Supporting Paper for the OPS NC

2nd Workshop

25th July 2012

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Agenda

- **Purpose and objective**
- **Structure**
- **Operational Planning and Scheduling**
- **Introduction to the subjects included**
- **Interaction with other NCs**

Purpose and objective


ENTSO-E Draft Network Code for
Operational Planning and Scheduling

18 July 2012

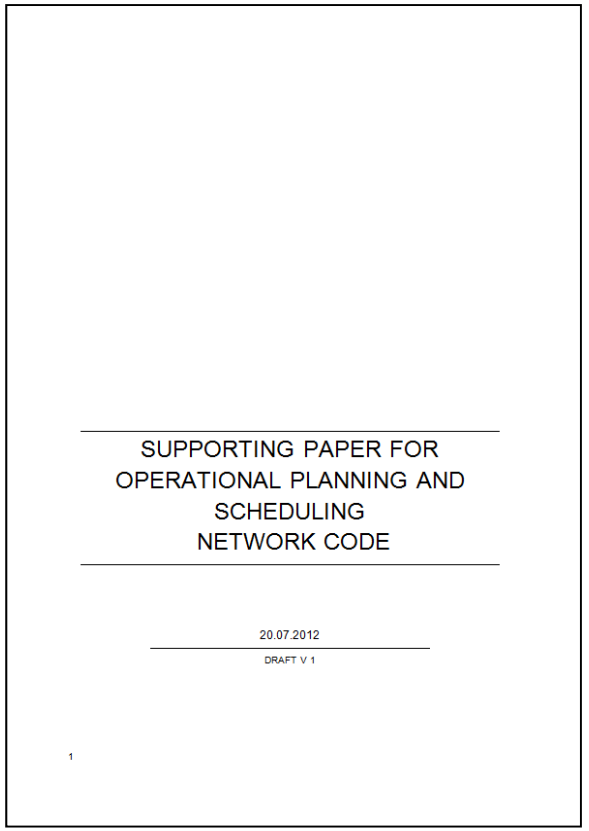
Notice

This document contains a draft Network Code for Operational Planning and Scheduling, prepared by the Drafting Team of the Operational Planning and Scheduling Network Code as of 18 July 2012, in line with the ACER Framework Guidelines on System Operation published on 2 December 2011. It is intended for the discussion at the second public Workshop with DSOs' technical experts and all other stakeholders, taking place on 25 July 2012.

The document does not in any case represent a firm, binding or definitive ENTSO-E position on the contents, the structure, or the prerogatives of the Network Code for Operational Planning and Scheduling. Such position will be released for public consultation following the procedure according to the provisions of the 3rd Legislative Package.

LEGAL BINDING!

(except the whereas-section)


SUPPORTING PAPER FOR
OPERATIONAL PLANNING AND
SCHEDULING
NETWORK CODE

20.07.2012

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Not legal binding

Background, explanation, justifications and coherence with FG

Structure

Background (similar for all SO NCs)

- **Section 1:** Purpose and objective of the supporting paper
- **Section 2:** Procedural aspects and legal framework
- **Section 3:** Scope, structure and approach.

Explanatory notes (different for all SO NCs)

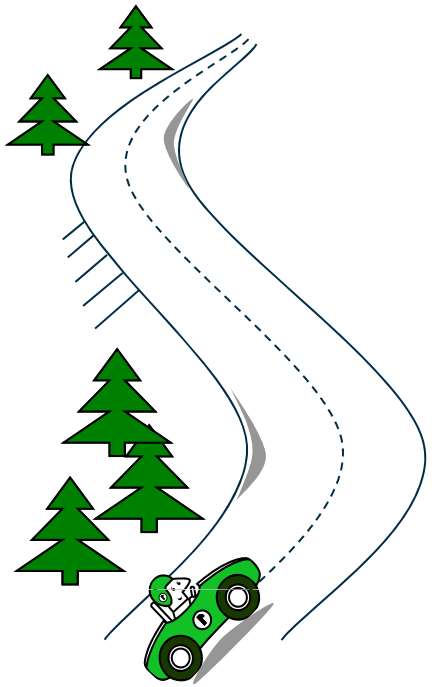
- **Section 4:** Relationship between OPS NC and FG
- **Section 5:** Background, objectives and benefits for the individual articles

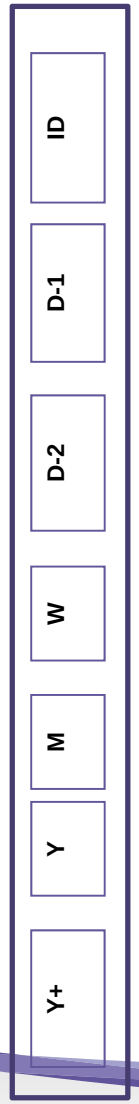
Next steps (similar for all SO NCs)

- **Section 6:** Next steps (for both SO and OPS NC)

Appendices (similar for all SO NCs)

Operational planning and scheduling





- Harmonized and solid technical framework for the planning phase
- Minimum requirements for the preparation of real-time system operation
- High degree of coordination
- Primarily TSO requirements, but TSO tasks builds upon knowledge and support from DSOs, power generating facilities, demand facilities etc.

Operational Planning and Scheduling

PROCESSES

Time frames: ID, D-1, D-2, W, M, Y, Y+

Security Analysis - chapter 2 & 3 -	Outage planning - chapter 4 & 8 -	Adequacy - chapter 5 & 6 -	Scheduling - chapter 7 -
Building Scenarios and Elaborating Common Grid models	REGIONAL COORDINATION	Ancillary services and adequacy monitoring	Schedule notification
Performing coordinated security analysis and setting up remedial actions	Planning process framework	Pan-European seasonal coordinated adequacy assessment	Schedule coherency verification

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Chapter 2 & 3: Security analysis

Overall purpose:
Ensures system operation is within normal operating state and that frequency, fault level, voltage and load flows etc. will remain within the predefined limits during normal N-1 conditions

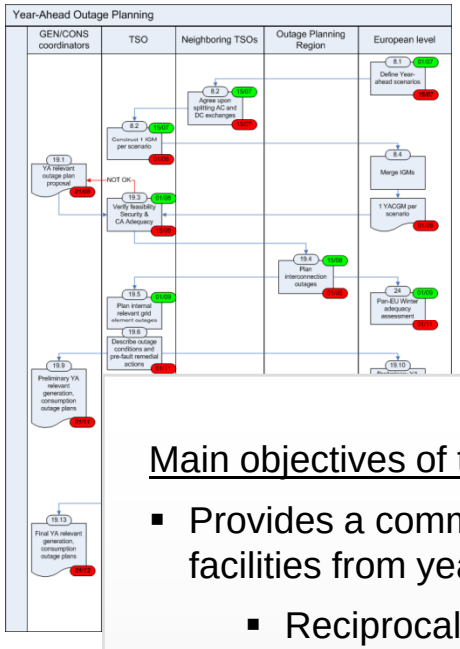
Main objectives of the chapters

- Requirements for data exchange:
  - *Year ahead common grid model (pan-European harmonisation level).*
  - *Day-ahead and intraday individual grid models (harmonised at least at synchronous area level).*
- Requirements for performing security analysis (harmonized at least at synchronous level).
- Requirements for coordination in operational planning (i.e. evaluation of contingencies and constraints, remedial actions, reactive power control, short circuit coordination).

New and altered requirements

- Procedures for constructing a pan-European year-ahead common grid model
- Improvement of data quality

Chapter 4 & 8: Outage planning and common TSO operational planning platform



Overall purpose:
Setting requirements and roles/responsibilities for every relevant party operating within EU, hereby ensuring a harmonized coordination of outages with cross-border impact.

Main objectives of the chapters

- Provides a common European framework regarding outages of grid and production/demand facilities from year ahead and how to update these until real-time:
  - Reciprocal and transparent processes.
  - Setting deadlines ensuring relevant and necessary information is available, when needed
- Provides data for more planning processes: outage planning, security analysis, system adequacy assessment and capacity calculation.

New and altered requirements

- More harmonized procedures, deadlines etc.
- Currently no single centralized data platform for sharing information on outage planning exist. Introducing this eases and stimulates collaboration and coordination between TSOs.

Chapter 5: Adequacy

Overall purpose:
Ensures and monitors system adequacy, i.e. supplying the load in all the steady states that the power system may face

Main objective of the chapters

- Pan-European system adequacy assessments season ahead
- On-going national adequacy assessments updating the pan-European analysis with the possibilities of import/export
- Coordination between TSOs, specially if adequacy level is low

New and altered requirements

- Increased TSO coordination

Chapter 6: Ancillary services

Overall purpose:
Ensures adequate ancillary services by setting requirements for procurement and management systems

Main objective of the chapters

- Close collaboration between neighbouring systems, since system operation no longer is a national issue: sharing of information, common procurement etc.
- Close link to LFCR NC and Balancing NC
- High level of detail

New and altered requirements

- Requirements concerning cross-border coordination of ancillary services to facilitate closer TSO collaboration enabling more efficient and economic system operation.

Chapter 7: Scheduling

Overall purpose:
Provides the TSO valuable insight from all market participants after market closure but before real-time, which enables the TSO to balance the system in real time.

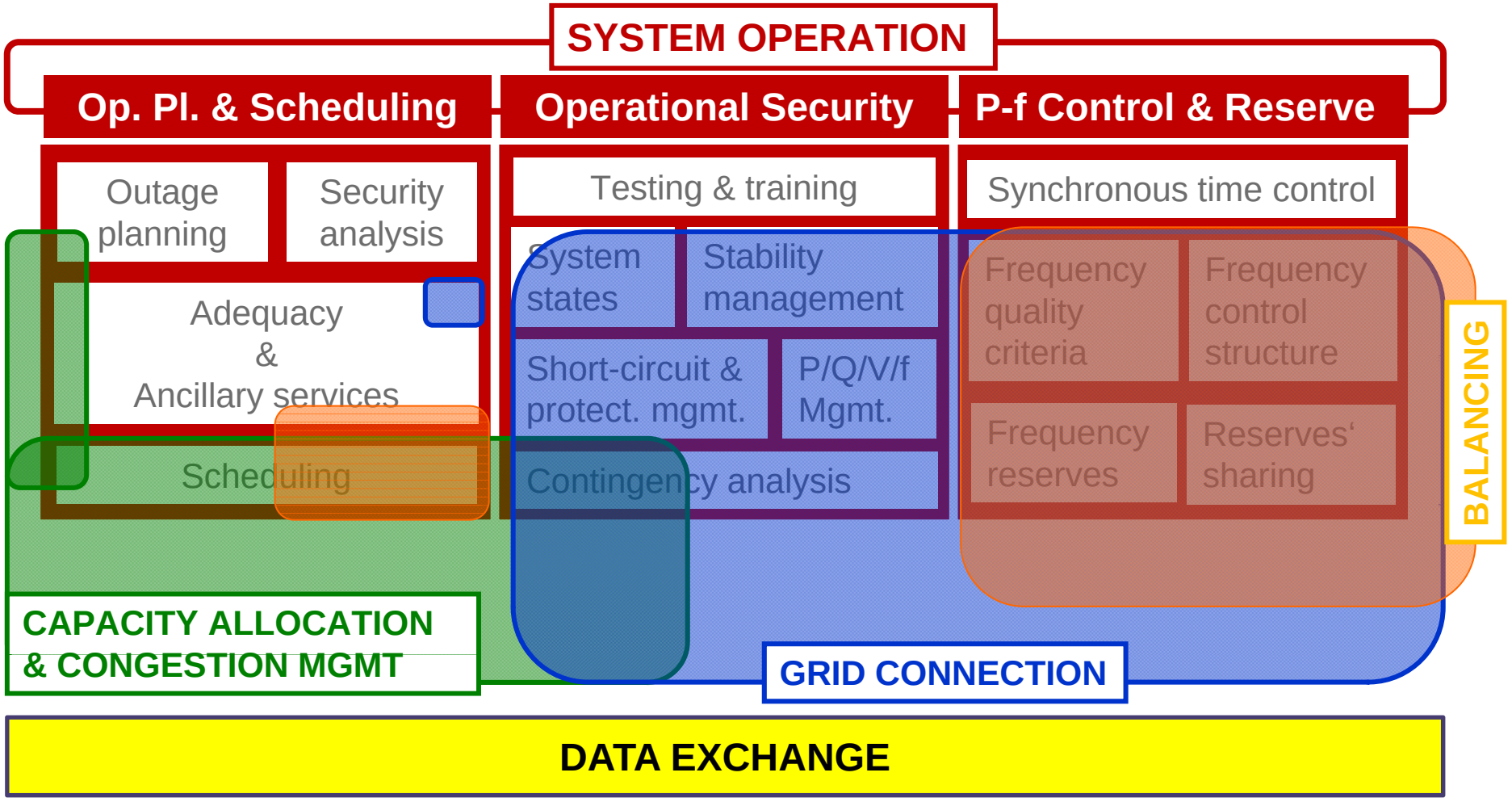
Main objectives of the chapters

- Schedules inform the TSO of the intentions of the market participants in real-time – before real-time.
- Is input to short term security analysis and adequacy analysis
- Facilitates proactive measures to avoid imbalances caused by market misunderstandings.
- Sets the data requirements for TSO/TSO and TSO/market participants for energy exchange both nationally and cross-border

New and altered requirements

- Scheduling in net positions, increasing the possibility of the TSO to proactively take measure in case of imbalances due to mistakes.

Interaction with other Network Codes



- The supporting paper is not legal binding
- It provides the background for understanding OPS NC:
  - Explanations and justifications on the requirements in the OPS NC - both overall and more detailed per subject
  - Coherency with FG SO / FG OPS

Thank you for your attention!

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Overview of the Year-Ahead Outage Planning process