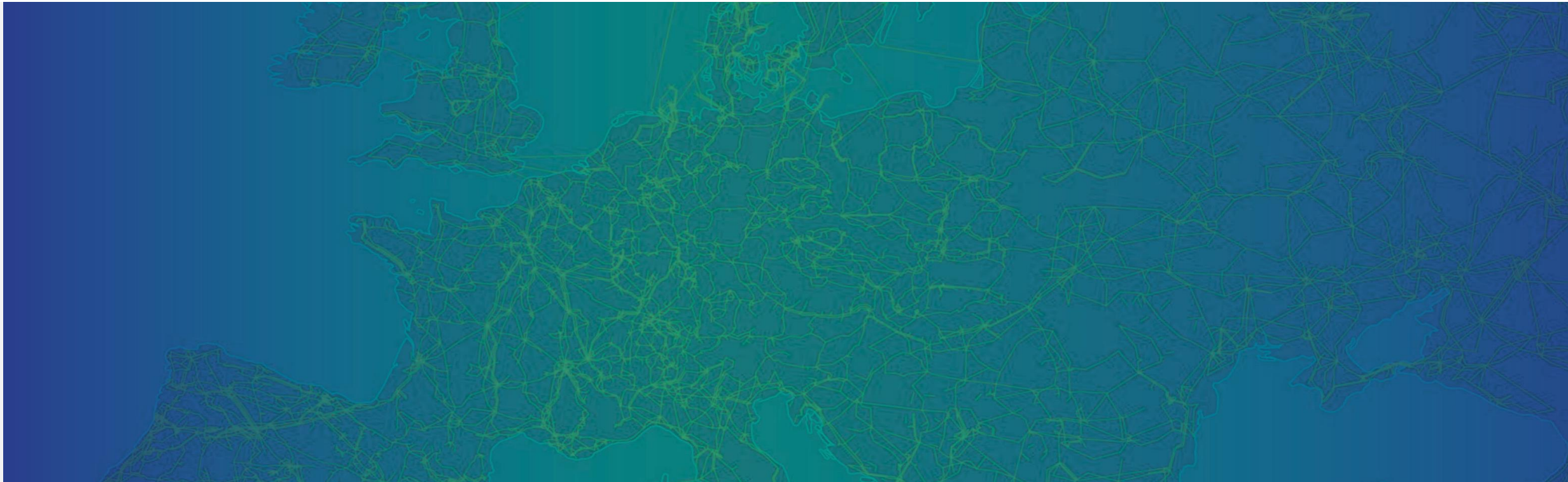


# TOP.3 - IGDs planning

11 September – GC ESC in Brussels



Mario Ndreko (ENTSO-E) – StG CNC convenor

# TOP.3 - IGDs planning

## Legal aspect of IGD

Article 58 in NC RfG

Article 56 in NC DC

### CHAPTER 8

#### *Non-binding guidance and monitoring of implementation*

#### *Article 58*

#### **Non-binding guidance on implementation**

1. No later than six months after the entry into force of this Regulation, the ENTSO for Electricity shall prepare and thereafter every two years provide non-binding written guidance to its members and other system operators concerning the elements of this Regulation requiring national decisions. The ENTSO for Electricity shall publish this guidance on its website.
2. ENTSO for Electricity shall consult stakeholders when providing non-binding guidance.
3. The non-binding guidance shall explain the technical issues, conditions and interdependencies which need to be considered when complying with the requirements of this Regulation at national level.



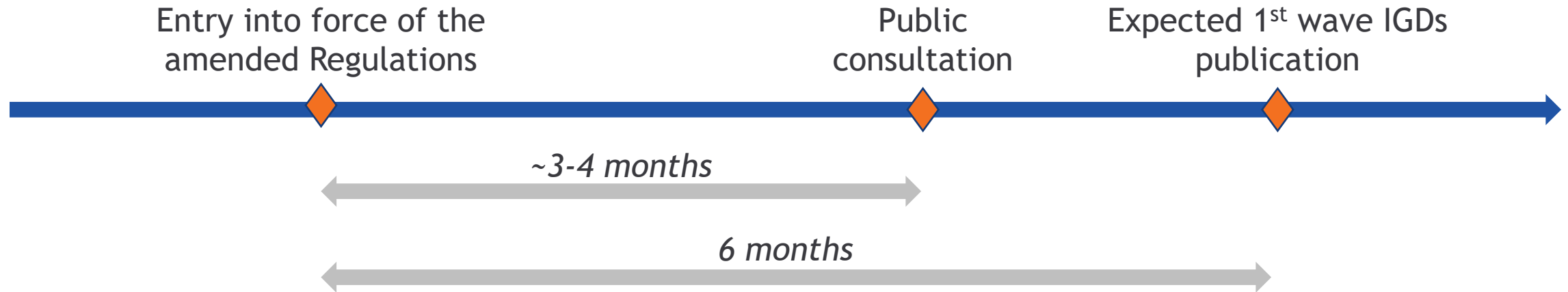
Implementation Guidance Documents (IGDs)

- Legal obligation
- Non-binding guidance to support CNCs national implementation

## TOP.3 - IGDs planning

### New topics in NC RfG and NC DC 2.0 - Expected timeline and considerations

#### Expected timeline



#### Considerations

- ❖ The expected timeline is subject to the **timing of the entry into force of the amended Regulations**.
- ❖ Any **change in content of the Regulations** from ACER's recommendation will impact the scope and timeline of the current plan.
- ❖ The **public consultation** of each IGD to consider **feedback from the stakeholders** will not be launched before 4 months after the amended regulation comes into force.
- ❖ Due to the available **resources**, the new topics will be developed in **2 subsequent waves**.
- ❖ Regarding the topics to be covered, GC ESC stakeholders' feedback has been considered: **IGD on certification** is included in the plan; **forced oscillations IGD** has been prioritized.

# TOP.3 - IGDs planning

## New topics in NC RfG and NC DC 2.0 (1/2)

1<sup>st</sup> wave

Topic

Grid Forming



Heat Pumps



Certification



PtG Demand Units



Scope

Guidance on the implementation of the Article Y(7), and Articles for type A,B,C, and D PPMs.

The scope should be defined after finalizing the ongoing discussion within the related ACER's work stream. Here the final version of the NC DC 2.0 is important to decide the content of the IGD.

Guidance of national certification processes based on the results of the EG HCF.

Recommendation about the non-exhaustive requirements.

# TOP.3 - IGDs planning

## New topics in NC RfG and NC DC 2.0 (2/2)

### 2<sup>nd</sup> wave

#### Topic

Forced oscillations



Electrical Storage Modules



Aggregation of different type of facilities (PGMs, EVs, demand facilities, storage)



Low frequency demand disconnection LFDD & Underfrequency defence plan



#### Scope

Recommendation on the selection of values within the proposed ranges in the Article 21 and Article 26 of NC RfG; how to collect and process the data; which should be the monitoring period.

General explanation for stand-alone storage systems and the compliance. To explain how to interpret ESM usage.

Provide guidance on how to interpret the requirements of mixed facilities behind the same connection point (co-location).

Explanation of the 200 ms total tripping time according of the Article 19 of the NC DC.

# TOP.3 - IGDs planning

## Existing IGDs to be updated

### Priorities

Obsolete IGDs after NC RfG  
and NC DC 2.0 entry into  
force

[Link](#) to the existing IGDs

Rate-of-change-of-frequency withstand capability  
(RoCoF)

Automatic connection/reconnection and  
admissible active power ramp in (updated 2021)

Frequency Sensitive Mode (FSM)

Limited Frequency Sensitive Mode (LFMS)

Parameters of non-exhaustive requirements  
(updated 2021)

Special issues for Type A generators