinEAC to 31.12.2021 (HKZ Alpha) and 31.03.2022 (HKZ Beta, unchanged), aligned with OWF planning.
- COVID19: Impacting delivery of materials and equipment, quarantine of transportation vessels, and staff travel restrictions.



Hollandse Kust (noord)

700 MW, AC

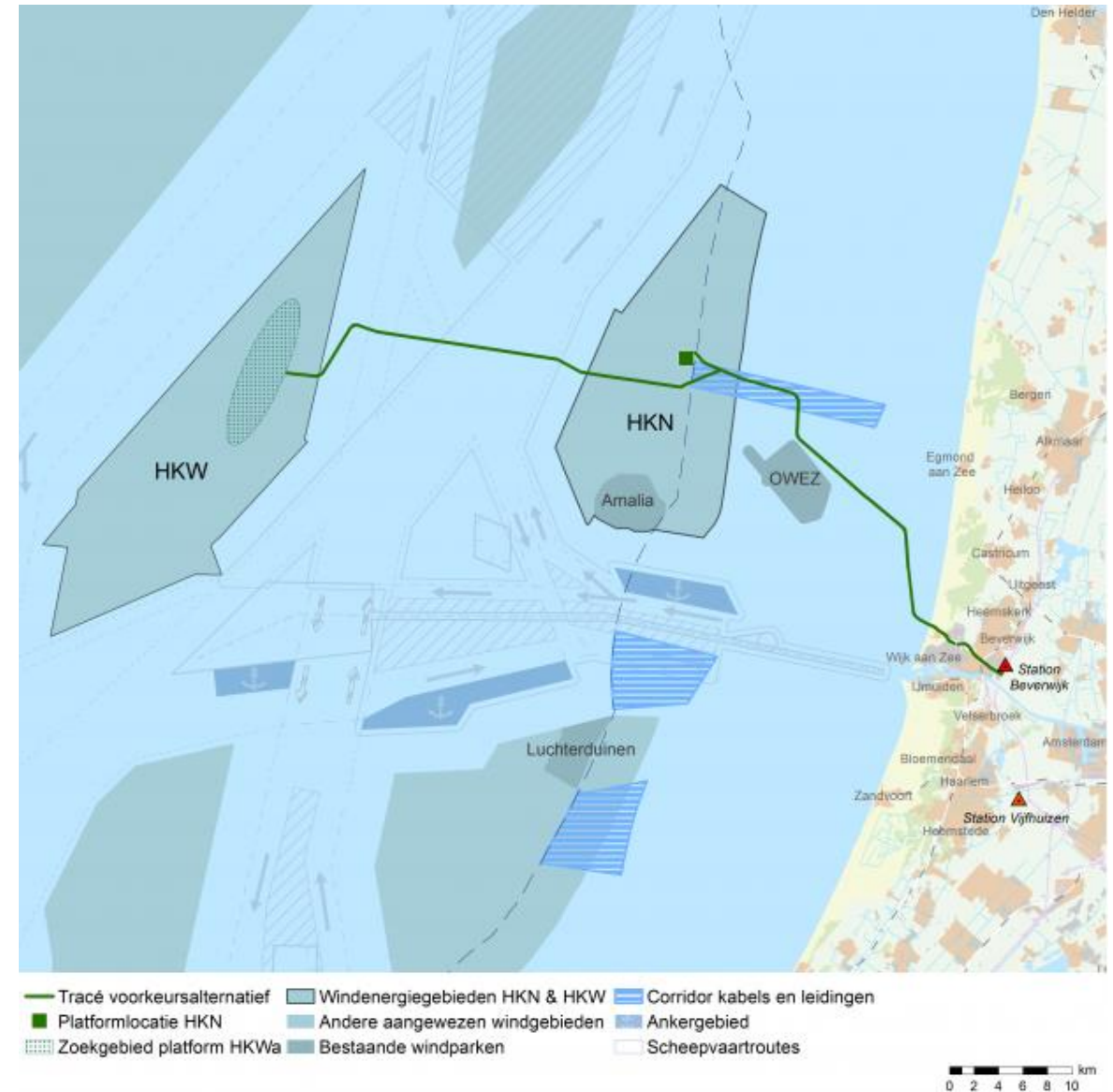
- Irrevocable permits for HKN and HKW Alpha obtained 13.05.2020.
- Local stakeholders remain concerned. Information centre opened.
- Contracts awarded:
 - Platform HKN/HKWa/HKWb: Engie-Fabricom Iemants;
 - Seacable HKN/HKWa: Jan de Nul LS;
 - Landcable HKN/HKWa: NRG and TAIHAN;
 - Landstation engineering: Movares;
 - Landstation preparatory works: KWS.
- COVID19: minimal impact.
- Delivery date: 31.03.2023



Hollandse Kust (west)

Alpha: 700 MW, AC

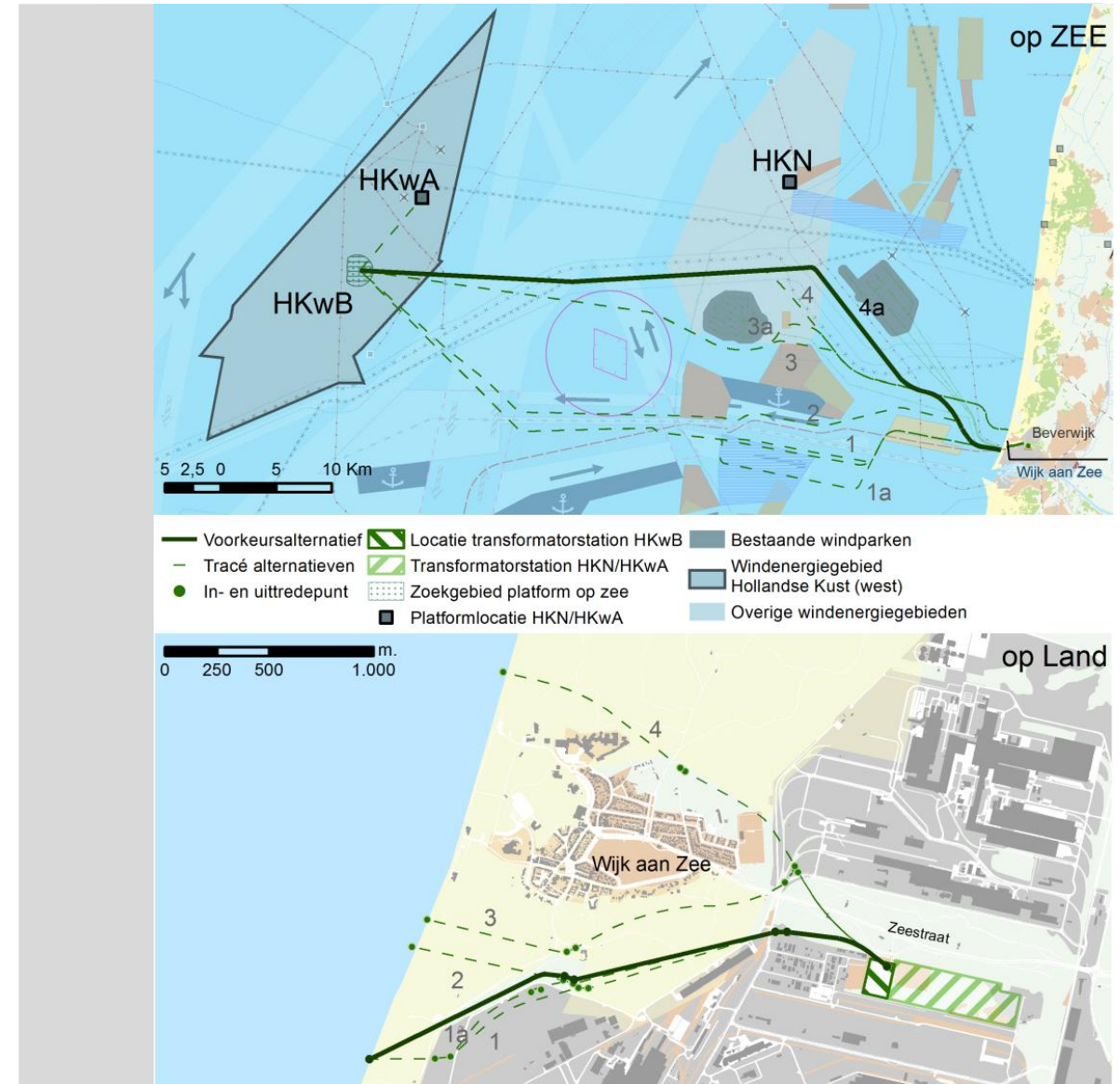
- Project HKN and HKWa are being overseen by one team.
- Permits irrevocable, contracts in place.
- Platform HKW Alpha will be called off Q4 2020, according to schedule, with the delivery date of 31 March 2024.
- Delivery date Q1 2024.



Hollandse Kust (west)

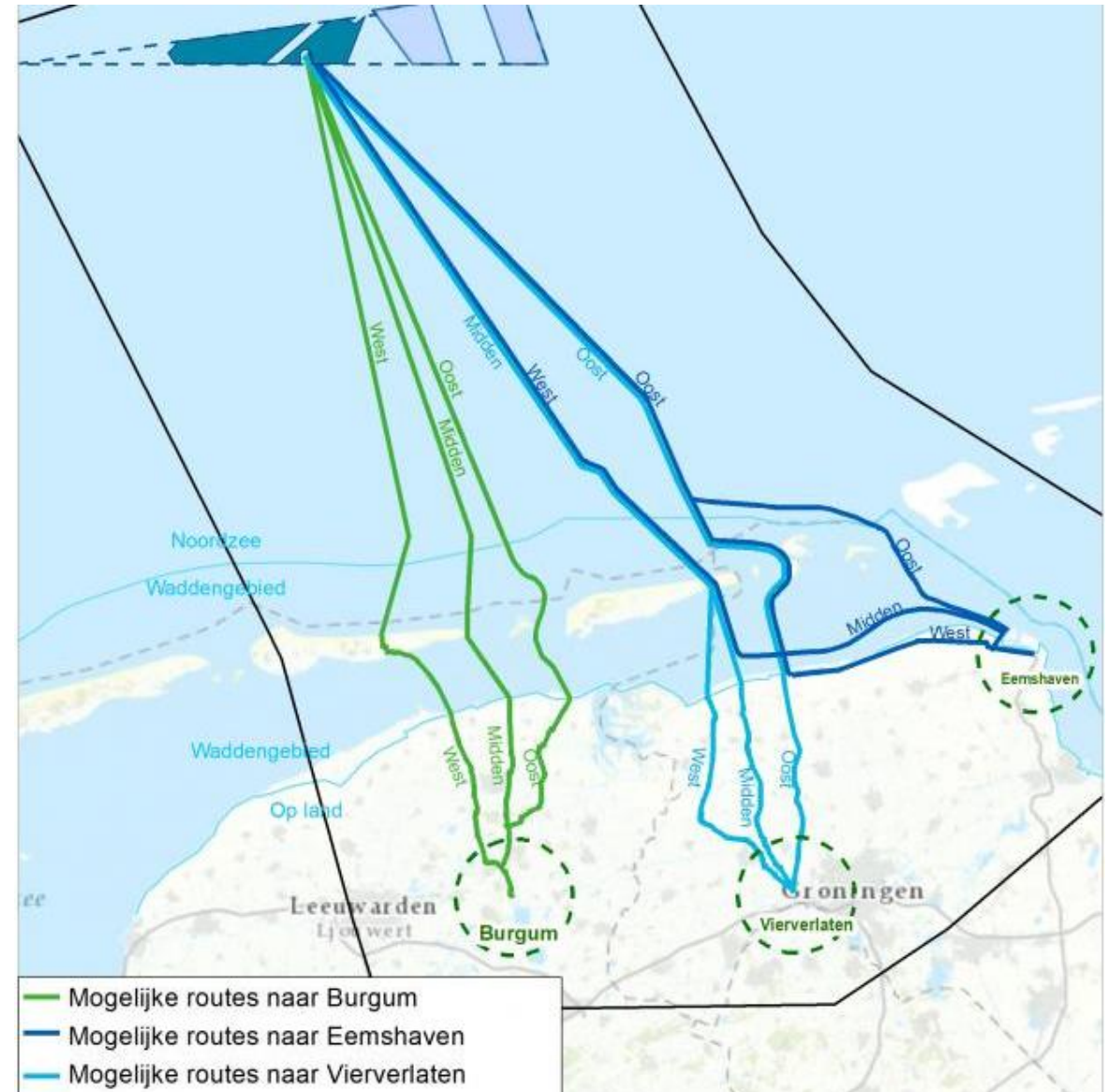
Beta: 700 MW, AC

- Project HKWb and Ten Noorden van de Waddeneilanden are being overseen by one team.
- Preferred alternative chosen by MinEAC.
- Delivery date Q1 2026.
- Stay informed:
<https://www.netopzee.eu/hollandsekustwestbeta/>



Ten Noorden van de Waddeneilanden

- 700 MW, AC
- Preferred alternative expected Q4 2020
- Delivery date Q1 2027.
- Stay informed:
<https://www.netopzee.eu/tennoordenvandewaddeneilanden/>



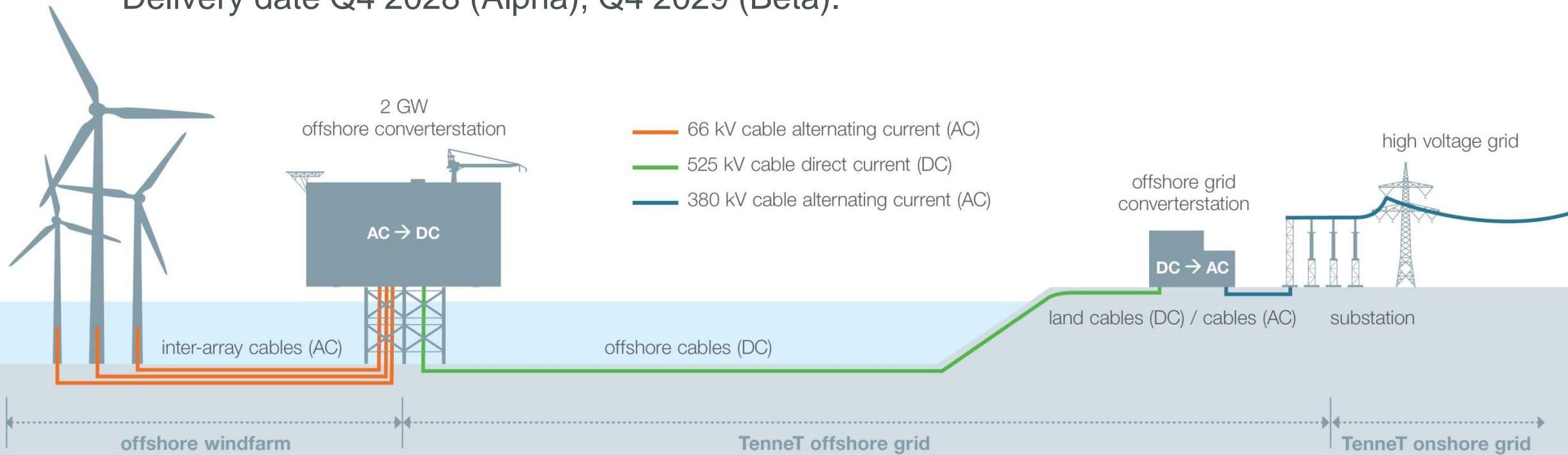
IJmuiden Ver

2 x 2 GW, HVDC

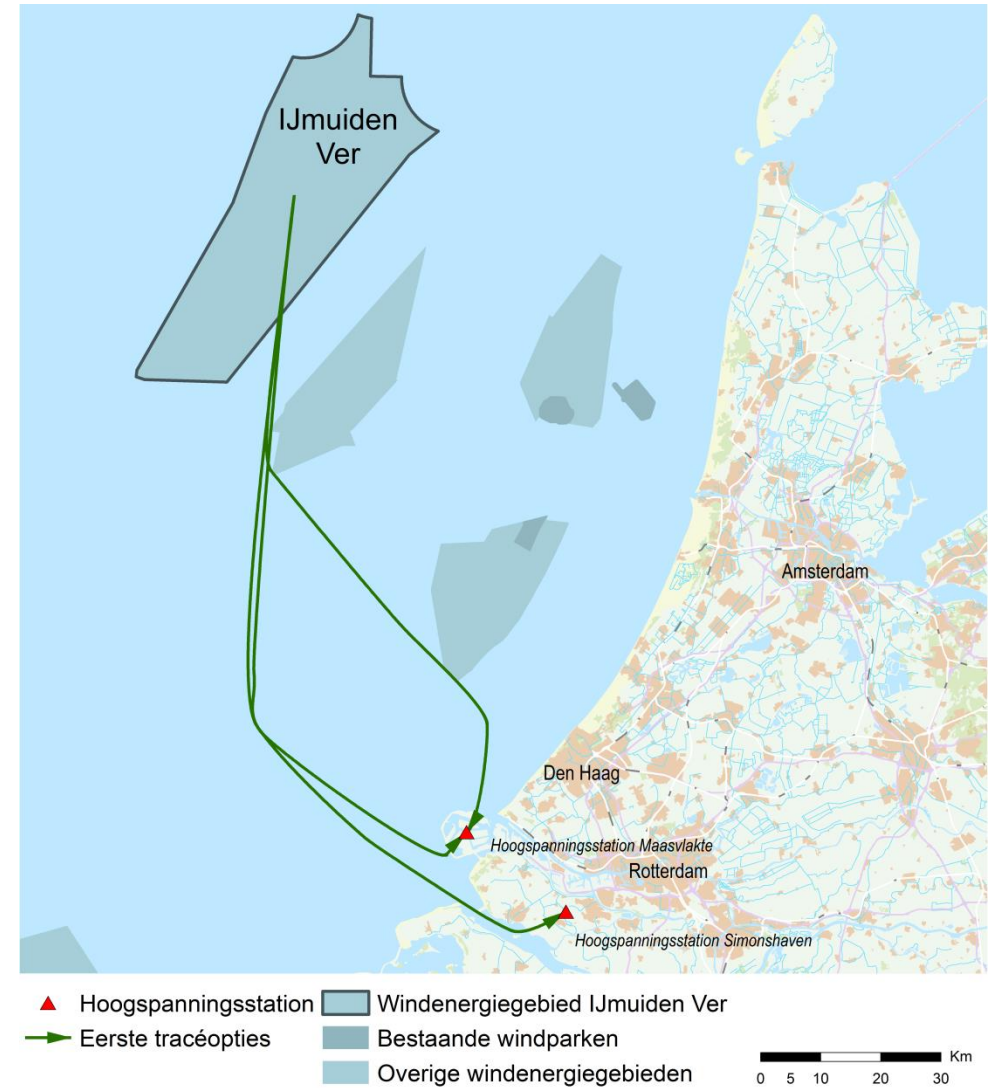
Technical requirements stated in Development Framework for Offshore Wind Energy.

Preparing for platform, cable tender which is scheduled for 2021.

Delivery date Q4 2028 (Alpha), Q4 2029 (Beta).



IJmuiden Ver



2 GW platform compared to Arnhem's soccer stadium



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Webinar RVO/MinEAC 09.07.2020

Questions? Please contact: Netopzee@tennet.eu

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