

Offshore Legal Framework

Introduction

16-4-2015

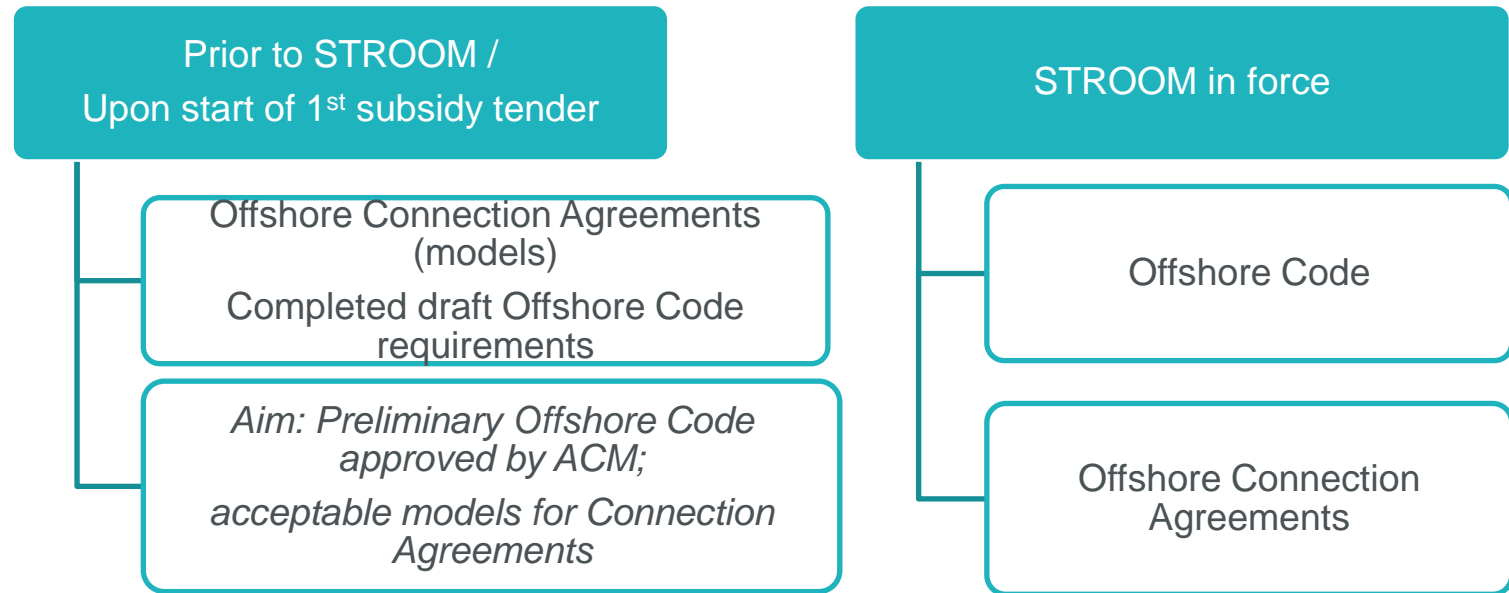
Saskia Jaarsma



Background

Legal framework: Offshore Code + Connection agreements

- Connection agreements for construction and operational phase
- Offshore Codes: technical requirements



Existing legal procedures are being used for development of the Offshore Legal Framework



Offshore Legal Framework

Technical Code amendments

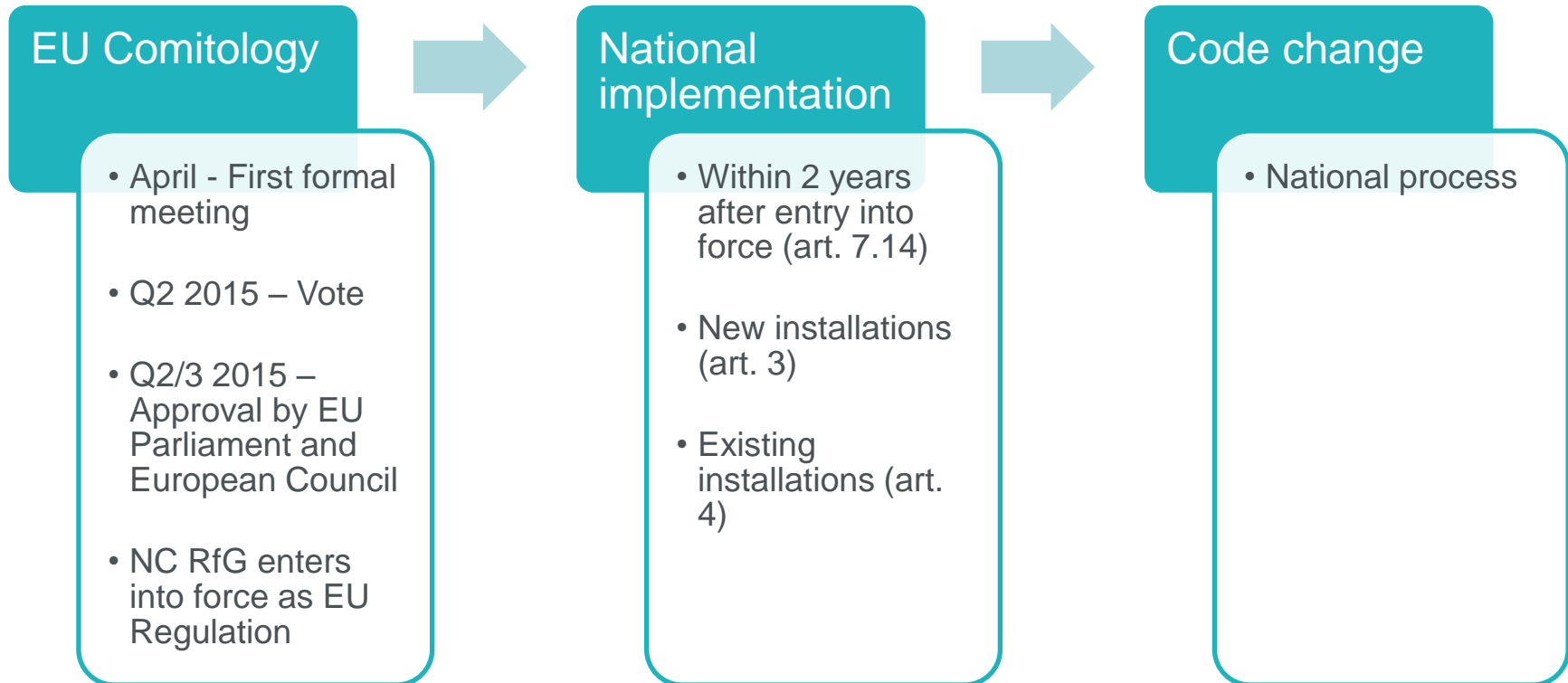
- Offshore Code provisions regarding offshore grid connections

*Public law based **general applicable rules** regarding connections to the offshore transmission system*

- elaboration based on European Network Code Requirements for Generators
- technical conditions for connecting to the platform (system specifics)
- technical requirements for installations of connected parties (OWFs)
- Starting point: RfG chapters for Offshore Power Park Modules (preliminary) implemented in Dutch national Codes as of start subsidy tender SDE+
- RfG specifies the required capability (value or boundary) of PPM
- For some requirement parameters TSO can define the range or value

Model Offshore Connection Agreements

Status RfG



Existing Code change process



- Two existing procedures
 - *Uniforme Openbare Voorbereidingsprocedure* (UOV, appr. 6 months)
 - *Verkorte procedure* (VP, appr. 3 months)
- Main difference:
 - UOV takes more time as ACM considers it necessary to consult the market more extensively
- ACM indicated they would be willing to apply the Verkorte Procedure for the Offshore Code

<https://www.acm.nl/nl/onderwerpen/energie/codes-energie/codes-energie-wijzigen/>



Overview existing Code change process

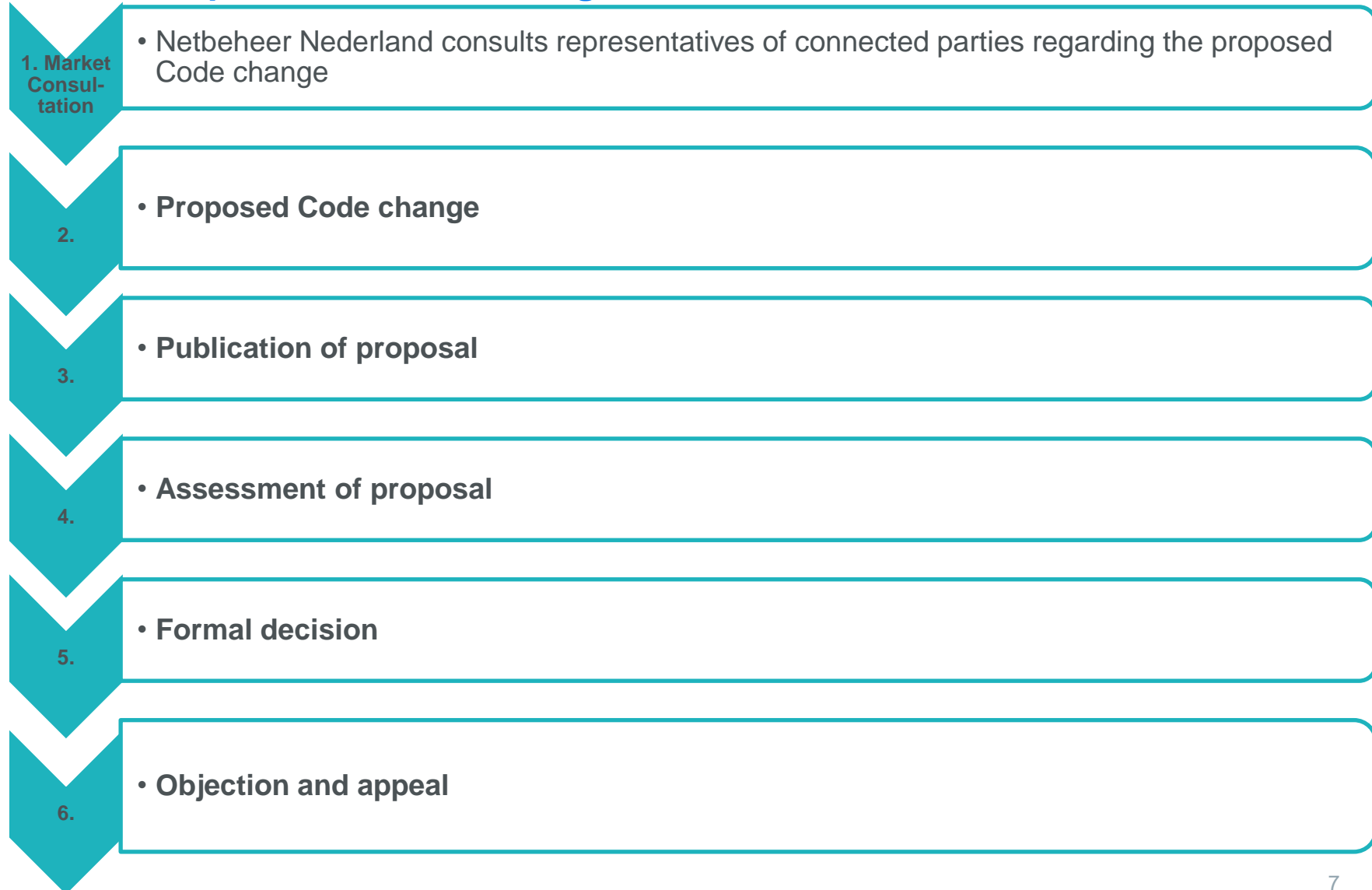
“Verkorte procedure” according to ACM





Overview existing Code change process

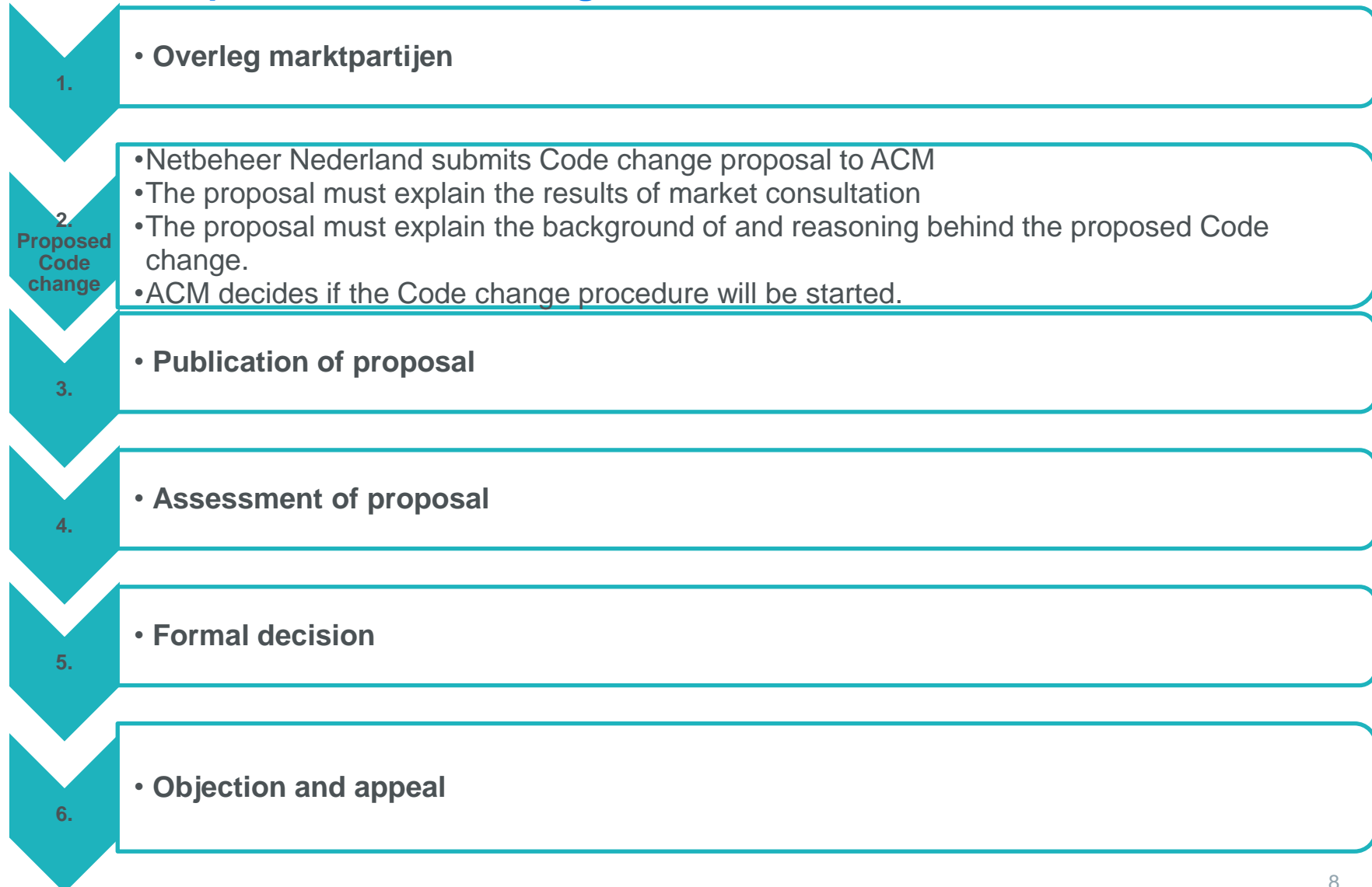
“Verkorte procedure” according to ACM





Overview existing Code change process

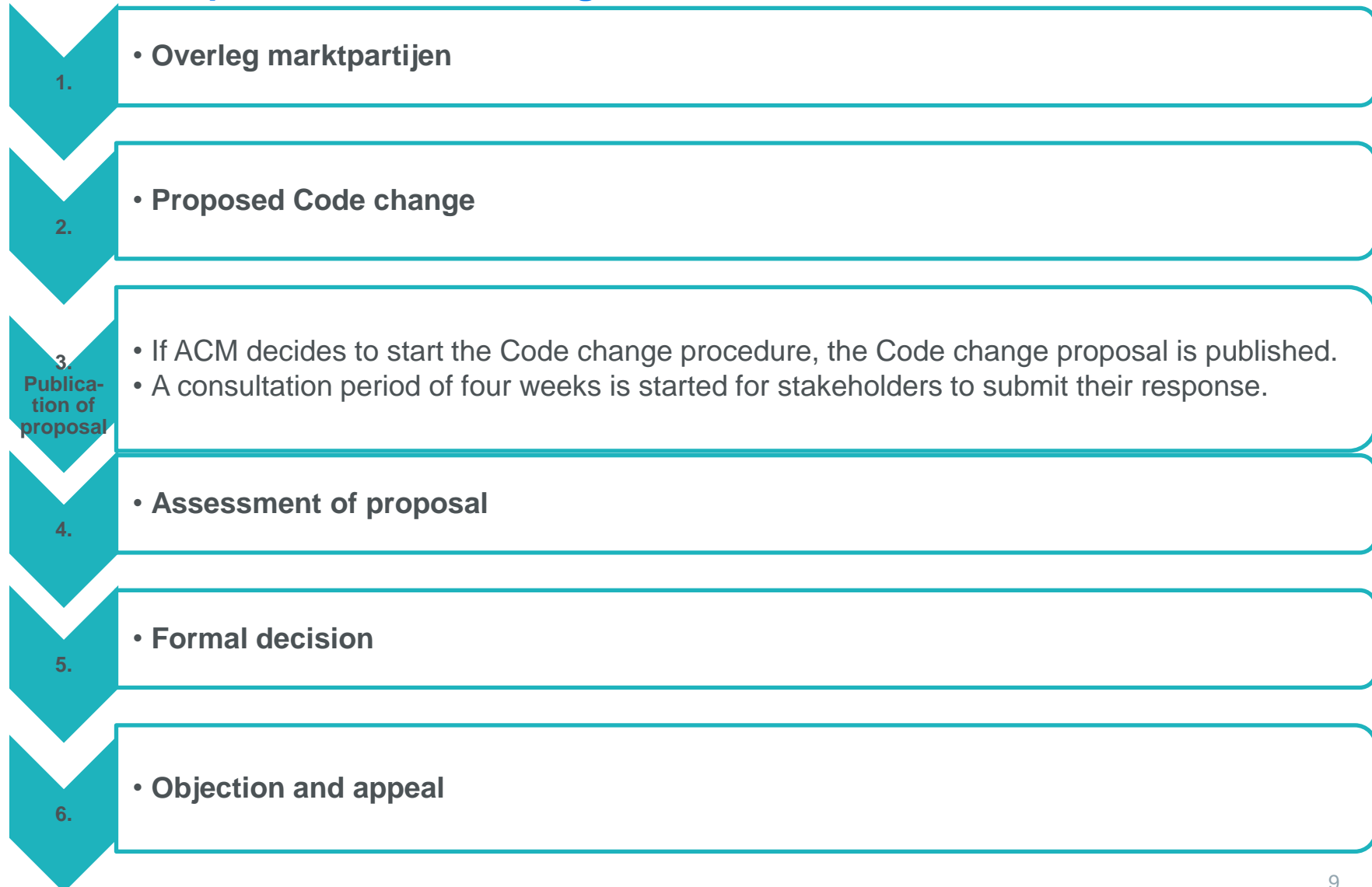
“Verkorte procedure” according to ACM





Overview existing Code change process

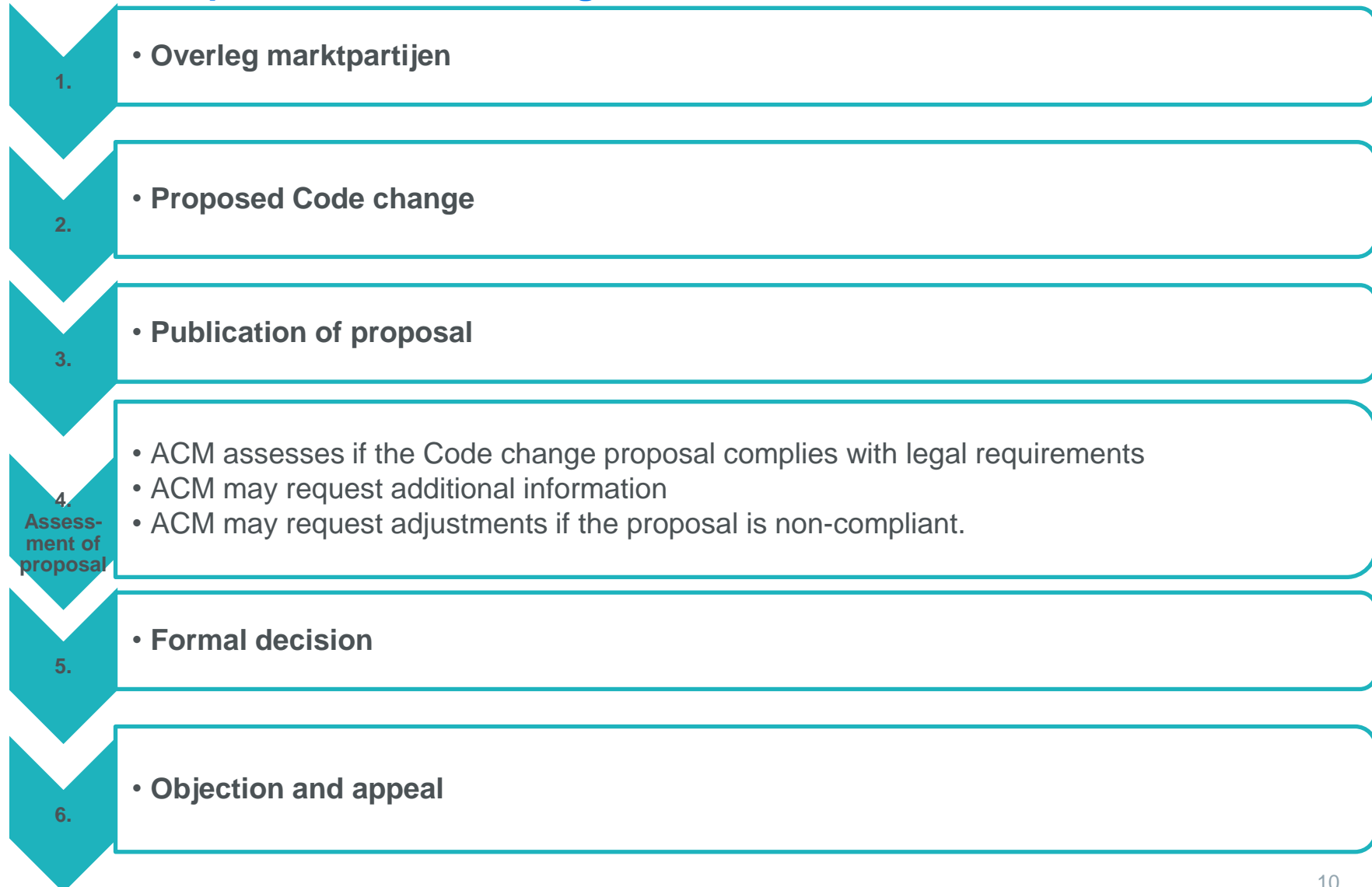
“Verkorte procedure” according to ACM





Overview existing Code change process

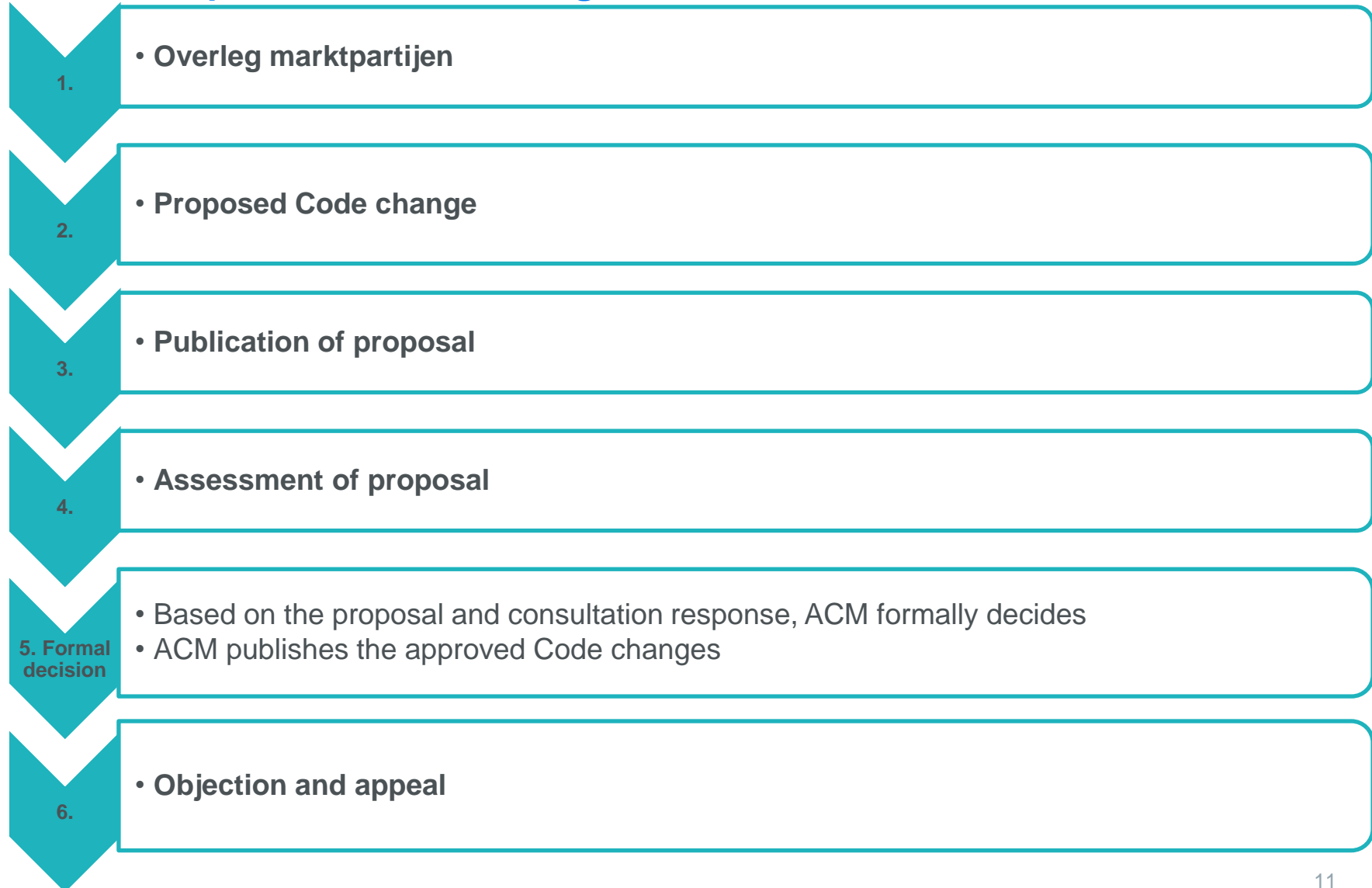
“Verkorte procedure” according to ACM





Overview existing Code change process

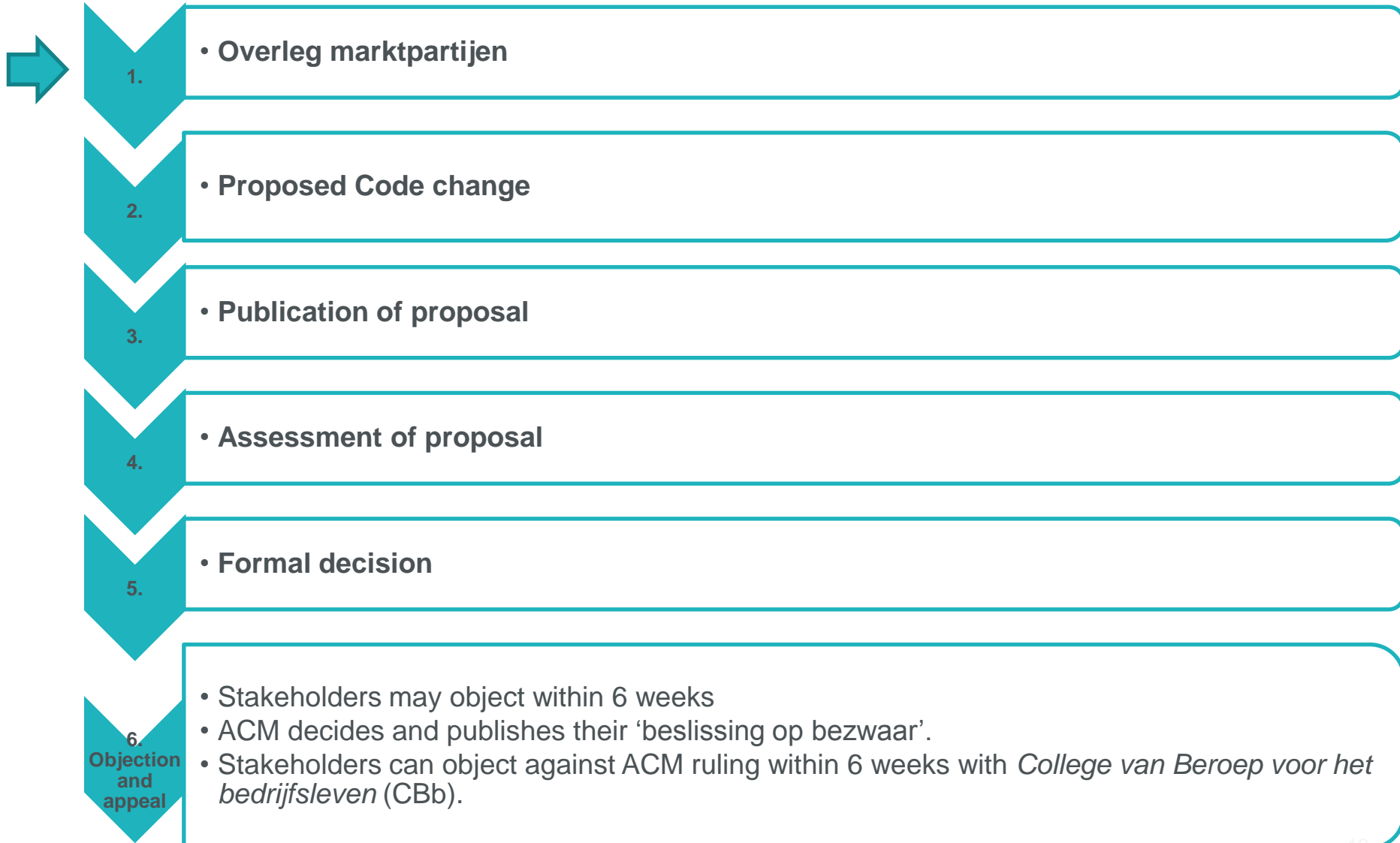
“Verkorte procedure” according to ACM





Overview existing Code change process

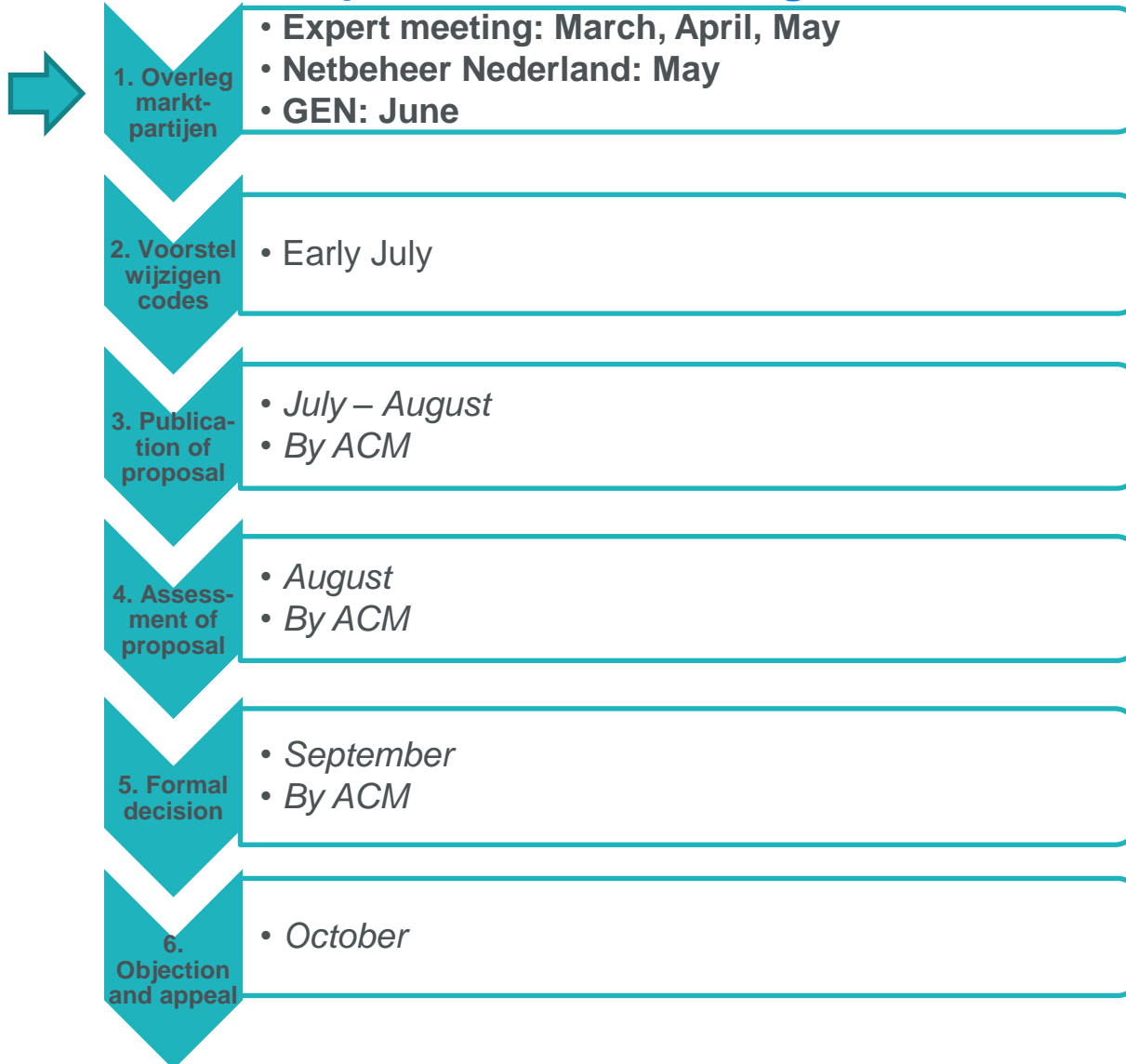
“Verkorte procedure” according to ACM





Timeline existing Code change process

“Verkorte procedure” according to ACM





Conclusions/recommendations

Regarding the Offshore Code

- It is in our common interest to establish the Offshore Code timely
- “Verkorte procedure” for Code changes is highly desirable
- ACM will apply “verkorte procedure” if the proposed Code change is supported by GEN
- You are represented in GEN via existing members (Representative Bodies)
- TenneT uses these Expert Meetings to consult the draft Offshore Code and create a proposal for the Offshore Code

⇒ **Provide your written feedback regarding the draft Offshore Code**

⇒ **Align with your representatives in GEN to assure smooth decision making**



Offshore Legal Framework

Technical Code amendments

Model Offshore Connection Agreements

- Agreement for connection and power transmission

*Civil law based agreement, establishing **enduring obligations** between system operator at sea and connected party*

- Legal general conditions for the exploitation phase of the OWF
- Maximum available capacity and contracted transport capacity
- Applicability of connection, transport and metering tariffs
- Mandatory compensation in case of interruption of power transmission
- Control centre arrangements (*bedrijfsvoeringsafspraken*)

- Agreement for realisation of the offshore connection

*Civil law based agreement, regarding the construction of the connection, also for future constructional changes; **temporal character**, entered into before operational phase*

- Legal general conditions regarding the realisation phase
- Access to the platform for connecting the inter-array cables
- Terms of delivery for the connection
- Mandatory compensation in case of exceeding the time of delivery
- Basic design of the connection

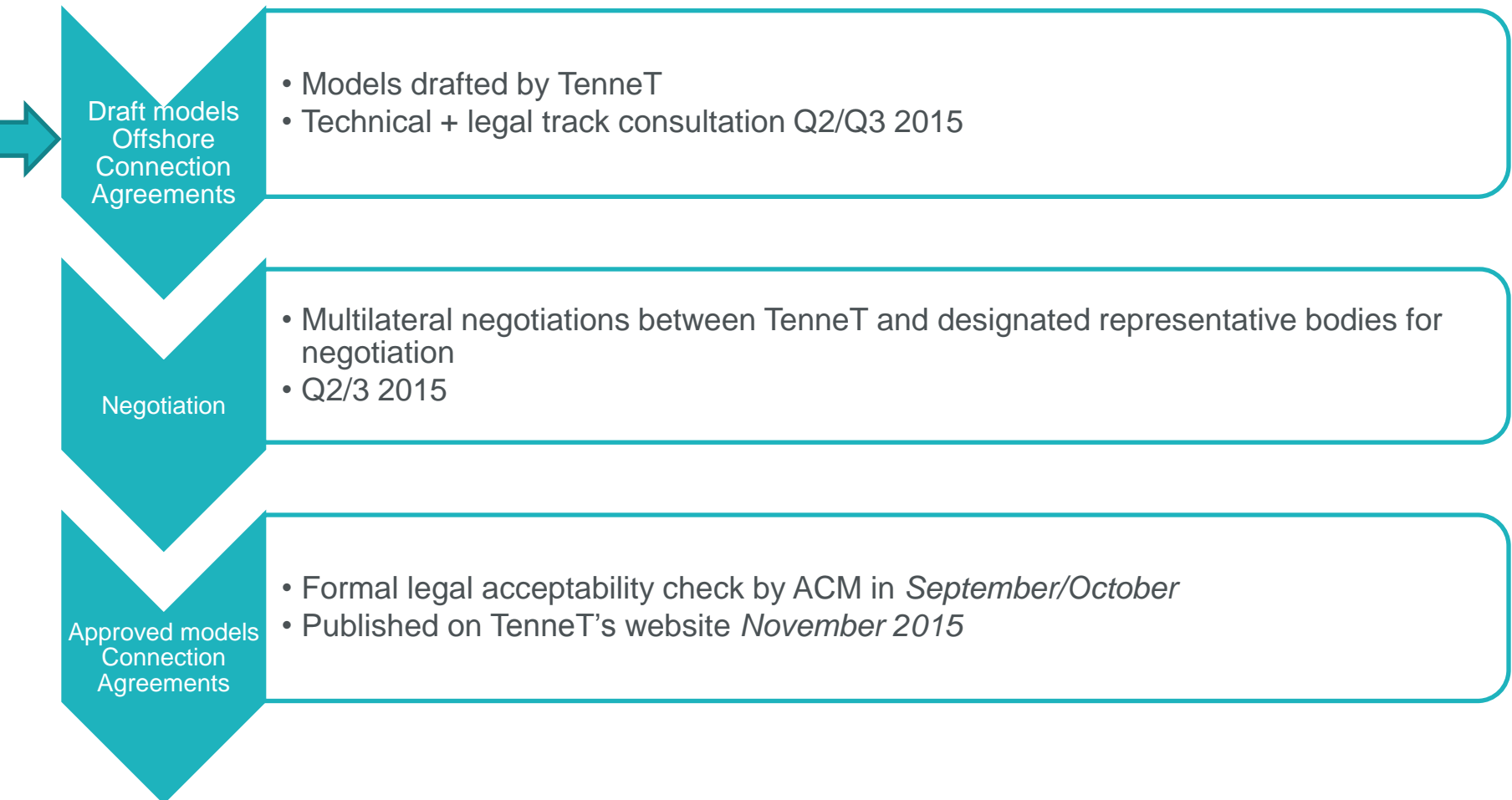
Principles for regulation

TenneT is obliged to use conditions and charge tariffs that are *objective, transparent and non-discriminatory*

- It evolves from TenneT's *mandatory tasks* as a transmission system operator to deal with system operational challenges in an early stage of development
- TenneT is obliged to perform *(cost) efficient* grid management:
 - *Careful consideration of investments on the platform for ancillary services versus the alternative: ancillary services provided by generators*
 - *Efficient measures should be future-proof, taking into account that from time to time grid load will be fully dependent on wind*
 - *It is not feasible to extend the platform investment after the design phase*
 - *Offshore flow to land grid must be stable, peak transport capacity must be guaranteed*
- TenneT and generators recognize their *mutual interdependencies*
- Due to the discrimination prohibition, TenneT may only distinguish between connected parties on land and at sea, as long as there is a *justification* to treat such parties different
- The legal framework should be *applicable one-on-one* to the other Dutch offshore projects



Procedure to approved model Offshore Connection Agreements





Conclusions/recommendations

Regarding the Offshore Connection Agreements

- It is in our common interest to establish the Offshore Connection Agreement Models timely
- TenneT uses these Expert Meetings to consult the draft Offshore Connection Agreement Models
- After ACM has verified legal acceptability, the Offshore Connection Agreements and their General Terms and Conditions are fixed and public

⇒ Provide your written feedback regarding the draft Offshore Connection Agreements



Overview: how are technical topics reflected in the OLFW

Table of topics Legal Framework						
	Topic	Offshore Code	Offshore REA	Offshore REA General terms	Offshore CTA	Offshore CTA General Terms

	Technical issue
	Technical issue concluded
	Legal - conform onshore conditions
	Legal - to be discussed

[Table topics Legal Framework.xlsx](#)



Offshore Legal Framework

Way to consult stakeholders to the offshore grid

Use of template consultation sheet:

1. Presentation by topic (today's presentation)
2. Input on each topic (conform ppt) provided by all stakeholders (deadline)
3. TenneT gathers input and formulates (initial) reactions
4. Consultation results taken into account with in formal procedures:
 - a. Technical Code changes (Offshore Code): to GEN and ACM
 - b. Draft models connection agreements: to designated representative bodies for negotiation

[Template consultation sheet.docx](#)



Offshore Legal Framework

Way of consultation

Template Consultation Sheet:

Subject: Offshore Connection and Transmission Agreement (CTA)

[Name and contact details responding party]

[Article CTA + content (see ppt) f.i.:]

Article 3

- Feed-in: OWF entitled to a transmission capacity equal to the Feed-in Transmission Capacity (3.1.1 Grid Code)
- Obligation TenneT to keep the Installation connected to the Offshore Transmission System in a way that allows OWF to feed in for the Installation at the (primary) Connection Point a quantity of electrical energy corresponding Feed-in Transmission Capacity
- *If overplanting is decided: addition of a flexible provision that for overplanting purposes allows an additional feed-in of no more than 10% of the system's Feed-in Transmission Capacity, if technically feasible.*
- Consumption: obligation TenneT (after connecting Installation to Offshore Transmission System) to keep Installation connected in a way that allows OWF to take up for the Installation at the (primary) Connection Point a quantity of electrical energy that corresponds with the Contracted Transmission Capacity

[Feedback / input / consulted party] [space left blank]

[Initial reaction TenneT] [space left blank]

Thank you

An aerial photograph of an offshore wind farm at sunset. The sky is filled with dramatic, colorful clouds in shades of orange, yellow, and blue. The sun is low on the horizon, casting a warm glow over the entire scene. Several wind turbines are visible, their white towers and three-bladed rotors standing out against the sea. The water is dark with some whitecaps. A few small boats are scattered across the water, including one near the center and another in the lower right. The overall mood is serene and majestic.

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

E-mail: netopzee@tennet.eu

NC RfG

April-16-2015

Bart van Hulst

Offshore code requirements



Starting point: Network code Requirements for Generators

RfG has separate chapter for Offshore Power Park Modules (PPM)

RfG specifies the required capability (value or boundary) of PPM, by

- a written requirement, or
- specific parameter value, or
- parameter value within a defined range, or
- an envelop of an operating area.

For some requirement parameters TSO can define the range or value

RfG: Title II - Chapter IV



Requirements for Offshore Power Park Modules

Article 23: General provisions

Article 24: Frequency stability requirements

Article 25: Voltage stability requirements

Article 26: Robustness

Article 27: System restoration

Article 28: General system management

These articles refer back to articles of conventional power plants.

Article 23: General provisions



Main topics:

- Definition of Offshore PPM
- Connection point
- Offshore grid connection system

Article 24: Frequency stability



Reference to Article 13 Frequency range (table 2)

Time periods for which PPM shall be capable of operating on frequencies deviating from nominal value while staying connected to the network

Synchronous area	Frequency range	Time period for operation
Continental Europe	47.5 Hz – 48.5 Hz	30 minutes
	48.5 Hz – 49.0 Hz	30 minutes
	49.0 Hz – 51.0 Hz	Unlimited
	51.0 Hz – 51.5 Hz	30 minutes

Article 25(1) Voltage stability



Table 10: Voltage base for 1 pu < 300 kV (at connection point)

Time periods for which PPM shall be capable of operating for voltage ranges deviating from nominal value while staying connected

Synchronous area	Voltage range	Time period for operation
Continental Europe	0.85 pu – 0.90 pu	60 minutes
	0.9 pu – 1.118 pu	Unlimited
	1.118 pu – 1.15 pu	30 minutes

Article 25(3) Voltage stability

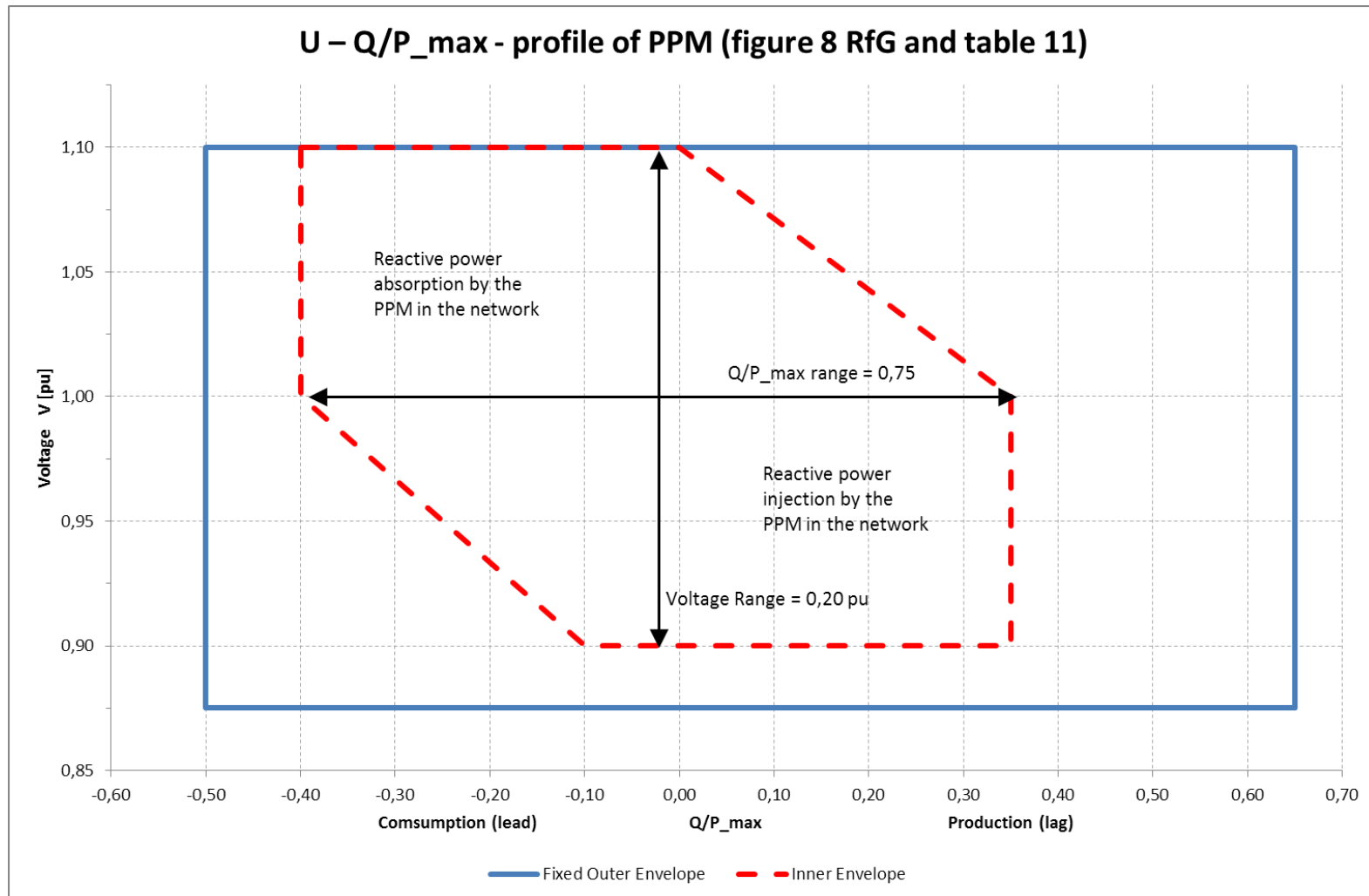


- Fast fault current injection in case of symmetrical faults
- Voltage stability at and below maximum capacity.

Article 25(3) Voltage stability



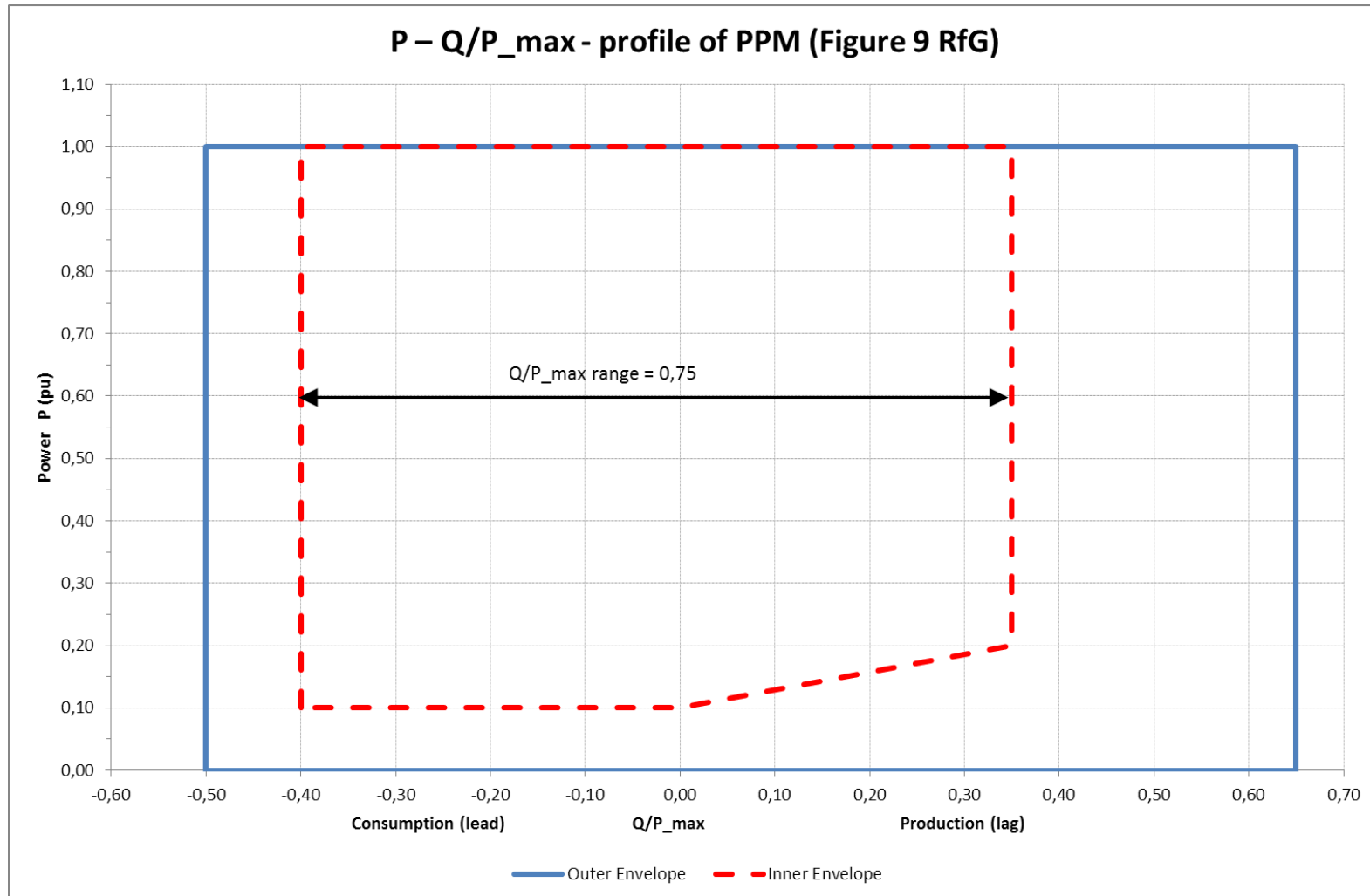
Reactive power capability at maximum capacity



Article 25(3) Voltage stability



Reactive power capability below maximum capacity



Article 26 Robustness

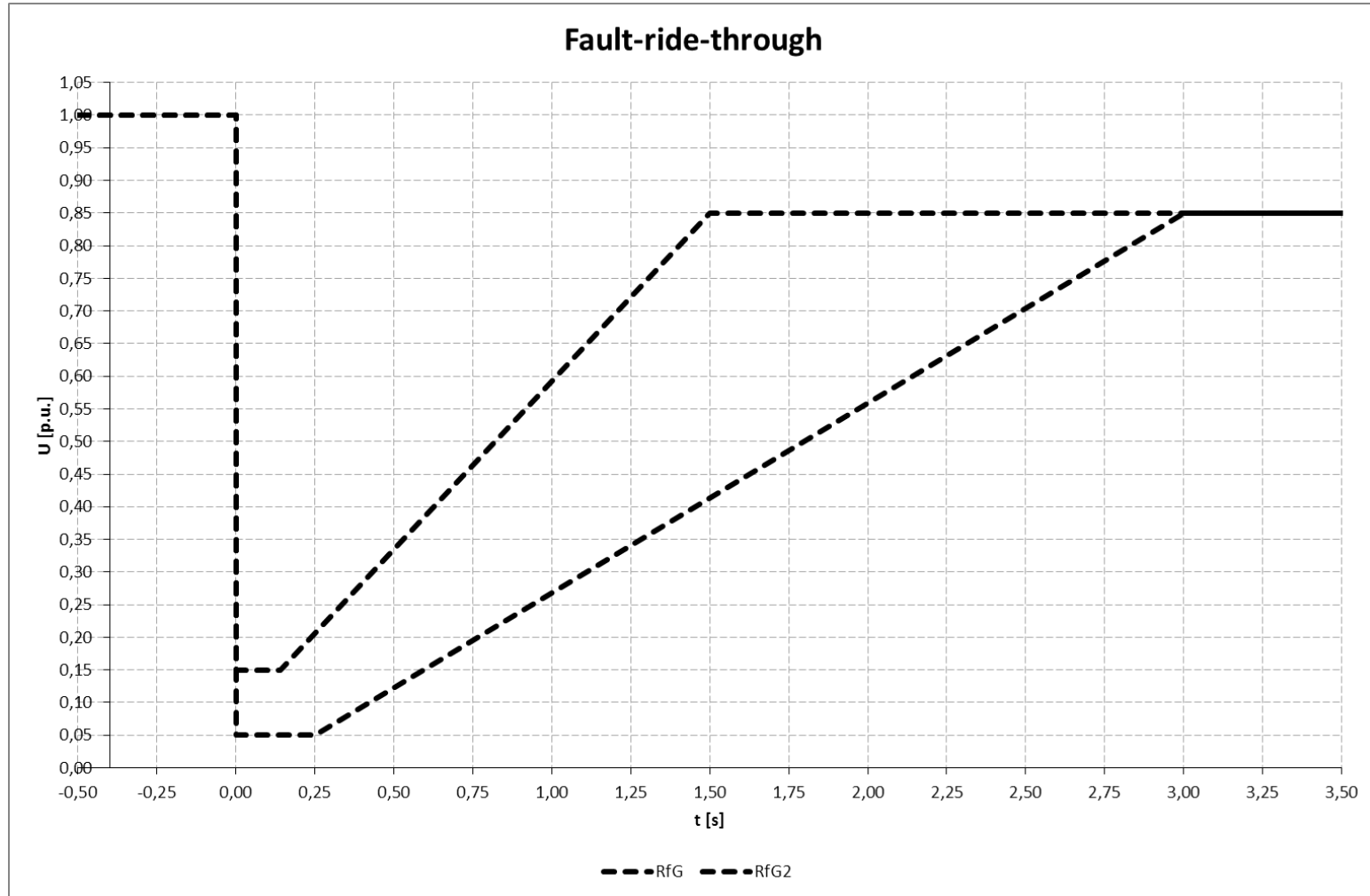


- PPM shall retain steady state operation in case of power oscillations
- PPM shall be capable of remaining connected and operate without power reduction as long as voltage and frequency remains within the limits
- PPM shall be capable of remaining connected to the network during auto-reclosures on network line
- Fault-ride-through capability

Article 26 Robustness



Fault-ride-through profile (table 3.2) - band width



Article 27 System restoration



Article 14 → reconnection

- Reconnection after an incidental disconnection caused by network disturbance
- Automatic reconnection

Article 15 → system restoration

- Black start
- Island operation
- Quick re-synchronisation



Article 28 General system management

Article 14

- Control schemes and settings
- Protection schemes and settings
- Information exchange

Article 15

- Loss of angular stability
- Instrumentation
- Simulation models

Article 16

- Synchronisation

Thank you

An aerial photograph of an offshore wind farm during sunset. The sky is filled with dramatic, orange and blue clouds. The sun is low on the horizon, casting a warm glow over the sea. Several wind turbines are visible, their white blades and yellow bases standing out 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

Public Consultation Offshore Legal Framework

Model Agreements

Offshore Connection & Transmission Agreement

16-4-2015

Fokke Elskamp



Offshore Connection & Transmission Agreement (CTA)

Agreement establishing an enduring relationship between the offshore system operator and the connected party (OWF), regarding mandatory connection and power transmission obligations

Summary of the content

- Main body of Agreement:
 - Maximum available capacity and contracted transport capacity
 - Applicability of connection, transport and metering tariffs
 - Metering
 - Entry into force
 - Station operation engagements (*bedrijfsvoeringsafspraken*)
- Legal general conditions
- Annexes:
 - OWF operations and contact details
 - Description and technical specifications of the Connection unit, including drawings
 - Technical terms and conditions for connection to offshore platforms
 - Technical requirements applicable to the connected Installation (unless provided for in applicable Offshore Code)
 - Arrangements for Installation operations and exchange of information
 - List of tariffs



Offshore Connection & Transmission Agreement (CTA)

The following is drawn from currently existing
– onshore applicable – connection and transmission agreements ('ATO')

The content of this presentation is for information and discussion purposes only. In no way does it constitute rights for (potential) connected parties, or bind TenneT legally



Offshore Connection & Transmission Agreement (CTA)

MAIN BODY OF THE CONNECTION & TRANSMISSION AGREEMENT



Offshore Connection & Transmission Agreement (CTA)

Article 1: Definitions and general provisions (1)

Definitions - Capitalized words have the meanings assigned to them in:

- Article 1 of the Act (STROOM bill)
- The Glossary accompanying the technical codes within the meaning of Article 9.1 of the Act (*Begrippenlijst*)
- The Tariff Code (Article 9.2 of the Act) and the technical codes (Art. 9.1 of the Act)
- Or otherwise as defined:

Act: Electricity and Gas Act (= STROOM bill)

Agreement: this Connection and Transmission Agreement, consisting of the Main (body of the) Agreement, General Terms and Conditions, and the Annexes

General Terms and Conditions: *TenneT General Terms and Conditions for the Connection and Transmission of Offshore Electricity 2015*

Basic Design: basic design included in *Annex 2*

Glossary (*Begrippenlijst*): The Glossary as referred to in the technical codes

Annexes: All annexes to the CTA, which form an integral part thereof

Codes: Electricity Grid Code (*Netcode Elektriciteit*), Electricity System Code (*Systeemcode Elektriciteit*), Electricity Metering Code (*Meetcode Elektriciteit*), Electricity Tariff Code (*Tarievencode Elektriciteit*), and the Electricity and Gas Information Code (*Informatiecode Elektriciteit en Gas*)

European Act: Regulation (EC) 714/2009 and forthcoming Network Codes and guidelines

Contracted Transmission Capacity: contracted transmission of 3.7.4 Tariff Code

Main (body of the) Agreement: part of the Agreement other than the General Terms and Conditions and the Annexes

Installation: Equipment (electrical or otherwise) and power lines that: a. are permanently connected to each other; b. are intended for the consumption, storage, transfer or production of electricity; c. are used or managed by a consumer or producer; and: d. are located behind a system's security facilities (= STROOM definition)



Offshore Connection & Transmission Agreement (CTA)

Article 1: Definitions and general provisions (2)

Offshore Transmission System: One or more connections – including any associated auxiliary equipment for the transmission of electricity – connecting one or more offshore wind farms to an electricity transmission system (= STROOM definition)

Feed-in Transmission Capacity: Transmission capacity contracted and made available on the connection within the meaning of 3.1.1 Grid Code that OWF will be allowed to feed into the grid

Metering Device: device referred to in article [8] CTA that comprises all the components, software, etc. that are necessary for recording exchanged electrical energy and, if applicable, reactive energy

Tariff Decision: Public law based decision of ACM (Art. 6.12 STROOM) that establish tariffs for TenneT

List of Tariffs: List that states, in accordance with the ACM Tariff Decision, the tariffs that are payable by OWF to TenneT under the CTA



Offshore Connection & Transmission Agreement (CTA)

Article 1: Definitions and general provisions (3)

General provisions

- Agreement subject to the General Terms and Conditions
- Explicit exclusion of applicability of General Terms and Conditions of the connected party
- Order of precedence in case of conflicts between the documents that are part of the Agreement: Main body of the Agreement - Annexes - General Terms and Conditions
- Language of the CTA: Dutch or English (communication language control centre: Dutch)



Offshore Connection & Transmission Agreement (CTA)

Article 2: (Contact) details & specifics updates

- Technical details of the Connection (specs) > *Annex 1*
- Information duties: possible or planned changes to the details of *Annex 1* to be noticed in writing
- Guarantee accuracy and completeness of provided details (verifiably)



Offshore Connection & Transmission Agreement (CTA)

Article 3: Transmission right; contracted power transmission capacity

- Feed-in: OWF entitled to a transmission capacity equal to the Feed-in Transmission Capacity (3.1.1 Grid Code)
- Obligation TenneT to keep the Installation connected to the Offshore Transmission System in a way that allows OWF to feed in for the Installation at the (primary) Connection Point a quantity of electrical energy corresponding Feed-in Transmission Capacity
- If overplanting is decided: provision and conditions regarding additional feed-in of no more than 10% of the system's Feed-in Transmission Capacity, if technically feasible
- Consumption: obligation TenneT (after connecting Installation to Offshore Transmission System) to keep Installation connected in a way that allows OWF to take up for the Installation at the (primary) Connection Point a quantity of electrical energy that corresponds with the (Contracted) Transmission Capacity (*kWmax + kWgecontracteerd*)



Offshore Connection & Transmission Agreement (CTA)

Article 4: The Connection

- Basic Design: technical description and diagrammatic representation of the Connection on TenneT's connecting platform, added as *Annex 2*
- Information duty TenneT regarding possible or planned changes to the details of the Basic Design (*Annex 2*)
- Arrangements for (partly) disconnection for the purpose of modifications or maintenance



Offshore Connection & Transmission Agreement (CTA)

Article 5: Connected Installation (OWF)

- OWF ensures to satisfy the requirements applicable to the connected Installation in *Annex 4*, after taking in operation and continuously during the term of the CTA
- TenneT informs OWF in writing as soon as possible of any proposed changes to the Installation requirements



Offshore Connection & Transmission Agreement (CTA)

Article 6: Tariffs

- Mandatory Tariffs, if applicable, will be charged (List of Tariffs in *Annex 6*, accordance with yearly updated ACM Tariff Decision)
- “*Transporttarief*” not applicable for feed-in of OWFs
- On request of TenneT, OWF provides the details necessary for determining the tariffs owed. TenneT informs OWF of the tariffs that apply
- All amounts owed by OWF increased by taxes, surcharges and duties that TenneT is required or authorized to charge under a government decision.
- ACM Tariff Decision prevails in event of conflicts between the Tariff Decision and the List of Tariffs



Offshore Connection & Transmission Agreement (CTA)

Article 7: Metering devices and metering

- TenneT maintains, replaces, relocates and/or removes the primary component of the Metering Device
- Metering in accordance with Metering Code (might be necessary to amend for metering at sea)
- Metering at (primary) Connection Point (defined in *Annex 1*, diagrammatic representation in *Annex 2*), performed by an Acknowledged Metering Responsible Party, to be designated by TenneT
- Metering tasks to be charged to OWF at mandatory tariffs



Offshore Connection & Transmission Agreement (CTA)

Article 8: Transparency requirements

- OWF to provide in good time information to TenneT regarding Art. 14 (generation forecast) and Art. 16 (actual generation) of Regulation (EU) No 543/2013 (transparency)



Offshore Connection & Transmission Agreement (CTA)

Article 9: Testing and Simulation Requirements

- TenneT will be entitled to require from OWF during the Installation's lifecycle the performance of the compliance tests and simulations pursuant to the TenneT compliance testing requirements (in accordance with Offshore Realisation Agreement)
- Requirement OWF of performance of compliance tests and simulations pursuant *Annex 5*
- Reference to TenneT's testing compliancy documents in *Annex 4*
Compliance activities with regard to Connection Requirements for System Operations related to Wind Farms, Version V3.0, January 2014 (SO-SOC 13-141) – to be updated according RfG and tailor made for offshore



Offshore Connection & Transmission Agreement (CTA)

Article 10: Commencement and Term of Agreement

- CTA takes effect on the day after the Connection has been taken into operation
- CTA remains in force [for an indefinite term or until relevant date]
- OWF and TenneT may each cancel the CTA subject to the cancellation provisions of the General Terms and Conditions



Offshore Connection & Transmission Agreement (CTA)

Article 11: Applicable Law

- CTA governed by the Laws of The Netherlands



Offshore Connection & Transmission Agreement (CTA)

Article 12: Amendment of Main body Agreement and Annexes

- Amendments and additions agreed by the Parties in writing, in effect from the agreed time
- Changes to Annexes: ensure effective date, new Annex replaces the old Annex; amended Annex to be signed by both Parties
- Parties consult with each other how to deal with void or non-binding provisions
- Parties consult with each other about changing the CTA if current legislation is amended in a way that precludes unamended continuation of the Main body of the Agreement in its existing form



Offshore Connection & Transmission Agreement (CTA)

Article 13: Operational arrangements and exchange of information

- Arrangements on operational matters and exchange of information on operations to be included in *Annex 5*



Offshore Connection & Transmission Agreement (CTA)

GENERAL TERMS TO THE CONNECTION & TRANSMISSION AGREEMENT



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 1 – Definitions

Capitalized words have the meanings assigned to them in:

- Glossary (*Begrippenlijst*), technical codes
- Electricity and Gas Act or the CTA
- or otherwise:

ACM: Authority for Consumers & Markets

Party / Parties: party / parties to the CTA, i.e. TenneT or OWF

Property: any movable or immovable property (or part or combination thereof) for which a Connection was or will be realized or transmission of electrical energy occurs or will occur

Representative Body (*Representatieve Organisatie*): a legal entity within the meaning of Article 9.5 of the Act



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 2 – Maintenance, inspection, replacement, relocation and removal of a Connection

- Connection unit to be maintained, tested, replaced, relocated, or removed exclusively by and at the expense of TenneT, in consultation with OWF
- Modifications to the Connection at the expense of OWF, if:
 - modification on request of OWF
 - result from an act or omission on part OWF (unless credibly established circumstances that cannot reasonably be attributed to OWF)



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 3 – Facilities for the Connection

- Connection shall be located entirely on TenneT's platform; provision shall contain arrangements concerning access for OWF to the platform
- OWF provides required cooperation free of charge in the performance of work on the Connection
- Equipment that forms part of or is used for the Connection is and remains the property of TenneT
- If CTA is terminated, TenneT entitled to use the equipment that forms part of or is used for OWF's Connection for the purpose of its operations



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 4 – Rights and obligations

- Arrangements for cable crossings
- As and when necessary, OWF and TenneT shall fairly and reasonably consult with each other to install cables realize Connections and create branches from pre-existing Connections, and to operate, maintain, enlarge, modify or remove such lines on behalf of OWF or third parties
- To the extent reasonably within its power, each Party ensures that no acts occur that are capable of preventing or obstructing TenneT's or third Party's (esp. neighboring OWF's) operations, or jeopardize the safe presence, maintenance or repair of cables, Connections or branches or that pose a hazard to people or property
- Shared use on behalf of a third party only with the OWF's consent (not withheld on unreasonable grounds, adverse consequences for OWF's operations in any event considered as a reasonable ground for withholding consent)



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 5 – Transfer of rights and obligations

- OWF may not assign rights and obligations under the CTA to a third party without TenneT's prior permission (TenneT shall not withhold permission without reasonable grounds)
- If successor to TenneT is named under the Act to manage the offshore grid (or part thereof), OWF may decline to consent to the successor taking TenneT's legal position under the CTA only if the successor fails to adopt unconditionally all rights and obligations of TenneT under the CTA.



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 6 – Restriction or interruption of transmission

- TenneT is allowed to restrict or interrupt transmission (shortest time possible) if reasonably necessary in the interests of an effective public electricity supply, on following conditions:
 - consultation between TenneT and OWF about the scheduled restriction or interruption.
 - In consultation with OWF, TenneT determines time and duration of its work in connection with the scheduled restriction or interruption, except (only) if performance of TenneT's statutory duties preclude such action. If this is the case, TenneT shall perform the work with the fullest possible allowance for the operations of the Connected Party.
 - No liability TenneT for damages or disadvantage resulting from scheduled restriction or interruption
- Unscheduled restrictions or interruptions, TenneT informs OWF
- however: compensation based on Article 5.27 STROOM bill
- Provision applies *mutatis mutandis* to work on the primary part of the Metering Device, except for mandatory compensation rules



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 7 – Invoicing and payment

- Monthly itemized invoicing in euro (€) for all amounts owed by OWF under the CTA (transmission tariff not applicable for feed-in)
- Payment term 30 days after date of the invoice; statutory interest over the outstanding amount from the due date
- In all instances undisputed part of an invoice to be paid on time; Parties consult with each other on any disputed part of the invoice
- Set-offs under Article 6:127 *et seq* of the Netherlands Civil Code (*verrekening*) of debts against debts owed by the other Party not be allowed, except in the case of a set-off in bankruptcy or suspension of payments (Art. 53 / Art. 234 Bankruptcy Act)



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 8 – Security deposit

- TenneT shall have the right to require OWF to provide collateral against amounts owed by OWF under the CTA if:
 - OWF fails or in previous three months has failed to meet payment obligations (in full or on time), and
 - reasonable grounds for TenneT assuming that OWF will be unable or unwilling to fulfil
- Collateral cancelled as soon as the Connected Party has met its payment obligations in full and on time for a consecutive period of six months



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 9 – Other obligations

- General obligation TenneT to execute the CTA as a conscientious Transmission System Operator, taking all measures reasonably necessary to prevent OWF from being inconvenienced or unnecessarily harmed
- OWF ensures to have concluded agreement(s) to assume Balance Responsibility (*programmaverantwoordelijkheid*) or to commission an Acknowledged BRP (*“Erkende programma-verantwoordelijke partij”*) on its behalf.
- Required cooperation between Parties in applying and implementing these provisions, in particular by:
 - informing each other Party about all details, incidents and changed circumstances that may be relevant to performance of the CTA
 - informing the other Party in good time of changes of address and changes of names or trading names
- Access OWF to the platform in case of emergencies
- Access TenneT to the installation in case of necessity for fulfilment of obligations imposed by the authorities
- Parties may choose to be represented by third parties for the purposes of fulfilling their obligations and exercising their rights



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 10 – Right to compensation OWF (Art. 5.27 STROOM bill)

- OWF shall be entitled to damage compensation payable by TenneT if the volume of electricity that cannot be transmitted across the offshore transmission system during a calendar year exceeds the volume of electricity that cannot be transmitted as a result of maintenance that on average is reasonably required for the system, and the Connected Party cannot have all or part of its electricity transmitted as a result.
- Compensation comprises consequential damage and damage resulting from lost or deferred income for the OWF, subject to the relevant provisions in or pursuant to the Act (STROOM bill)
- OWF shall endeavor to reduce the damage as far as possible.



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 11 – Liability (1)

- Liability towards each another only for direct damage that one Party causes the other Party, subject to a maximum of [to be discussed] euro per incident
- No liability for any damage other than direct damage, including loss of profit/income and immaterial damage
- TenneT shall not be liable for damage arising due to:
 - deficiencies in transmission: unscheduled interruptions and/or restrictions of transmission and voltage management disruptions (such as voltage dips and transients)
 - scheduled and agreed interruptions or restrictions of transmission (curtailment)
- Exception for damages arising through deliberate act or gross negligence by TenneT, its employees or its subordinates, maximum of 10,000,000 (ten million) euro per incident and per calendar year
- In case more connected parties damaged by deliberate act or gross negligence and total damage exceeds maximum, amount divided proportionally to connection capacity (no individual compensation higher than actual damage)



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 11 – Liability (2)

- Claims due to a deliberate act or gross negligence by TenneT to be submitted within one year of occurrence of the deficiency, otherwise right cease to exist
- If total damage from deficiency in transmission due to deliberate act or gross negligence by TenneT is expected to exceed maximum TenneT pays within reasonable time after end of aforementioned year, but not later than six months after that
- No liability for both Parties towards each other for damage arising from acts or omissions by third parties
- Liability provisions extend to transmission system owner, OWF owner, OWF operator the employees or subordinates of the Parties



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 12 – Termination

- Termination (dissolution) of the CTA by mutual consent, not unilaterally, except in case:
 - TenneT's TSO-at-sea designation ceases
 - Upon granting suspension of payments (unless sufficient security furnished within reasonable time)
 - Bankruptcy declared or filed (unless sufficient security furnished within reasonable time)
- OWF may terminate by written notice of cancelling of at least two months
- TenneT may cancel the CTA because of pressing interests ("*zwaarwichtige belangen*"), with due observance of the OWF's reasonable interests upon written notice giving reasons for the cancellation and a reasonable period of time
- During notice period, Parties give each other opportunity to perform activities necessary for termination of the CTA; Parties remain bound to the CTA



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

- TenneT may dissolve the CTA with immediate effect after:
 - notice of default affording a reasonable time for redress, OWF fails to fulfil any of its obligations (except payment obligations – under the CTA, and seriousness justifies dissolution in view of safety of people and property or the safety and reliability of the public electricity supply
 - notice of default affording a reasonable time for redress, OWF fails to fulfil its payment obligations
 - the BRP (*programma-verantwoordelijke partij*) for the Connection has lost its status and the OWF fails to remedy this situation within two working days after occurrence
- After dissolution of the CTA, TenneT has the right to deactivate the Connection at the OWF's expense with effect from the day of effectiveness of the dissolution
- Parties have the right to suspend fulfilment of their obligations under the CTA in cases provided for by the Dutch Civil Code (*Burgerlijk Wetboek*), if reason for suspension is justifiable, for instance because of safety of persons and property or the safety and reliability of the public electricity supply, taking into account the reasonable interests of the OWF
- TenneT may interrupt or restrict transmission to execute suspension
- The CTA shall remain fully in force on occurrence of a situation of necessary restriction or interruption of power transmission or justified suspension by TenneT



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 13 – Loss of status of Balance Responsible Party (BRP) (*Programma-Verantwoordelijke Partij*)

- The following applies if the Balance Responsibility Party loses its status.
 - OWF rectifies the situation as soon as possible and in all instances within two working days of its occurrence
 - During the rectification period the OWF limits as far as reasonably possible the feed-in and/or uptake of electricity over the Connection
 - TenneT charges OWF an imbalance price in accordance with the imbalance system as if a zero programme had been submitted for electricity exchanged over the Connection during the period of loss of status of the BRP
 - Supplementary to this charge, the OWF owes 10% of the imbalance price
- Parties inform each other without delay of the loss of status BRP and inform each other as soon as possible of the measures to rectify the situation



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 14 – Deviations from the General Terms and Conditions

Departures from and additions to the General Terms and Conditions only binding if agreed by Parties in writing as an integral part of the Main body of the Agreement or Annexes



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 15 – Amendments of the General Terms and Conditions (1)

- Amendment of General Terms and Conditions by TenneT if and after agreement on the amendment with Representative Bodies (*Representatieve Organisaties*) of Connected Parties. If no agreement reached, TenneT may make the amendment subject to a ruling by the independent third party referred to below
- Amendments also apply to pre-existing agreements with OWFs that are subject to these General Terms and Conditions
- Term for effectiveness of amendment to the General Terms and Conditions not earlier than 14 days after the postmarked date of dispatch of the written notice informing OWF of the amendment
- Representative Bodies of Connected Parties are informed written notice with explanatory notes about amendments of these General Terms and Conditions. Consultation starts within six weeks of dispatch, purpose: endeavor to reach agreement on the proposed amendment



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 15 – Amendments of the General Terms and Conditions (2)

- In case of objections from Representative Bodies (*Representatieve Organisaties*), and no solution within four months, each has the right to request an independent third party designated jointly by them to give a ruling that makes allowance for the interests of TenneT on the one hand and the interests represented by the Representative Bodies on the other. In case parties do not agree on designation, the designation could be requested to be made by the presiding judge of the Arnhem District Court
- TenneT and the Representative Bodies involved in the consultations may depart from the procedure described above subject to consultation with each other. The parties shall consult reasonably with each other about such a departure if one of the parties submits a written and articulated request to the other parties to that effect.
- TenneT may amend this article only if and after it has reached agreement on the amendment with Representative Bodies of Connected Parties.



Offshore Connection & Transmission Agreement (CTA)

General Terms and Conditions

Article 16 – Applicable law

- CTA to be governed by the laws of the Netherlands

Article 17 – Disputes

- Parties endeavor to resolve disputes amicably
- Choice of forum: competent court in Arnhem (the Netherlands), if unable to resolve disputes amicably
- In particular cases, Parties choose to agree a different way of dispute dissolution
- If immediate provisional measures required: free to apply to a preliminary injunctions court for summary proceedings
- Always intact the right to submit a dispute to ACM (Art. 10.20 STROOM bill)

Article 18 – Final provisions

- Citation clause: 'TenneT General Terms and Conditions for the Connection and Transmission of Offshore Electricity 2015'



Offshore Connection & Transmission Agreement (CTA)

ANNEXES TO THE CONNECTION & TRANSMISSION AGREEMENT



Offshore Connection & Transmission Agreement (CTA)

Annex 1 – Details of OWF

General details

- EAN code of connection / EAN code(s) of power line(s) / Producer / Correspondence address + contact person / Chamber of Commerce registration number / Commencement date / Invoice address / Order number / reference for invoicing purposes

Transmission details

- Feed-in Transmission Capacity / Initially contracted Transmission Capacity (usage) / Transmission tariff category (producers exempted) / kW_{max} category of operating time

Connection details

- Connection capacity / Physically connected to / Primary Connection Point / Secondary Connection Point / Tertiary Connection Point

Details of metering device

- Location of metering device / Voltage level of metering device / Owner of metering device / Correction factor for cable losses / Correction factor for transformer losses / assigned Balance-responsible party / Assigned party with metering responsibility



Offshore Connection & Transmission Agreement (CTA)

Annex 2 – Description and technical specifications of the Connection, including drawings

Platform specifications:

- Line diagram of connection
- 33/66 kV
- maximum number of inter array cable connections
- (location of) metering device
- security operation
- Capacity curtailment conditions
- party responsible for operating the circuit breakers



Offshore Connection & Transmission Agreement (CTA)

Annex 3 – Technical terms and conditions for offshore connection platforms

- Technical specifications for the platform relevant OWF's
- Measures to ensure that producers the same platform do not negatively affect each other



Offshore Connection & Transmission Agreement (CTA)

Annex 4 – Technical requirements applicable to the connected Installation (OWF)

- All that is not arranged on Technical Code level, to be added in *Annex 4*
- Description of compliance test requirements: prescribe relevant compliancy tests, according to TenneT Requirements (to be updated and tailor made for connected parties to grid at sea)



Offshore Connection & Transmission Agreement (CTA)

Annex 5 – Operational arrangements and exchange of information (1)

Scope of the Annex

- Describes operational arrangements agreed by and between OWF and TenneT Control Centre. Details specified: contact persons of the both Parties / content of the operational arrangements / procedure for resolving failures / exchange of information

Contact details for operational matters

- Operations at TenneT performed by National Control Centre (LBC) Arnhem for voltages of 380/220 kV

Contact details for planning the availability of the TenneT transmission grid

Planned Unavailability

- On working days, OWF's contact person for matters concerning Planned Unavailability
- Specification of availability of the offshore connection in case of maintenance (Planned Unavailability), and Unplanned Unavailability

Changes to contact details

- TenneT Customer Relationship Manager responsible for changing the contact details e.a. (correspondence address TenneT TSO B.V.)



Offshore Connection & Transmission Agreement (CTA)

Annex 5 – Operational arrangements and exchange of information (2)

Content of arrangements:

Control work

- In conformity with NEN-EN 50110, under the operational decision-making authority of the operational managers of either Party. Basic principle: each Party controls its own component, in accordance with the arrangements agreed for the Interchange Point (see *Annex 2*). Any exceptions to be stated in the table

Switching procedures

- Supplemental to NEN-EN 50110: specific switching procedure Parties must follow to assure safety, continuity, etc. If this situation occurs, to be detailed in table

Resolution of failures

- Failure in this Annex defined as an unscheduled interruption or restriction of electricity transmission, including but not confined to a voltage management disruption (such as voltage dips and transients).

Duty to provide information on failures

- As failure occurs: Parties inform each other comprehensively and quickly to allow to act effectively. The information includes volume of switched-off capacity and the estimated resolution time of the failure.
- On request: Parties provide information about (probable) cause of the problem, and state actions to resolve the failure as well as measures to prevent recurrence



Offshore Connection & Transmission Agreement (CTA)

Annex 5 – Operational arrangements and exchange of information (3)

Major incidents and protection and restoration plan

- TenneT coordinates the response to a major incident affecting the energy supply. For this purpose, TenneT may instruct OWFs to switch-off. OWF shall ensure that the requested load is switched off in conformity. The National Control Centre shall issue this instruction by telephone to the contact person named above. On request, OWF receives written confirmation of the oral instruction
- In order to control the incident or to prevent damage to the managed Installation, the connection, or the grid, the OWF may request TenneT to switch off all or part of the Connection if it is affected by a major incident. TenneT shall meet such a request unless it cannot reasonably be expected to do so

Crisis centre

- In the event of a major incident, option for OWF to let a crisis centre handle communications. OWF indicates when the crisis centre is to take over handling of communications. The details of OWF's crisis centre stated in *Annex 5*

OWF's crisis team

- OWF designates crisis team to handle major incidents, contact details of the team stated in *Annex 5*

Exchange of information

- Parties provide each other with the information that by reasonable standards may be relevant to the operation of TenneT's grid and the operation of the Installation of OWF



Offshore Connection & Transmission Agreement (CTA)

Annex 6 – List of tariffs

Example: currently onshore used Tarievenblad 2015 – See next slide.

Geldig vanaf: 1-1-2015

Naam klant: OWF C.V.

Gegevens aansluiting

 Naam aansluiting Offshore Platform X
 Adres aansluiting

Factuurgegevens klant

 Facturatienaam OWF C.V.
 T.a.v. T.a.v. Crediteurenadministratie
 Factuuradres Postbus 123
 3000 AA ROTTERDAM
 Debiteurennummer TE1234
 Uw betalingskenmerk
 EAN-code xxxxxxxxxxxxxx
 Volumecorrectiefactor 0 %

 Tariefscategorie EHS (220 kV - 380 kV)
 Bedrijfstijd Groter dan 600 uur

Tarieven*	Hoeveelheid**	Tarief per eenheid	Bedrag per jaar	Bedrag per maand***
Aansluitdienst				
Periodieke aansluitverg. 220-380 kV aansluiting	1	€ 41.741,00	€ 41.741,00	€ 3.478,42
Transportdienst				
kW-gecontr. 220-380 kV (> 600u)	3500	€ 7,85	€ 27.475,00	€ 2.289,58
kW-max mnd 220-380 kV (> 600u)	0	€ 0,91	€ 0,00	€ 0,00
Vastrecht transportdienst 220-380 kV	2	€ 12.478,98	€ 24.957,92	€ 2.079,83
Meetdienst				
Meetdienst	1	€ 975,00	€ 975,00	€ 81,25

*) Deze kolom geeft ter indicatie een volledige weergave van de tarieven voor aangesloten op het Extra Hoogspanningsnet. Dit wil niet zeggen dat de hier genoemde aansluit-, transport- en meettarieven ook zullen gelden voor aangesloten op een transmissiesysteem op zee, hiervoor zijn vooralsnog geen tariefstructuren voorzien.

**) De hoeveelheid voor kW-max wordt op basis van meetwaarden vastgesteld.

***) Het maandbedrag is i.v.m. afrondingsverschillen indicatief weergegeven.

Wij verzoeken u dit tarievenblad zorgvuldig te bewaren bij uw aansluit- en transportovereenkomst en de bijhorende toelichting door te lezen.

Public Consultation Offshore Legal Framework

Connection Agreements

Offshore Realisation Agreement

16-4-2015

Fokke Elskamp



Connection Agreements: realisation

TenneT builds, owns and manages the offshore connection units as part of the offshore transmission system and connects the OWF within an agreed period

- Agreement on:
 - Planning of the realisation of the connection
 - Time setting for operational readiness
 - Commitment to compliance on technical requirements
- Legal general conditions
- Annexes:
 - *Annex 1: Basic Design for the Connection*
 - *Annex 2: Planning schedule*
 - *Annex 3: Insurance sheet [to be decided]*
 - *Annex 4: Compliance testing documentation*



Offshore Realisation Agreement (REA)

The following is drawn from currently existing
– onshore applicable – realisation agreements ('REA')

The content of this presentation is for information and discussion purposes only. In no way does it constitute rights for (potential) connected parties, or bind TenneT legally



Offshore Realisation Agreement (REA)

MAIN BODY OF THE OFFSHORE REALISATION AGREEMENT



Offshore Realisation Agreement (REA)

Article 1: Definitions and general provisions (1)

Definitions - Capitalized words shall have the meanings assigned to them in:

- Article 1 of the Act
- The Glossary accompanying the technical codes within the meaning of Article 9.1 of the Act (*Begrippenlijst*)
- The Tariff Code (Article 9.2 of the Act) and the technical codes (Art. 9.1 of the Act)
- Or otherwise as defined:

Act: Electricity and Gas Act (= STROOM proposal)

Agreement: agreement including all Annexes

General Terms and Conditions: *TenneT General Terms and Conditions for the Realisation of Offshore Connections 2015, as appended to this Agreement*

Basic Design: The basic design as described under A of the preamble and included in *Annex 1*

Glossary (*Begrippenlijst*): The Glossary as referred to in the technical codes

Annexes: All annexes to this Agreement, which form an integral part thereof

Codes: The Electricity Grid Code, the Electricity System Code, the Electricity Metering Code, the Electricity Tariff Code, and the Electricity and Gas Information Code

Recognised Party with Metering Responsibility (*Erkende Meetverantwoordelijke*): A Recognised Party with Metering Responsibility within the meaning of the Electricity Metering Code

Person Responsible for the Installation: The person who, in the context of the company's working conditions policy pursuant to the Working Conditions Act, is responsible for ensuring and maintaining the safety of the electrical installation and its operation and who has been appointed for that purpose by his/her employer in writing in accordance with the NEN-EN 50110-1 standard



Offshore Realisation Agreement (REA)

Article 1: Definitions and general provisions (2)

Connection Point: The interface point at which the Power Generating Module is connected to an offshore Transmission System, as identified in the Connection Agreement (= RfG definition) (i.e. the physical point agreed by the Parties where a separation may be made between the ownership and operation of the offshore grid Connection on the one hand, and the connected party's Installation on the other, see *Begrippenlijst*)

Work: All work required to realise the Connection

Planning: The planning within the meaning of Art.7 that has been appended to this Agreement as *Annex 2* and that contains the target dates pertaining to the Work

- The Agreement will be subject to the General Terms and Conditions. The applicability of the General Terms and Conditions of the connected party will be explicitly excluded.
- Order of precedence in case of conflicts between the documents that are part of the Agreement: Agreement - Annexes 1 and 2 - General Terms and Conditions



Offshore Realisation Agreement (REA)

Article 2: Realization of the connection

- The actual realisation regards connecting the OWF installation to TenneT's platform, in accordance with the planning for the realisation of the platform and the scheduled start-up date, and depending on the test and simulation results as well as the requirements of designating a:
 - Person Responsible for the Installation
 - Supplier
 - Balance Responsible Party (BRP) (*Programma-Verantwoordelijke Partij*)
 - Metering Responsible Party
- Concluding a Connection and Transmission Agreement (CTA)
- TenneT performs the realisation in accordance with the provisions of the Act, the Codes and Agreement
- TenneT shall perform the realisation in accordance with the conditions, guidelines and principles as laid down in the Basic Design and Offshore REA



Offshore Realisation Agreement (REA)

Article 4: Connection points (ownership and management)

- Diagrammatic representation of the primary and secondary Connection Points for the Connection operated by TenneT in *Annex 1* (also specified in Connection and Transmission Agreement)
- The Connection entirely owned by TenneT in accordance with the relevant provisions of the applicable laws and regulations
- See: Position Paper regarding common point of connection



Offshore Realisation Agreement (REA)

Article 5: Testing and simulation requirements

- Requirement OWF of performance of compliance tests and simulations pursuant *Annex 4*
- These tests and simulations shall be performed before the Connection is taken into operation
- Reference to TenneT's testing compliancy documents attached as *Annex 4*:
Compliance activities with regard to Connection Requirements for System Operations related to Wind Farms, Version V3.0, January 2014 (SO-SOC 13-141)) – to be updated according to RfG and tailor made for offshore



Offshore Realisation Agreement (REA)

Article 6: Start-up and commissioning of the connection

- Conditions before taking Connection into operation:
 - OWF concluded supply agreement at least one month before use of the Connection, and informs TenneT of the supplier's name on request
 - OWF agreed with TenneT that TenneT shall appoint a Recognised Party with Metering Responsibility, and shall have an effective and reliable metering device at its disposal
 - OWF informed TenneT of the name of the Person Responsible for the Installation
 - OWF informed TenneT of the name of the Balance Responsible Party (BRP)
- Before OWF starts using the Connection:
 - OWF satisfies the conditions in *Annex 4 to the Connection and Transmission Agreement* (technical installation requirements for OWF)
 - TenneT receives a Connection and Transmission Agreement for the Connection signed by OWF
 - OWF satisfies the provisions below on this slide:
- Before the Connection is commissioned, TenneT informed by OWF or Supplier, the Balance Responsible Party (BRP) (*Programma-Verantwoordelijke Partij*) or Person Responsible for the Installation of all relevant details using the relevant procedures in accordance with the relevant Code provisions



Offshore Realisation Agreement (REA)

Article 7: Planning

- Setting the target date for commissioning of the Connection; in accordance with the scenario of the Minister of Economic Affairs
- TenneT shall do everything that may be reasonably expected (best effort) to complete the Work in accordance with the Planning; if in spite of this the Planning turns out not to be feasible, Parties will consult with each other in order to arrive at a mutually acceptable solution
- TenneT shall keep OWF informed of the progress of the Work [to be discussed: way and terms of reporting]
- If the required permits for the construction of the Connection are not issued, Parties shall consult with each other about possible alternatives



Offshore Realisation Agreement (REA)

Article 8: Insurance

[To be decided if relevant offshore]

- TenneT takes out a CAR (Construction All Risk) insurance in connection with the performance of the Work, including the connection to the Offshore Wind Farm (OWF) at the interface
- A copy of a summary of TenneT's current insurance policy has been provided to OWF and is also included as *Annex 3* to this Agreement.



Offshore Realisation Agreement (REA)

Article 9: Termination

- After the REA has entered into effect, OWF may cancel the REA without stating any reasons

[To be decided if relevant offshore:]

- If REA is terminated pursuant any reason attributable to OWF, actual costs specifically made for connected party owed to TenneT



Offshore Realisation Agreement (REA)

GENERAL TERMS AND CONDITIONS TO THE OFFSHORE REALISATION AGREEMENT



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 1 – Definitions

- Capitalized words have the meanings assigned to them in:
- Glossary (*Begrippenlijst*) accompanying the technical codes
- the REA, or otherwise:

General Terms and Conditions: 'TenneT General Terms and Conditions for the Realization of Offshore Connections 2015' concerning the construction of offshore Connections. In these General Terms and Conditions, realization of a 'Connection' shall be understood to include the modification, extension or removal of an existing Connection

Party / Parties: TenneT or OWF

OWF: the party with which TenneT enters into an Agreement

Work site: the site (offshore platform) where the Connection will be realized



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 2 – The Agreement

- REA ends by operation of law after both Parties have fulfilled all of their obligations arising from the Agreement
- Without the OWF's consent, TenneT shall have the right to engage third parties for the fulfilment of its obligations towards the OWF, under TenneT's full responsibility for the performance of these third parties
- OWF is responsible for the timely provision (also in connection with planning) and the accuracy of the information, data and decisions submitted to TenneT by it or on its behalf that are required for the proper realization of the Connection.
- Departures from and/or additions to the REA only apply if agreed by Parties in writing.



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 3 – General Terms and Conditions

- Citation clause: '*TenneT General Terms and Conditions for the Realization of Offshore Connections 2015*'
- Departures from and/or additions to these General Terms and Conditions only apply if agreed by Parties in writing
- Any General Terms and Conditions of the OWF do not apply to the Agreement



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 4 – Permits

- Unless Parties agree otherwise in the REA, TenneT shall apply for any permits required for the Work at the platform

Article 5 – Construction work

- [To be discussed: standard arrangements for cable crossings]
- (As far as necessary) OWF cooperates in the realisation of the Connection free of charge, unless explicitly agreed otherwise



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 6 – Access to the platform

[To be discussed: arrangements for access to platform for connection activities]



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 7 – Intellectual property rights

- All drawings, designs, models etc. created by TenneT for the realisation of the Connection (platform) and made available by TenneT in connection with the Work, as well as all associated intellectual and industrial property rights remain the exclusive property of TenneT
- TenneT shall also be considered to be the creator and author of those drawings, designs, models etc.
- Without TenneT's prior written permission, OWF shall not make any documents, information and/or advisory reports from TenneT available to third parties



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 8 – Right to compensation OWF (Art. 5.27 STROOM bill)

- OWF is entitled to damage compensation payable by TenneT if TenneT partly or completely fails to deliver the part of the Offshore Transmission System required to connect the OWF within the timeframe stipulated in the scenario within the meaning of Article 5.6, subsection 1 of the Act (STROOM bill), and if the OWF cannot have all or some of its electricity transmitted as a result
- The damage compensation covers consequential damage and damage resulting from lost or deferred income for the OWF, subject to the relevant provisions in or pursuant to the Act (STROOM bill)
- OWF endeavours to limit the damage referred to in this article as far as possible



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 9 – Liability

- If during or after the performance of the Work shows that the performance does not meet the requirements that may be reasonably imposed on it, TenneT will correct any errors and rectify any deficiencies
- If OWF suffers damage due to attributable failure to TenneT in fulfilling its obligations connected to the realisation of the Connection, TenneT will only be liable for damage covered by its Construction All Risk (CAR) insurance policy or that TenneT can recover from third parties
- [To be decided whether CAR insurance will also be applicable offshore]



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 10 – Taxes and levies

- Prices stated in the REA are exclusive of Value-Added Tax (VAT) and other levies, duties or other costs resulting from the performance of the Work, wherever it may be carried out
- Costs for the account of OWF and charged separately
- Financial consequences of any changes to regulations, rules, legislation etc. during the term of the REA for the account of OWF; TenneT notifies OWF in writing as soon as possible about any such changes and the consequences thereof



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 11 – Default

- If OWF has not paid an invoice within the applicable term and in requested manner, it shall be in default without any notice, barring any part of the invoice rightly disputed by the OWF
- From the moment of default until the day on which full payment has been made, the OWF shall owe statutory interest, without prejudice to TenneT's right to full compensation
- All expenses incurred in collecting amounts owed by OWF as well as (extra)judicial costs for the account of the OWF



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 12 – Early termination of Agreement

- If the OWF:
 - files for bankruptcy, is declared bankrupt, cedes its property to credits, submits a request for suspension of payment
 - decides to discontinue its business activities or a significant part thereof – including its stake in a company that already exists or is to be established – or decides to change its business objectives or to dissolve or wind up its business

TenneT has, without compensation obligation and without prejudice to its rights and without notice of default or recourse to the courts, the right to:

- I. dissolve the REA (whole or in partly) by submitting a written notification to that effect to the OWF
- II. claim any amount owed by the OWF to TenneT immediately and entirely
- III. suspend execution of the REA



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 13 – Confidentiality

- Without prejudice to Article 5.22 of the Act (STROOM bill) (confidentiality provisions for system operators), each Party shall treat as confidential any information it receives from the other Party in connection with the REA or the performance of the Work, except insofar as it concerns information that is generally known or accessible
- TenneT has the right to provide third parties it has engaged for the performance of the Work with any information about or supplied by the OWF that is reasonably necessary for the performance of the Work
- Without prior written permission from TenneT, the OWF may not publicly disclose any documents, information or advisory reports drawn up by TenneT in connection with the performance of the REA
- The confidentiality duty remains in force after the REA has ended



Offshore Realisation Agreement (REA)

General Terms and Conditions

Article 14 – Disputes

- Parties shall endeavour to resolve disputes amicably
- Any disputes arising from the REA – including its existence and validity –submitted to the competent court in Arnhem, the Netherlands, if Parties are unable to resolve the disputes amicably
- In particular cases, Parties may choose to agree a different way of resolving a dispute
- If a dispute requires an immediate provisional ruling, Parties shall be free to apply to a preliminary injunctions court for summary proceedings
- The provisions of this article shall leave intact the right to submit a dispute to the Authority for Consumers & Markets (ACM) under Article 10.20 of the Act (STROOM bill)



Offshore Realisation Agreement (REA)

ANNEXES TO THE OFFSHORE REALISATION AGREEMENT



Offshore Realisation Agreement (REA)

Annexes

Annex 1: Basic Design for the Connection

Connection specifications that are relevant for the interconnection of cables (Basic Design), also in *Annex 2 CTA*

Annex 2: Planning schedule

Annex 3: Insurance sheet [to be decided]

Annex 4: Compliance testing documentation:

Compliance activities with regard to Connection Requirements for System Operations related to Wind Farms, Version V3.0, January 2014 (SO-SOC 13-141)) – to be updated according to RfG and tailor made for offshore

Thank you

An aerial photograph of an offshore wind farm at sunset. The sun is low on the horizon, casting a warm, golden glow across the sky and the water. Several wind turbines are visible, their silhouettes and yellow bases standing out against the shimmering sea. A few small boats are scattered across the water, including one near the center and another in the lower right. The sky is filled with soft, white clouds, and the overall atmosphere is serene and majestic.

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

E-mail: netopzee@tennet.eu

Disclaimer

Liability and copyright of TenneT

This PowerPoint presentation is offered to you by TenneT TSO B.V. ('TenneT'). The content of the presentation – including all texts, images and audio fragments – is protected by copyright laws. No part of the content of the PowerPoint presentation may be copied, unless TenneT has expressly offered possibilities to do so, and no changes whatsoever may be made to the content. TenneT endeavours to ensure the provision of correct and up-to-date information, but makes no representations regarding correctness, accuracy or completeness.

TenneT declines any and all liability for any (alleged) damage arising from this PowerPoint presentation and for any consequences of activities undertaken on the strength of data or information contained therein.



www.tennet.eu

TenneT is Europe's first cross-border grid operator for electricity. With about 21,000 kilometres of (extra) high-voltage lines and 36 million end-users in the Netherlands and Germany, we rank among the top five grid operators in Europe. Our focus is to develop a North-west European energy market and to integrate renewable energy.

Taking power further

