

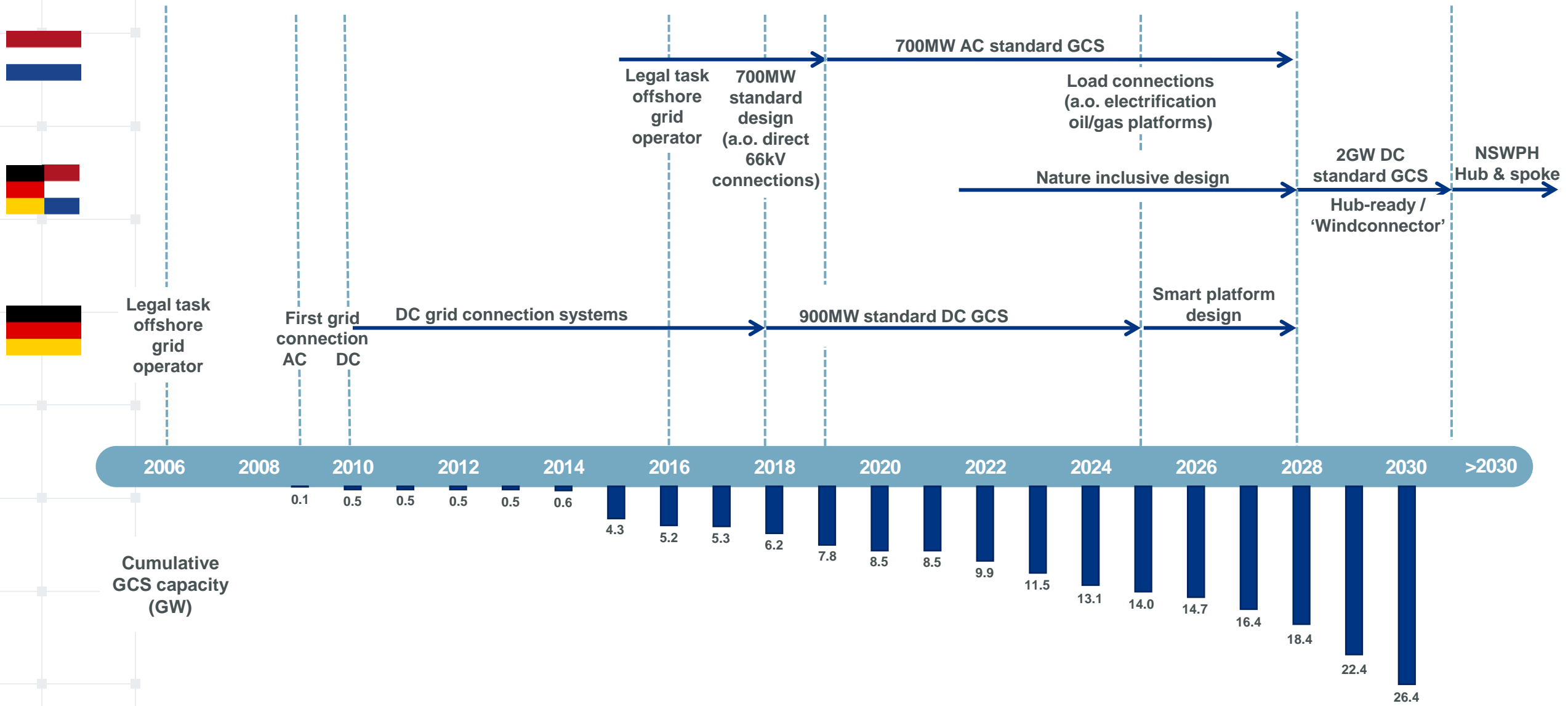


# Offshore hub developments

Thomas Donders – TenneT

# TenneT Offshore Grid Developments

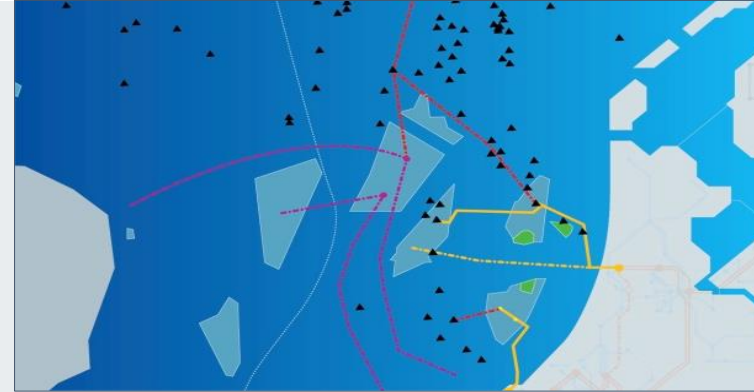
## Germany and the Netherlands



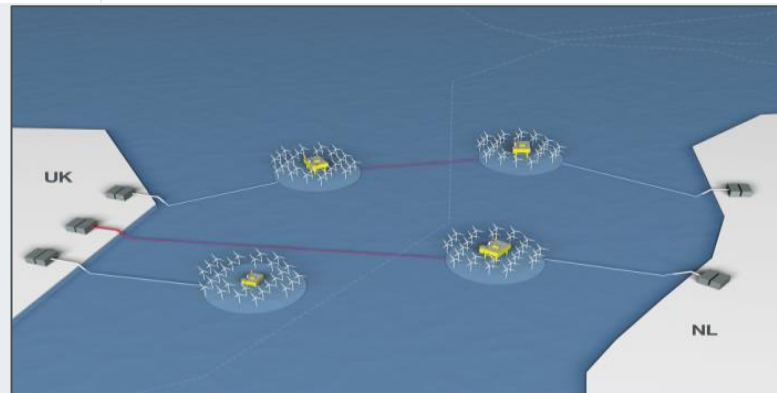
# First offshore energy hubs until 2030



Ijmuiden Ver: Platform or island evaluation



Electrification of offshore oil/gas platforms



Multipurpose interconnections “Windconnector”



Innovative techniques

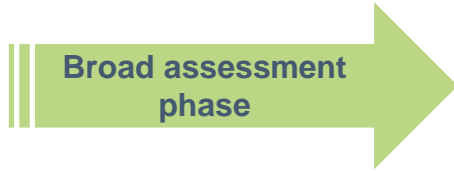
# Energy hubs after 2030 → North Sea Wind Power Hub

## From vision to modular programme

### Hub-and-Spoke Modular concept

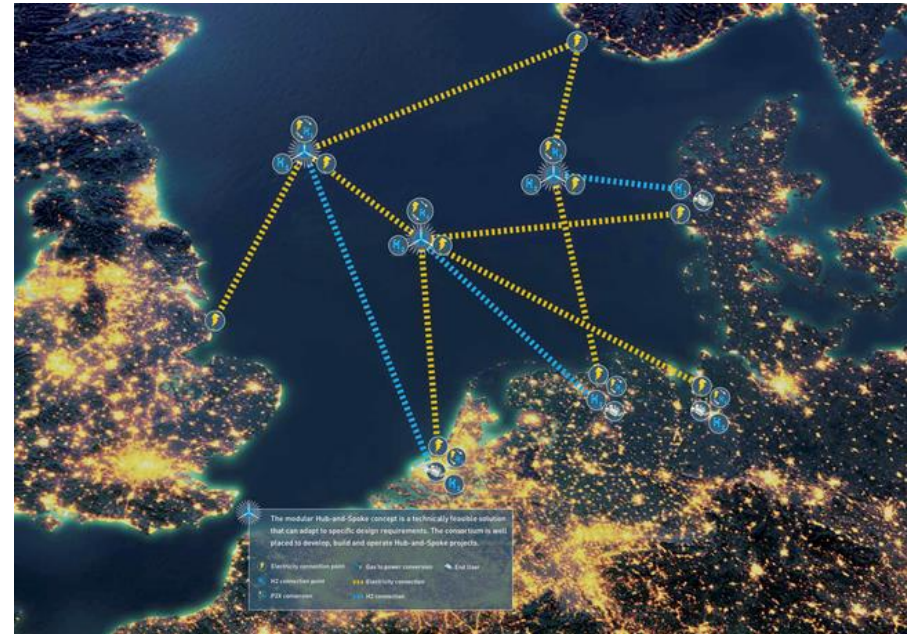


From vision as presented in 2016 – a 36 GW Hub & Spoke project based on a sand island on the Dogger Bank ....



- >60 people involved from consortium companies
- >25 separate studies, including: regulatory, technical, economic, different island concepts, role of power-to-gas

... to programme providing a step-by-step approach to unlock the vast offshore wind resource, integrating it into the onshore energy grids and continue high level of security of supply



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