

## Dutch Offshore Wind Atlas (DOWA)

The DOWA project is a joined ECN-Whiffle-KNMI project which runs from June 2017 until December 2019. The project includes extending the KNW-atlas beyond 2013 and making a new atlas (DOWA) for 2008-2017 with:

- An improved re-analyses model (ERA5 instead of ERA-Interim)
- An improved version of weather model HARMONIE which provides better hourly wind data
- An improved methodology which makes it possible to use innovative measurements such as high resolution satellite surface wind fields (ASCAT) and aircraft wind profile measurements (MODE-S EHS). The new method will improve the quality of time series and the representation of the diurnal cycle.

The DOWA will not only contain wind climatology, but also information required for further downscaling with a Large Eddy Simulation (LES) model. This means that it is possible to downscale the information in DOWA locally from hourly to 10 seconds and from 2,5 km to 100 m horizontally. The KNW-atlas lacks this information.

Month	Delivery KNW/DOWA	“Routekaart Dutch offshore wind”
June 2017	Start DOWA	
Dec 2017	KNW 2014 until and including Aug 2017	Start tender HK-Z (1 <sup>st</sup> tranche)
Jan 2018	KNW incl Sept 2017	
Febr 2018	KNW incl Oct 2017	
March 2018	KNW incl Nov 2017	End tender HK-Z (1 <sup>st</sup> tranche)
April 2018	KNW incl Dec 2017	
May 2018	KNW incl Jan 2018	
June 2018	KNW incl Febr 2018	
July 2018	KNW incl March 2018	
Aug 2018	KNW incl April 2018	
Sept 2018	KNW incl May 2018	
Oct 2018	KNW incl Juni 2018	
Nov 2018	KNW incl Juli 2018	
Dec 2018	KNW incl Aug 2018 and DOWA 2008-1017	Start tender HK-Z (2 <sup>nd</sup> tranche)
Jan 2019	KNW incl Sept 2018	
Febr 2019	KNW incl Oct 2018	
March 2019	KNW incl Nov 2018	End tender HK-Z (2 <sup>nd</sup> tranche)
April 2019	KNW incl Dec 2018	
May 2019	KNW incl Jan 2019	
June 2019	KNW incl Febr 2019	
July 2019	KNW incl March 2019	
Aug 2019	-	
Sept 2019	-	
Oct 2019	-	
Nov 2019	-	
Dec 2019	-	Start tender HK-N