



Ministry of Infrastructure and the  
Environment



## Tussenstand Wozep- bijeenkomst 2018

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Erkman; Martine Graafland; Maarten de  
Jong; Suzanne Lubbe; Maarten Platteeuw;  
Ingeborg van Splunder; Marijke Warnas



Presenter:

Ingeborg van Splunder (RWS)



# Welcome

- Goal of the 'Tussenstand Wozep' meeting

Start at the beginning:

What is Wozep?

(Offshore wind  
ecological programme)





## Offshore Wind Ecological Programme (Wozep)

- Ministry EKZ has given assignment to RWS 2016
- Government coordinates research programme Wozep
- Earlier, monitoring and evaluation part of permit by wind sector

Goals of Wozep research programme:

- Reduce uncertainties in knowledge gaps and assumptions in EIA/AA
- Reduce uncertainties in upscaling offshore wind energy after 2023
- Effectiveness and necessity of mitigation measures



Need for international cooperation:

- Effects are trans-boundary;
- North Sea countries similar knowledge questions; re-use of data and knowledge
- Cumulative effects on North Sea level



## Wozep research programme

Priority species and pressures:

- Marine mammals, under water noise
- Birds, collision and displacement
- Bats, migrating subpopulation, collision
- Benthos 'long' term development soft and hard substrate
- Focus on cause-effect relationships





## Role Wozep

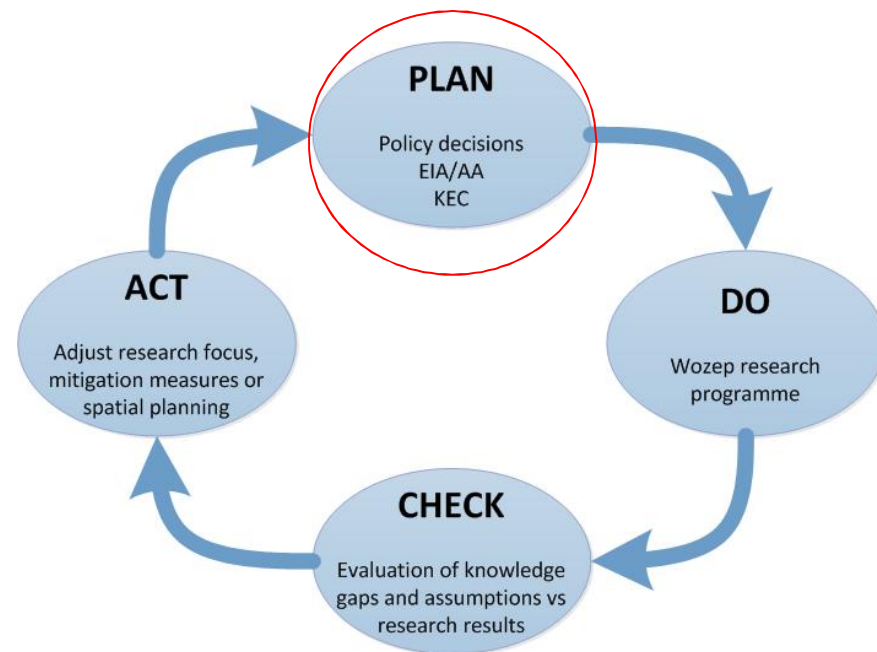
Future plans offshore WF

- PBL scenario's
- Min. EZK is preparing plans for WF

Research is part of adaptive management process

Summer 2018:

KEC update for next WF's





## Programme

10.00 – 10.15 Welcome, introduction – I. van Splunder (RWS)

### Birds

10.15 – 10.25 Maarten Platteeuw (RWS): short introduction in Wozep bird research.

10.25 – 10.50 Tobias van Kooten (WMR) - habitat modelling

10.50 – 11.15 Astrid (Bureau Waardenburg) - Population dynamics

Coffee 11.15 – 11.30

11.30 – 11.55 Mardik Leopold (WMR) presence of guillemots in wind farms

### Benthos

11.55 – 12.00 Maarten de Jong (RWS) short introduction benthos

12.00 – 12.20 Edwin Verduin (Eurofins); Benthos soft substrate survey in PAWP

Lunch 12.30 – 13.30



## Marine mammals

- 13.20 – 13.30 Aylin Erkman (RWS): short introduction marine mammal / underwater noise research
- 13.30 – 13.55 Ron Kastelein (Seamarco): energetics of Harbor porpoise
- 13.55 – 14.20 Christ de Jong (TNO): frequency weighting of underwater noise

## Tea 14.20 – 14.35

## Bats

- 14.35 – 15.00 Maarten Platteeuw (RWS): short introduction Wozep bat research
- 15.00 – 15.25 Sander Lagerveld (WMR) bat migration at sea and along the North Sea-coast
- 15.25 Closing and glimpse of future plans; Ingeborg van Splunder

## Borrel/Drinks







## Summary and glimpse towards the future

- Birds habitat loss
- Birds collisions
- Marine mammals
- Benthos
- EMF



## Looking around Wozep

- 'Doorvaart en medegebruik'
- Building WF's Natuurinclusief; improving wind farm habitat?
- KRM: effect WF's on ecological status  
Knowledge gaps KRM refer to Wozep research programme and KEC
- Possible consequences for KEC because of CEAF project
- Increasing area offshore windfarms: ecosystem effects?

Work to be done!