

Update Offshore Grid

Werkatelier 10 juni



10-06-2015

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Content



3. Update technical consultation sessions
4. Offshore Investment Plan
5. Connection requirements

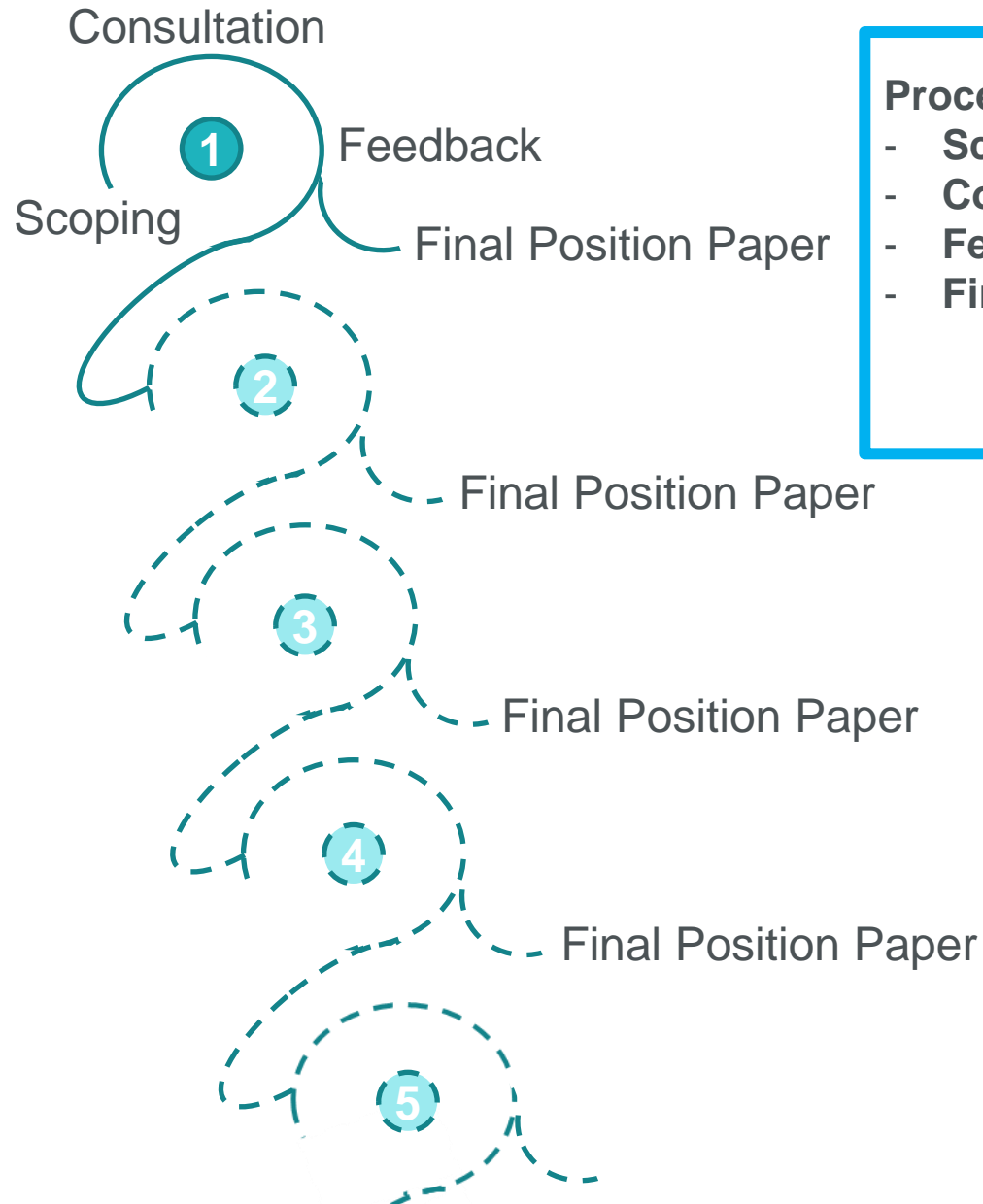
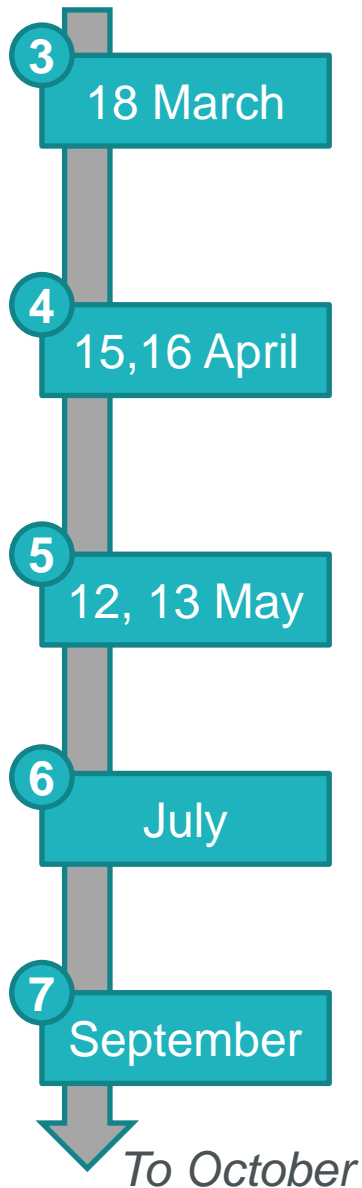


3. Update technical consultation sessions

- Please check our website for position papers, external reports and decision documents.
- **www.tennet.eu/nl/offshore-grid-nl.html**
- Consultation continues until October 2015

- Next Expert Meetings:
 - July
 - September
 - October
- Attendance by invitation only

Consultation process



Process:

- Scoping
- Consultation
- Feedback
- Final Position Paper



Consultation finalized

- Voltage level
- Number of J Tubes
- Point of common coupling
- Operation of bays
- Overplanting



Topics final consultation in July

- Number of bays
- Access to platform
- Reactive power compensation
- Protection
- SCADA/Metering/Data links
- Metering
- Redundancy/availability



Topics final consultation in Sept/Oct

- Installation interface management
- O&M interface management
- Harmonics and transient study
- Physical coordinates
- Compliance testing
- Stranded asset mitigation
- Planning
- Connection agreement
- Initial investment plan

4. Offshore Investment Plan



- Obligation TenneT to The Ministry of Economic Affairs
 - Required by STROOM
 - Based on Scenario EA
 - Check ACM warrants need and necessity of investments
- Experience in Germany, shows benefits of having a “NetzEntwicklungsplan”
 - Realistic planning
 - Supply chain
 - Stranded assets



Initial offshore investment plan

- Objectives of the IOIP:
 - Provide all OWFs with (reconfirmation of) information on TenneT's technical concept, technical requirements
 - Gain approval regarding need and necessity of proposed investments from the Ministry and ACM
- TenneT benefits from IOIP:
 - After approval, TenneT can safely prepare offshore investments
 - With this formal, public document, TenneT proves itself as a reliable and transparent partner for OWFs



Provisions in (draft) law regarding content of investment plans

Based on the currently known drafts, the proposed content entails:

- Description of current status of proposed investments from previous 2 years
- Description of proposed investments
 - Qualitative overview of expected expansions the next 10 years
 - Quantitative overview of expected expansions the next 5 years
- Overview of activities since date of signing Energieakkoord
- Planning based on the scenario by the Ministry of Economic Affairs
- Description of generic technical concept of the offshore grid connection system

5. Connection requirements



- Please check our website for topics legal framework, abstract RfG and MoM of consultation sessions.
- **www.tennet.eu/nl/offshore-grid-nl.html**
- Previous legal sessions:
 - Expert meeting in April – informing on process, set up model agreements and RfG requirements
 - Expert meeting in May – elaborating on content of model agreements
- Next legal session:
 - July
 - September
- Attendance by invitation only

Process and next steps



- With support of OWF set up Model agreement:
 - Offshore realisation, connection and transmission
 - General terms and conditions
- Next steps
 - Legal session July
 - Agree on process with EA, ACM, and OWF rep parties
 - Documents will be available via website prior to next session
 - TenneT is open for feedback and bilateral meetings:
Netopzee@tennet.eu
 - Ready before opening subsidy tender December 2015

Thank you

An aerial photograph of an offshore wind farm during sunset. The sky is filled with dramatic, golden clouds, and the sun is low on the horizon, casting a warm glow over the sea. Several wind turbines are visible, their towers and nacelles silhouetted against the water. A few small boats are scattered across the sea, some near the turbines. The overall scene is serene and captures the beauty of renewable energy in a natural setting.

Stakeholder consultation website
www.tennet.eu/nl/offshore-grid-nl.html

E-mail: netopzee@tennet.eu