



Workshop tender Borssele: update

10th June 2015

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Ministry of Economic Affairs



Welcome

Content 7th workshop:

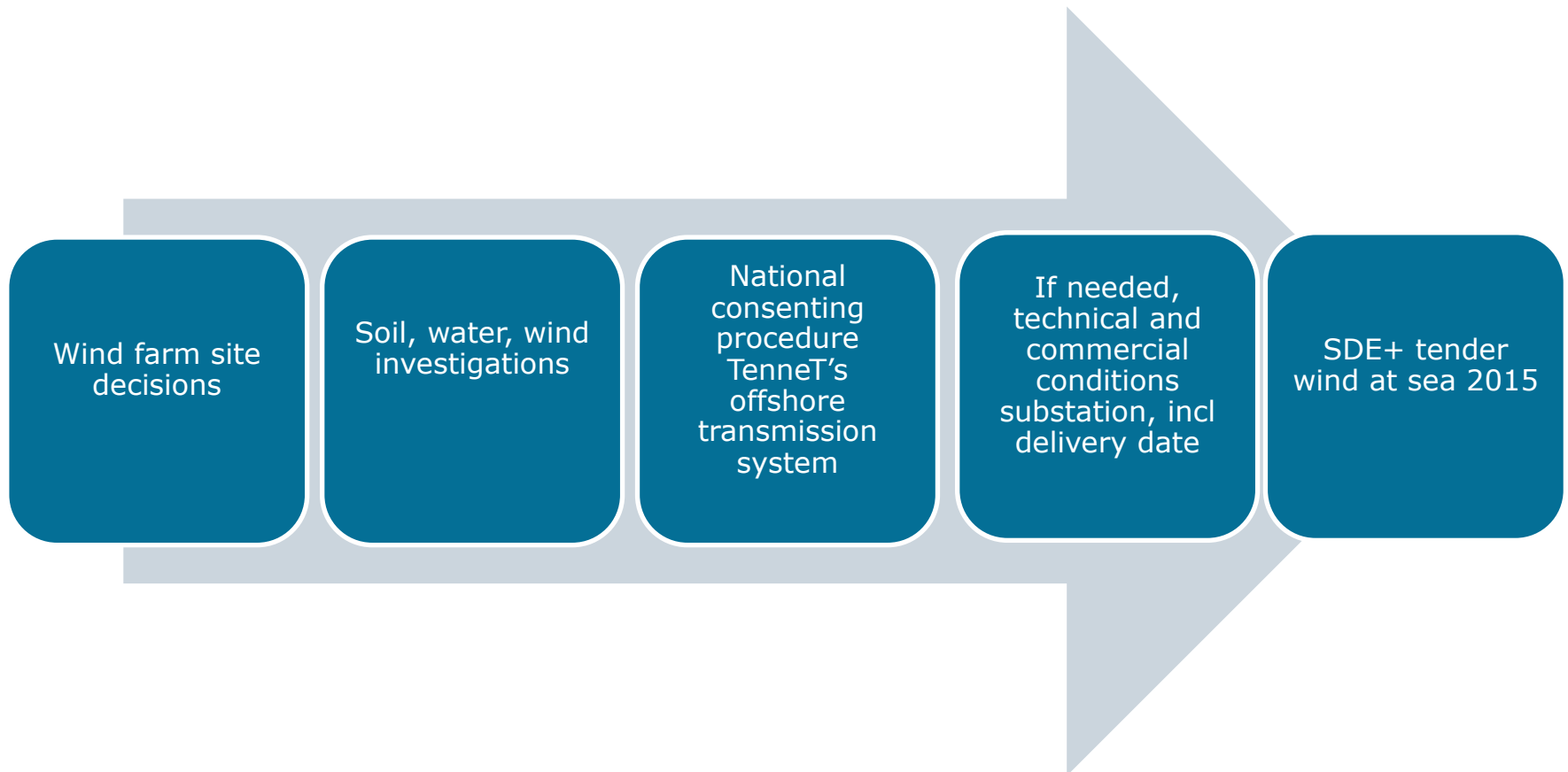
- Update: wind farm site decisions and tenders 2016-2018
- SDE+ subsidy scheme
- Offshore grid
- Site data (incl. preliminary results geotechnical investigations)

Update:

- Legislation and policy
- Wind farm site decisions
- Tenders 2016-2018

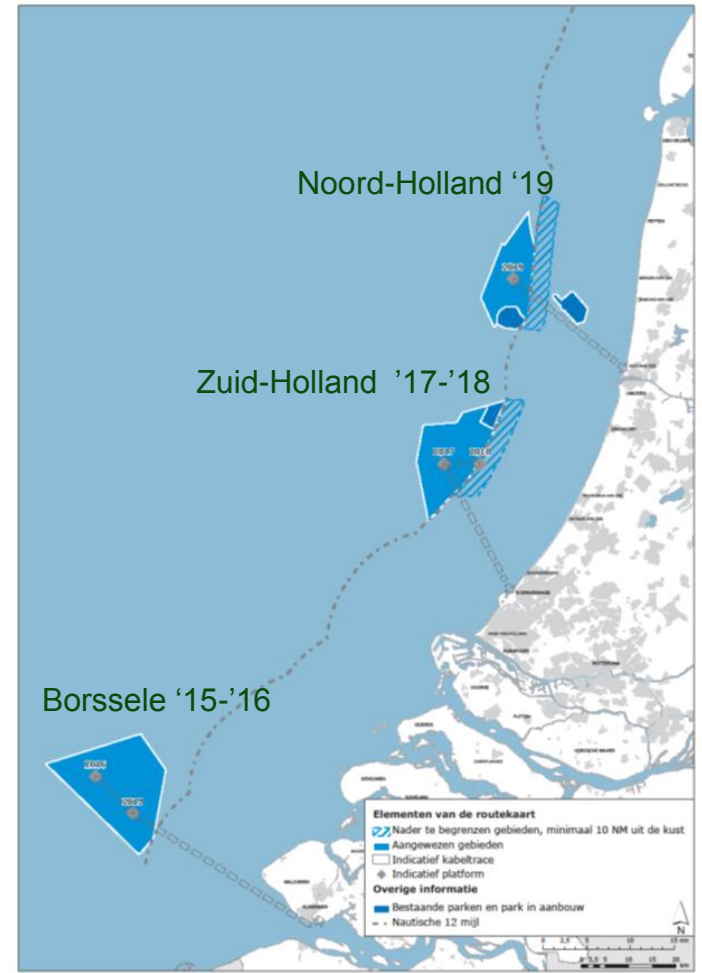
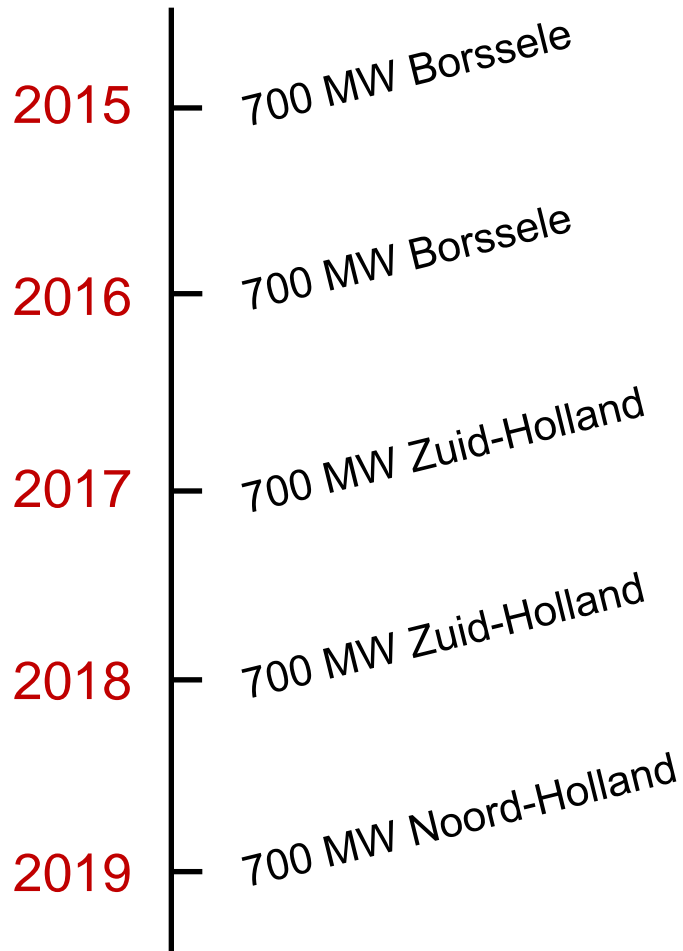


All included in programme 7th meeting

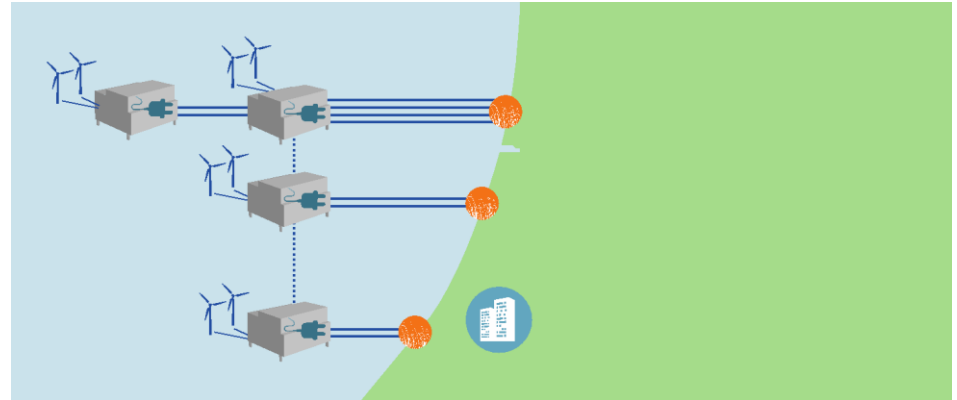
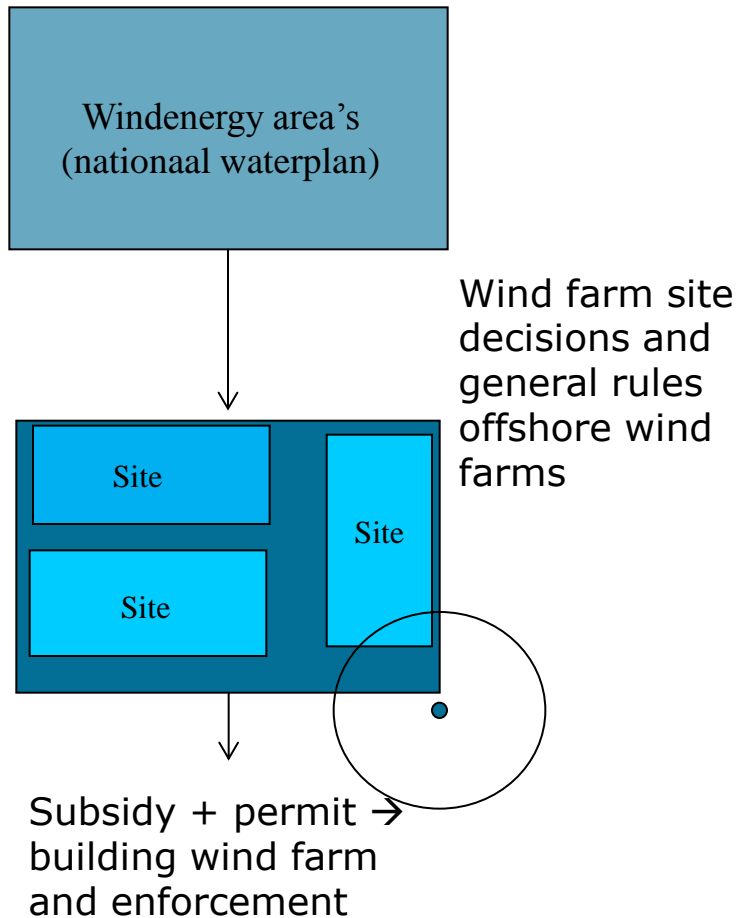




Legislation and policy (1): energy agreement and roadmap



Legislation and policy (2): new system



- Offshore transmissionsysteem : platforms and cables towards onshore grid (TenneT)
- Scenario government (art 5.6) + investment plan TenneT (art 5.5)



Legislation and policy (3): links (Dutch)

- Offshore Wind Energy Bill in senate, expected 1st of July 2015 (<https://zoek.officielebekendmakingen.nl/dossier/34058>)
 - Implementing Offshore Wind Energy Act (concept):
<http://www.internetconsultatie.nl/uitvoeringsregelingwetwinde-nergieopzee>
- Electricity and gas bill in parliament, expected 1st of January 2016 (<https://zoek.officielebekendmakingen.nl/dossier/34199>)
 - Decision Electricity and Gas, especially risks and liability:
<http://www.internetconsultatie.nl/besluit-elektriciteit-en-gas>
- General rules offshore wind farms, 1st of July 2015
 - <https://zoek.officielebekendmakingen.nl/stb-2015-153.html>
 - <https://zoek.officielebekendmakingen.nl/stcrt-2015-9712.html>



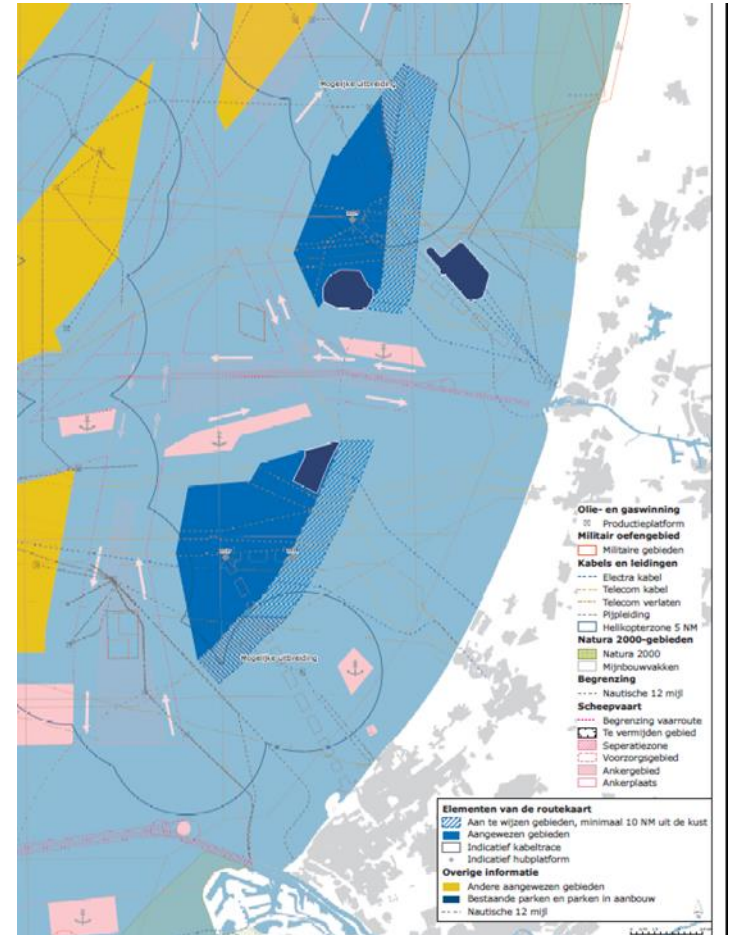
Legislation and policy (4): National Waterplan 2016-2021

- Draft for consultation (end of December 2014 – 22th June 2015)
- Final end December 2015
- Offshore wind:
 - Distance towards shipping lanes
 - Intention combined use and vessels < 24 m allowed to pass through wind farm (no seabed activities e.g. traditional trawling):
Investigating: SAR operations and enforcement
 - Procedure mining
 - Framework ecology and cumulation



Legislation and policy (5): Partial revision National Waterplan 2016-2021

- Adding designated areas 10-12 miles off the coast of North and South Holland
- Consultation scoping document EIA until 11th of June 2015
- Draft beginning 2016
- Final mid 2016





Legislation and policy (6): framework ecology and cumulation

- Published April 2015
- The government should apply this framework according to the national waterplan
- Estimates effects on harbor porpoise, birds and bats
- Conclusions: mitigation measures in wind farm site decisions are needed for:
 - Harbor porpoise
 - Migrating birds
 - Gulls
 - Migrating bats





Wind farm site decisions (1): process Borssele I&II

- New instrument and flexibility
- Concept-draft wind farm site decision Borssele II published 6th May 2015
- Draft wind farm site decisions Borssele I and II expected 17th July 2015 (consultation for 8 weeks)
- 'Preparation decision' (Dutch: voorbereidingsbesluit) wind farm sites Borssele I, II, III and IV published
- Final wind farm site decisions Borssele I and II expected end of November 2015 (appeal within 6 weeks)
- Irrevocable wind farm site decisions Borssele I and II expected mid 2016



Wind farm site decisions (2): general rules (!)

Not in wind farm site decision, but in 'Waterbesluit', new § 6a
Offshore wind farms: <https://zoek.officielebekendmakingen.nl/stb-2015-153.html>

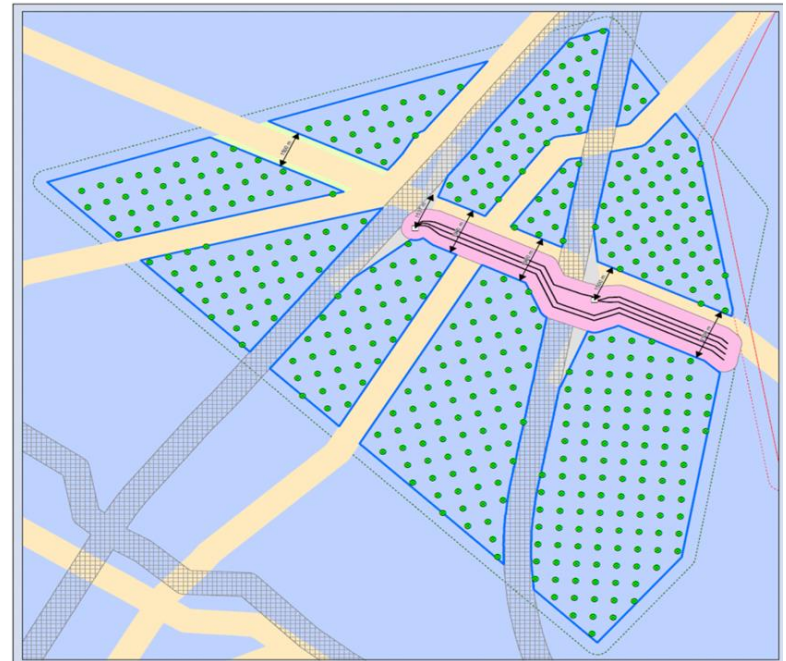
Highlights:

- 8 weeks before start building (6.16d) e.g.:
 - locations and design wind turbines and installations
 - safety and execution plan (6.16e, 6.16h and 6.16k)
- 4 weeks before exploitation: certification wind turbines (6.16g)
- Aviation and shipping: IALA O-139 and CAP 764 (6.16h)
- Installations and cables: NEN 1010, NEN-EN-IEC 61936-1 and NEN-EN 50522 (6.16h)
- Maintenance: NEN 3840 and NEN 3140 (6.16i)
- Decommissioning wind farm after exploitation (6.16l)



Wind farm site decisions (3): other

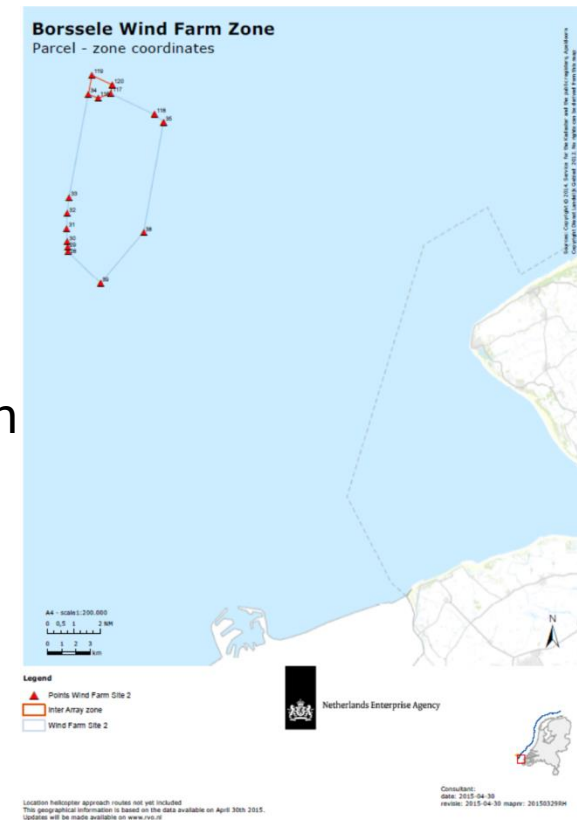
- vessels < 45 m allowed between sites I&II
- 2 x 500 meter maintenance zones telecom cable within wind energy areas
- Setting safety zone around site when starting to build
- No helicopter zones (NB will be excluded from picture)





Proposed draft wind farm site decisions (4): general

- Coordinates (boundaries site and cables)
- Lowest tip > 25 m, tipheight < 250 m
- No overhanging: distance wind turbines – safety zone $> 0,5$ rotor diameter
- Foundations allowed: monopile, tripod, jacket, gravity based, suction bucket
- Licence: construction year 0-5, exploitation year 3-29, decommissioning year 25-30
- < 96 turbines ($380/4$ MW = 95)?
- Rotor swept area > 921.055 m²
 $< 1.346.157$ m²?
- Co-operate for monitoring (e.g. installing metering equipment on wind turbines)





Proposed draft wind farm site decisions (5): harbor porpoise, seal and fish

- Acoustic deterrence device
- Soft start

	Max noise (dB re $\mu\text{Pa}^2\text{s SEL}_1$ at 750 meter from source)		
# turbines	Jan - May	June - August	Sept - Dec
77 - 95	forbidden	165	166
64 - 76	160	166	167
55 - 63	162	167	169
49 - 54	163	169	170
43 - 48	163	169	171
39 - 42	164	170	172
35 - 38	165	171	172



Proposed draft wind farm site decisions (6): birds

Migrating:

- Precaution
- September, October and November
- Rotations < 1 / minute
- Automatic system real time monitoring birds (e.g. radar) and automatic signalling wind turbines
- Expected hours based on data 3 years OWEZ and 2 years K8:
 -

Gulls

- < 96 turbines (380/4 MW = 95)





Proposed draft wind farm site decisions (7): migrating bats

If

- between 15th August – 30th September,
- between 1 hours after sunset and 2 hours before sunrise and
- Wind speed at hub height < 5,0 m/s

Then

- Rotations < 1 / minute



Proposed draft wind farm site decisions (8): lessons

- Starting with blanco paper
- How does a 'wind farm site decision' look like?
- Also parallel questions for
 - policy and legislation
 - SDE+,
 - site investigations and
 - technical lay-out and positions platform and cables TenneT
- Time pressure Energy Agreement
- Some solutions asked for changes in other workflows (e.g. decision to allow overplanting up to 380 MW required an addendum on the EIA)
- But ...
- We now have a standards for Borssele III/IV and 'Hollandse Kust'



Tenders 2016-2018

- Wind farm site decisions Borssele III and IV (tender 2016) expected:
 - Scoping document EIA 12th June 2015
 - 'Preparation decision' (Dutch: voorbereidingsbesluit) according to article 9 Offshore Wind Energy Act wind farm sites Borssele I, II, III and IV published
 - Q1 2016 draft
 - Q2 2016 final
 - Q4 2016 irrevocable
- 'Zuid-Holland' (tenders 2017 and 2018):
 - First preparations started (area → sites; cables)
 - Formal procedure depending on partial revision National Waterplan 2016-2021 (also tender 2019)