



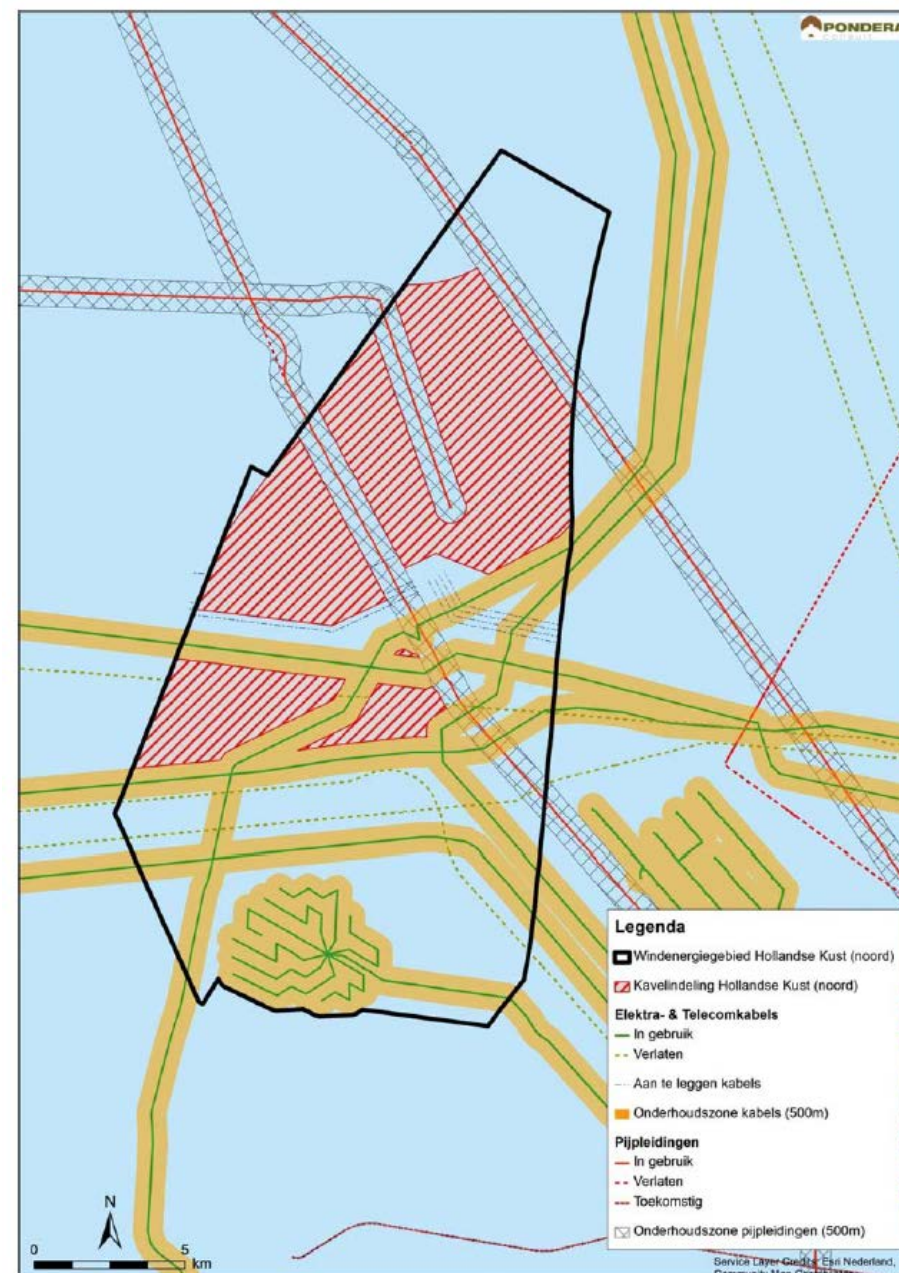
wind &
water
works

Update Hollandse Kust (noord)

Thomas Collette Rijkswaterstaat

Procedure wind farm site decision

- Publication draft decision 14 June 2018
- 8 points of view and 3 reactions
- Publication final decision 9 May 2019
- Appeal by 2 parties
- Decision Counsel of State 12 August 2019
- Wind farm site decision HKN V irrevocable



Main requirements (1)

- Definitions
- Site boundaries and coordinates
- Dimensions wind farm and wind turbines
- Maintenance zones cables and pipelines
- Permit for 30 years
- Mitigation birds, bats and sea mammals
- Lighting and marking
- Archeology
- Radarsystems for shipping safety
- Nature inclusive building
- Monitoring and evaluation program



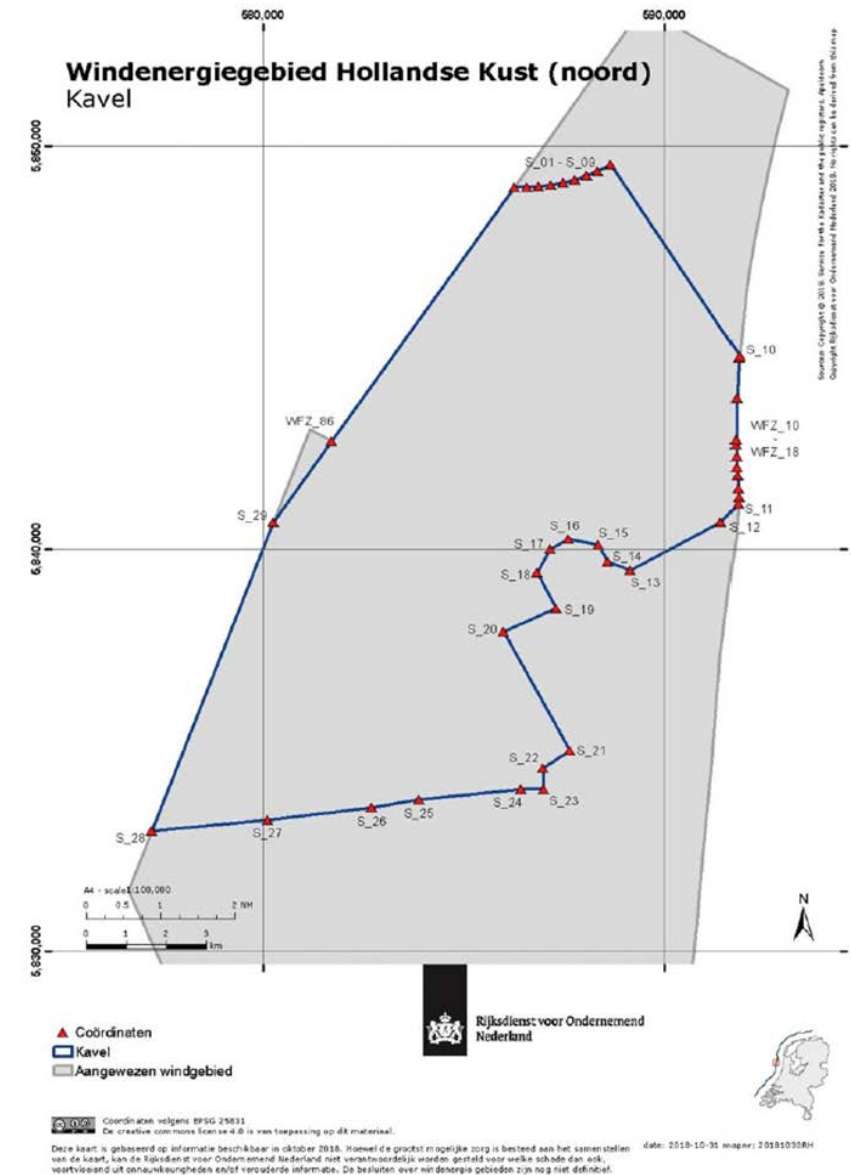
Main requirements (2)

- Radarsystems for shipping safety
- Nature inclusive building
- Monitoring and evaluation program
- Decommissioning
- Financial security



Comparison regulations HKZ and HKN (1)

- Definitions:
 - curtailment facility: the number of turbines in the wind farm site that are curtailed in the event that mining platform Q4C is approached by a helicopter. The area is bounded by the coordinates in Regulation 4.9.c
- Only wind turbines with an installed capacity of at least 8 MW are to be installed in the wind farm.
- Reporting obligation awarding local and regional businesses, no plan needed



Comparison regulations HKZ and HKN (2)

- Measures to prevent victims of collision amongst **bats** at rotor level: a new regulation will be in force before opening of the tender
- Sound emission standard

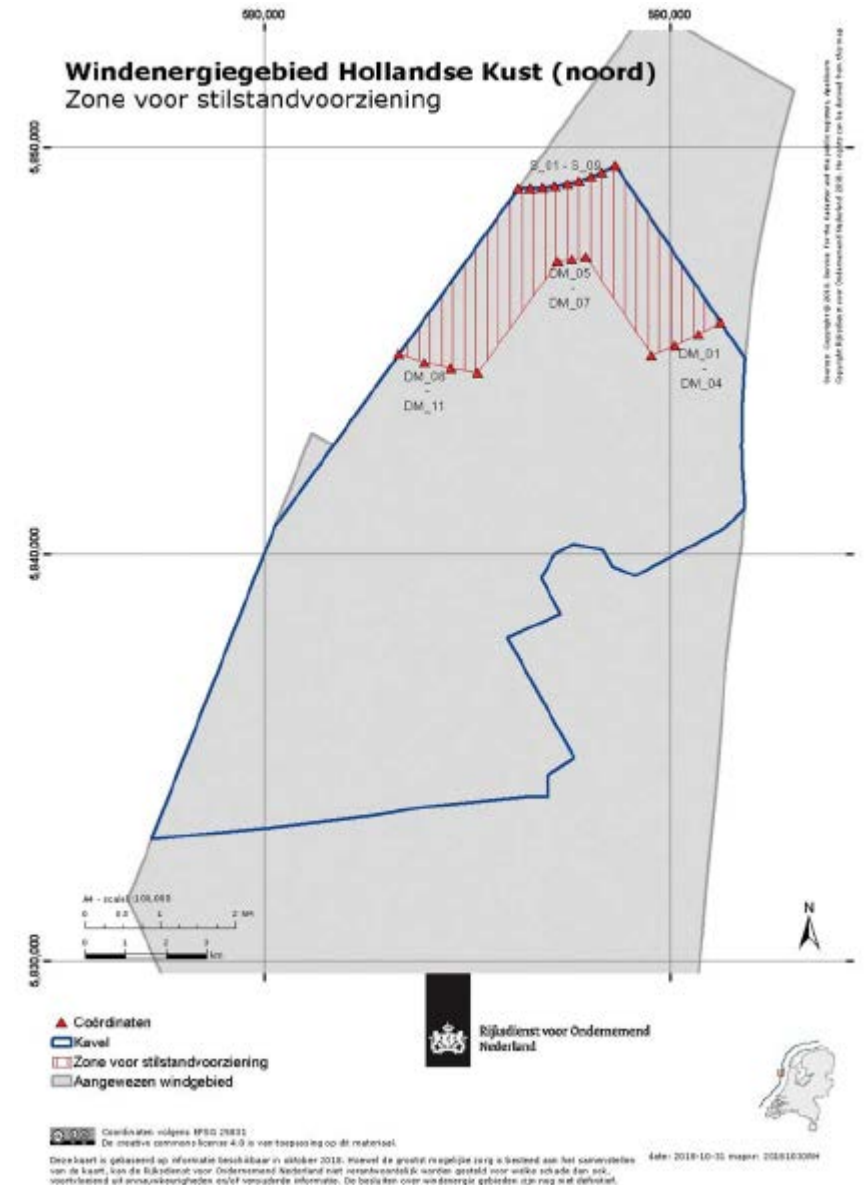
Sound level (dB re 1µPa ² s SEL ₁ on 750 metres from the sound source)			
Number of wind turbines to be installed	Period		
	January to May inclusive	June to August inclusive	September to December inclusive
77-95	165	169	172
76 or less	166	170	174

Comparison regulations HKZ and HKN (3)

- Nature inclusive building: more guidance
- Measure to ensure the safe accessibility of mining platform Q4C, by helicopter for the purposes of employee transport and Search and Rescue (SAR) operations.

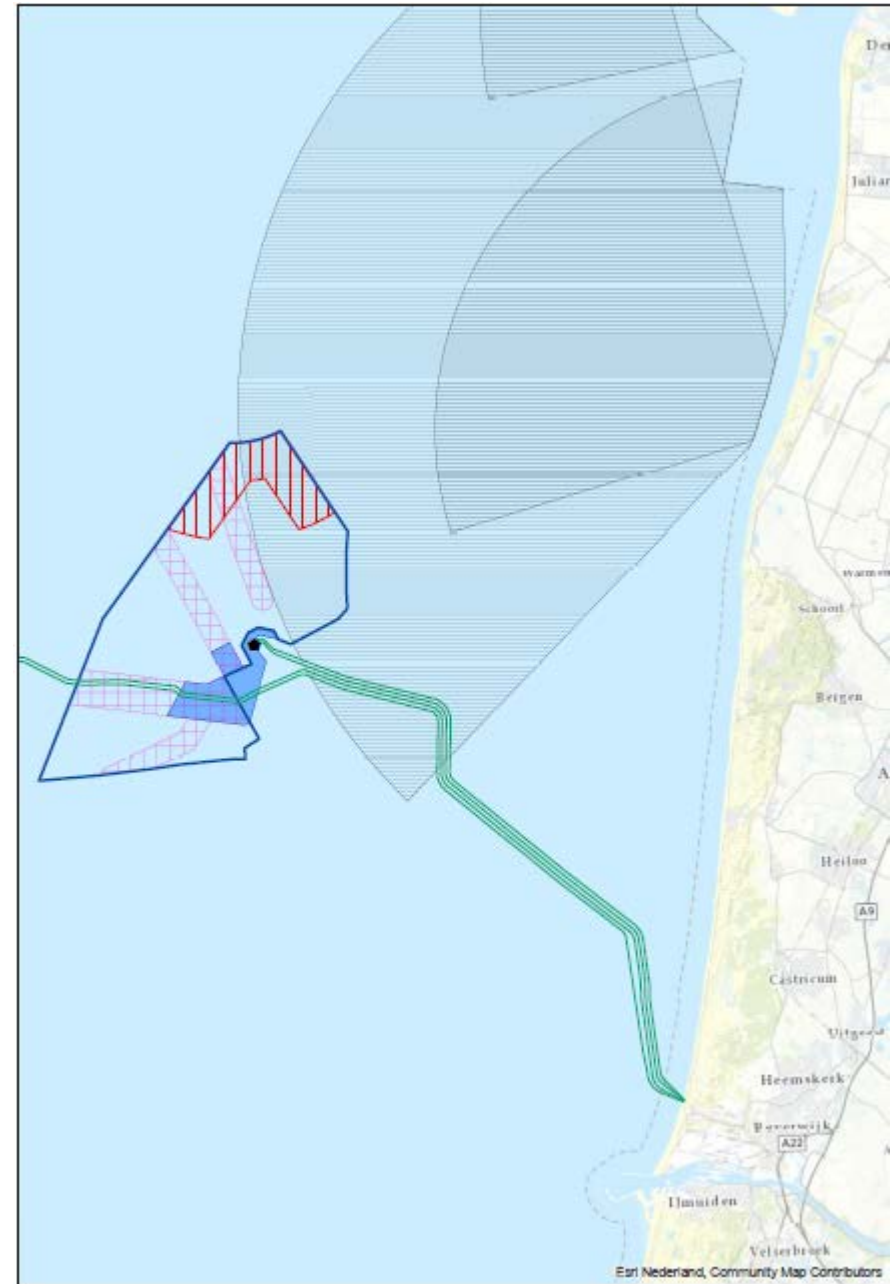
Study by To70: influence of wake effects on helicopter flights

Results end of 2019



Military training ground

- Change of the firing range
- Discussion between Ministry of Defense and Waterboard (Hoogheemraadschap)
- Result is expected before start construction
- Shooting takes place max 20 days/year
- Protocol between developer and Ministry of Defence



Any questions?