Electricity Balancing Guideline (EBGL)

Implementation in the Netherlands

June-15-2017

Stay tuned. Safety first!

For your safety as well as our own we would like to draw your attention to the following safety measures.

In case of an emergency, the following instructions also apply:

- Follow the escape route as indicated.

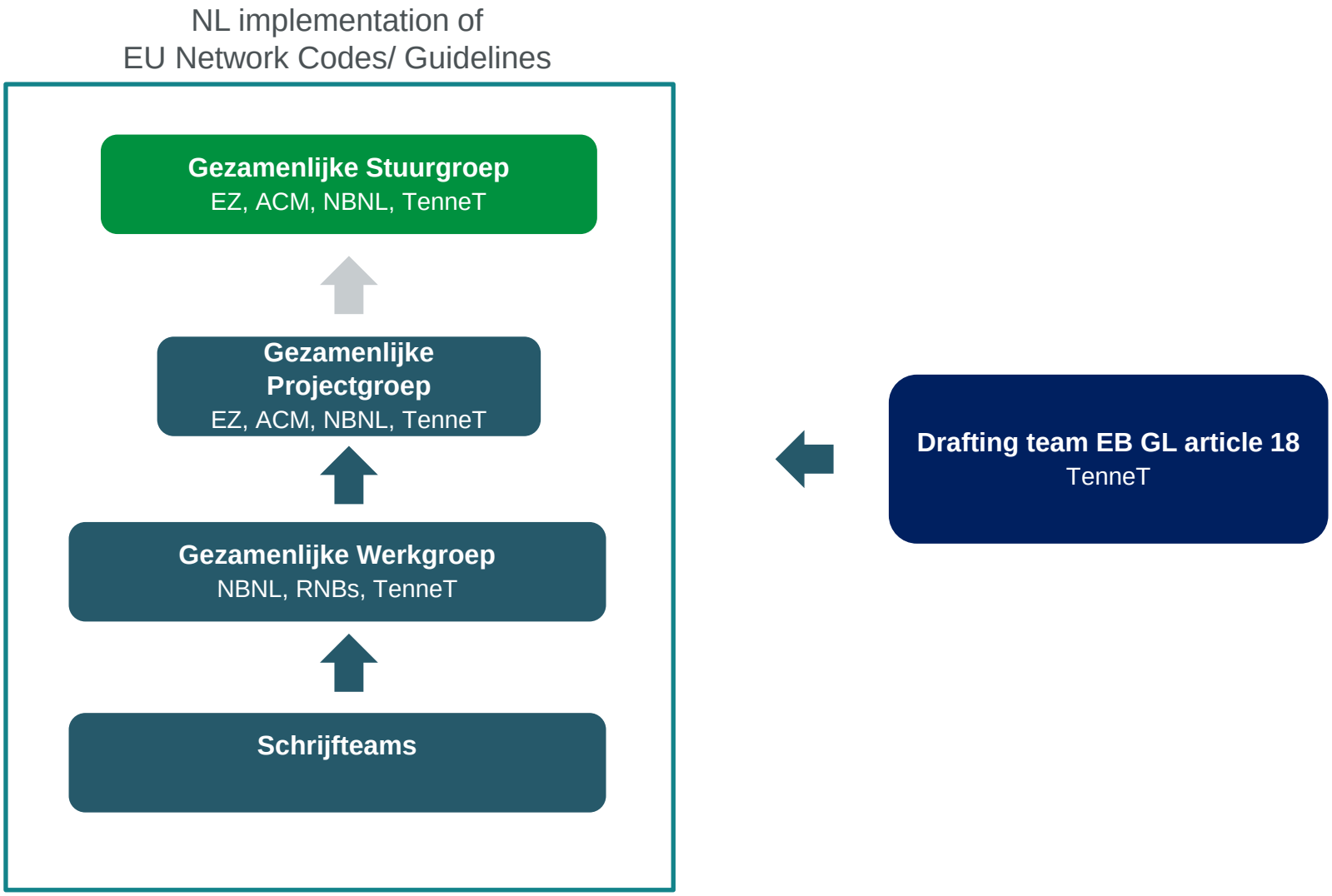
- Use the stairs instead of the lift.

- Go the assembly point.
- Follow the instructions of the in-company emergency worker who is present at that moment.

Agenda

- EBGL implementation
- Introduction electricity balancing guideline
- Implications for the Dutch market design
    - Continuity
    - Change
    - Uncertainty & Risks
- Impact on Dutch stakeholders

EBGL implementation



EBGL: Entry into Force late 2017

EBGL intended as *market* code, aiming at:

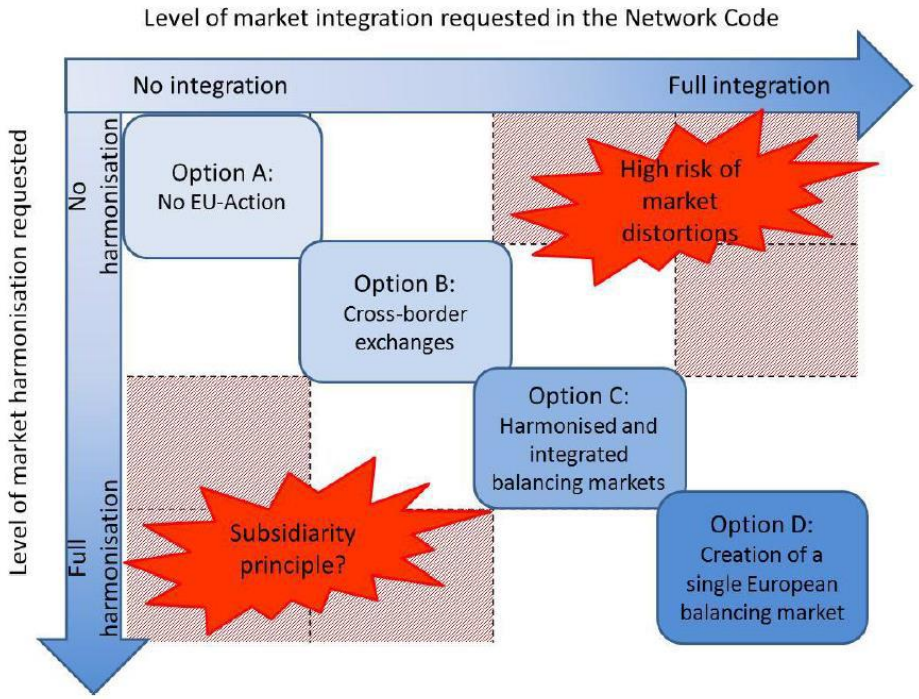
1. Integration of balancing markets (X-Border balancing)
2. Harmonization (Level playing field not explicitly mentioned)

EBGL text is a compromise:

- Major choices left to be decided after entry into force
- Multiple interpretations possible

Current NL market design aspects are expected to face:

- Continuity
- Change
- Uncertainty



EBGL scope and implementation

- The Electricity Balancing Guidelines (EBGL) deal with:
  - Roles and responsibilities in the balancing market (TSO, BRP, BSP)
  - Settlement:
    - Between TSOs
    - Between TSO and BRP
    - Between TSO and BSP
  - Procurement and exchange of balancing energy (European platforms)
  - Procurement and exchange of balancing capacity
  - Cross-zonal capacity for balancing
- Main implementation topics and discussions:
  - Design of European platforms for balancing energy exchange (international), including settlement discussions
  - Implementation of national terms and conditions (Article 18, national) **=> scope for today**

National terms and conditions

- National implementation is mainly covered by Article 18. It requires:
  - National terms and conditions for BSPs
  - National terms and conditions for BRPs
- These terms and conditions include a.o.:
  - Requirements on becoming a BRP or BSP (but not on eg. prequalifying units, SOGL)
  - Data exchange requirements
  - Definition of balance responsibility without overlaps, including for balancing energy bids
  - Imbalance settlement rules
- The terms and conditions focus on *market arrangements*.
- Generation and load schedules are out of scope of Article 18 implementation in NL. Grid limitations are tackled in SOGL implementation.

Continuity (1/2)

The following should not change from today in NL:

- Imbalance settlements BRP per ISP (“PTU”), per direction
- ISP = 15 minutes

- BRP determines (only) 1 net position by commercial trade schedules (EBGL not on generation or load schedules)
- Ex post update internal commercial trade schedules allowed

- Single (marginal) imbalance pricing, occasional dual pricing allowed
- Financial neutrality TSO warranted through tariffs

Continuity (2/2)

The following should not change in NL:

- Balancing energy bids from BSP to connecting TSO
- Close to real time gate closure time balancing energy bids
- No regulatory caps & floors on:
  - Bid prices
  - Balancing energy prices
  - Imbalance prices

- Settlement balancing energy by connecting TSO per ISP, per direction
- Balancing energy volume determined as requested activation
- Balancing energy adjusted to BSP-designated BRP

- No change to current “allocatieproces”

Change (1/2)

(Article 18) Public Terms & Conditions to be proposed by TSO at EIF +6m for:

- Balance Responsible Parties (BRP)
- Balancing Service Provider (BSP)

No deadline for approval by NRA

Article 18 implementation (six months after approval by NRA) leads to re-arrangement of and addition to current regulation and contracts:

- “Systeemcode”
- Executive rules (“Uitvoeringsregels”)
- BRP contracts
- ...

Change (2/2)

The following will change in NL:

- Procurement of balancing capacity (FCR, FRR) per separate direction
- Shorter term procurement of balancing capacity (FCR, FRR)
- Standard products activated from common merit order lists (aFRR, respectively mFRR) through activation optimization functions (with possibility for local specific products)

Uncertainty

- FRR products to be used in the future:
  - Full activation time for aFRR (“regelvermogen”), currently 15 minutes, likely to become 5 or 7.5 minutes
  - Standard product or specific (local) products for mFRR (direct-activated (“noodvermogen”) or scheduled activated (“reservevermogen”)
- Reservation of X-Zonal capacity for balancing purposes
- Usurpation of X-Zonal capacity remaining after intraday gate closure time by TSOs operating the reserve replacement process (less available for subsequent processes)
- Decision making process by qualified majority, or by ACER

High risk for NL from CMOLs

- Pricing of balancing energy activated from common merit order lists
- Algorithm of activation optimization functions
- Real time balancing information provision
- Balancing energy price marginal
  - aFRR/mFRR price differentiation?
  - Local/global FRR activation price differentiation?
- Consistency: balancing energy price equals imbalance price

Risk on Dutch market design from international developments

Impact on Dutch stakeholders

The following developments may have significant impact on Dutch stakeholders

- Development and design of European platforms:
- Cross-border exchange of balancing energy (aFRR, mFRR)
- Impact on data exchange and IT systems
- Contractual relationships

Development of European platforms

- TSOs currently in discussion on design of European platforms
- Implementation timelines uncertain
- Ongoing discussions on, a.o.:
  - standard product design
  - TSO-BSP settlement (impacting BSPs and BRPs)
  - gate closure times for balancing energy bids

Outcome uncertain, impact possibly significant

Cross-border exchange

- Impact on market participants:
  - Competition from cross-border balancing energy bids
  - Imbalance price influenced by local balancing energy bids activated for export
  - Impact on balancing energy prices
- Impact determined by:
  - Definition of balancing energy price (XB or local)
  - Amount of available cross-border capacity (starting point: use XB capacity left after intraday market)

Summary

Article 18 implementation team focuses on:

- assuring clear definition of roles and responsibilities in the balancing market
- implementation of changes necessary for balancing energy exchange
- checking for possible improvements in current arrangements
- having a comprehensive and robust set of terms and conditions both transparant and not overly long or complex

High risk from international developments for Dutch market design

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