Operational Planning & Scheduling Network Code

Presentation to JESG

20th February

Timeline and status update

Activity	Date
ACER publishes Framework Guidelines (FG)	1st December 2011
Mandated Start date from EC inviting ENTSO-E to develop Network Code	1 April 2012
ENTSO-E Public Workshop	19 March 2012 23 May 2012
ENTSO-E Public Workshop	25 July 2012
Assembly approval of draft Network Code	2nd November
Formal Consultation Starts	7th November 2012
ENTSO-E Public Workshop (during consultation)	20/21 November
Formal Consultation Ended	**7 January 2013**
ENTSO-E Public Workshop	**14th February**
Final Network Code submitted to ACER:	**1st April 2013**
ACER Network Code Review completes	**End June 2013**
Network Code submitted to Comitology	**July 2013**
Network Code applies from:	**2014**

Consultation Comments from Stakeholders

- 850 comments were received

- Total of 68 related to Relevant Assets

  - Criteria for relevance and thresholds

  - NRA and stakeholder consultation

- Total of 84 related to outage planning

  - Planning process dates

  - Management of incompatibilities between asset outages

  - Early to return of a Generator.

Chapter 4

OUTAGE COORDINATION

entsoe

Reliable Sustainable Connected

- **Relevance of assets for outage coordination**

- **Link with data provision for Transparency**

- **DSO involvement**

- **Main goals of the Outage Coordination Process: link with current practices**

- **Handling Forced Outages**

- **Real-time execution of the Availability Plans**

Relevance of assets for the Outage Coordination Process

GENERAL PRINCIPLES

A methodology for assessing whether a Significant Grid User or a Grid Element can be qualified as a Relevant Asset for the Outage Coordination Process shall be based on the following principles:

1.based upon a reference Common Grid Model;

2.Operational Security Limits are taken into account;

3.the influence of the Availability Status of an asset on assets located in another Responsibility Area is determined (sensitivity analysis);

4.when this influence is above a certain threshold, the Significant Grid User or the Grid Element is qualified as a Relevant Asset.

entso**e**

- **This methodology shall be harmonized at least on the Synchronous Area level;**

- **This methodology shall be approved by NRAs;**

- **The lists of Relevant Assets are the result of applying the methodology; and**

- **All concerned parties (TSOs, NRAs, Significant Grid Users, DSOs) shall be informed on the contents of these lists.**

entso**e**

- **Transparency regulations set up a framework for publishing feasible and coordinated Availability Plans;**

- **In this transparency framework Availability Plans shall be published as soon as the coordinated decision has been reached;**

- **The preliminary Availability Plans and change requests used in the Outage Coordination Process serve as "working documents" to enable coordination between all parties (during the decision process).**

entso*e*

Long-term indicative Availability Plans

- **Transparency regulation requires information on the Availability Status to be provided starting 3 years in advance;**

- **The Outage Coordination Process starts Year-Ahead;**

- **A new article was included to ensure that a preliminary assessment on the feasibility of the long-term Availability Plans will be provided from the TSO to the Outage Planning Agents for their information.**

entso e

DSO involvement in the Outage Coordination Process

- **All information on Availability Plans shall also be provided to the DSO if the Relevant Asset is located in the DSO's grid;**

- **The Availability Status of Relevant Grid Elements located in the Distribution Network is planned in cooperation between TSO and DSO;**

- **DSOs are involved in the coordination process of updating the Year-Ahead Availability Plans;**

- **All information on testing periods shall also be provided to the DSO if the Relevant Asset is located in the DSO's grid.**

entsoe

Outage Coordination Process: main goals

The Network Code enforces:

1. Starting from Year-Ahead, and up to real-time, at every point in time having a common coordinated Availability Plan for Relevant Assets that is feasible for execution according to the best estimates of each party.

2. Coordination between parties (TSOs, DSOs and Outage Planning Agents) whenever Outage Incompatibilities have to be resolved, and this in a symmetrical and reciprocal way.

The Network Code does not envision:

1. Changing current (and very different) best practices installed in the different systems. The way of coordinating, making decisions and financially compensating parties is determined within the national regulatory framework.

entso**e**

Article 39

Coordination processes in case of detected Outage Incompatibilities

1. For all Outage Planning Agents involved in the coordination process, the TSO connecting the Relevant Assets shall conduct this process in line with the applicable legal framework.

2. This Article shall apply to each coordination process that is initiated pursuant to the detection of Outage Incompatibilities according to Article 40.

entsoe

Article 40

Updates to the Year-Ahead Availability Plans

2. Each Outage Planning Agent or DSO that initiates an adaptation of the coordinated Availability Plan of the Relevant Assets under its responsibility shall send a change request to the connecting TSO(s). The connecting TSO(s) shall follow the following procedure:

    a) receive the change request;

    b) assess as soon as reasonably practicable whether Outage Incompatibilities arise as a result of this change to the coordinated Availability Plan of Relevant Assets;

    c) in the event that Outage Incompatibilities are detected, initiate a coordination process involving:

        i. Outage Planning Agents and DSOs for the Relevant Assets of which the Availability Status is impacted; and

        ii. the TSO(s) and DSO(s) connecting the Relevant Assets mentioned in (i);

    d) issue a reasoned decision on the change request:

        i. the change request shall be validated when no Outage Incompatibility is detected or remains after coordination; and

        ii. the change request shall be rejected when all detected Outage Incompatibilities cannot be relieved after coordination;

In case a coordination process according to Article 40(2)(c) of the [NC OPS] is initiated:

- If the current time is more than three months ahead of the outage start time, the TSO shall adapt the Availability Plan of its Grid Elements if possible for relieving the detected Incompatibilities;

- If the current time is less than three months ahead of the outage start time, the TSO has the right to reject the change request.

entsoe

In case a coordination process according to Article 40(2)(c) of the [NC OPS] is initiated:

- **The TSO shall adapt the Availability Plan of its Grid Elements if possible for relieving the detected Incompatibilities.**

A (financial) mechanism shall be installed to allow the TSO to buy off generation units in the market, should this be necessary to execute works on its Grid Elements.

entso e

In case a coordination process according to Article 40(2)(c) of the [NC OPS] is initiated:

- **The TSO can declare the maximal allowed production of some generators in order to create a secure condition to perform grid outages, only if these are planned with an advance greater than 8 days;**

- **When the Availability Status of a generator is changed from Available to Unavailable by the OPA, the TSO can reject the change request (if security or adequacy of the System is at stake).**

entso**e**

The current drafting of the network code allows for a big flexibility in nationally installed principles (law, bilateral contracts, …). It therefore does not directly impose a change of current national (best) practices.

Adapting this current draft to one of the national examples given in the previous slides would limit the practical flexibility of the code, and will change current practices in several systems.

entso**e**

New requirements were introduced to allow Outage Planning Agents to send updates to their proposed Availability Plan during the Year-Ahead coordination process.

These change requests will be handled according to Article 40, following the same coordination procedures based on existing national regulation.

DSOs are involved as their network can also be impacted by Forced Outages.

The difference needs to be made between:

- **Forced Outages (art. 44): cannot be foreseen, no flexibility: consequences have to be contained;**

- **Change requests (art. 40): are foreseen, in case of Incompatibilities coordination has to be initiated.**

Transparency regulations do not make this distinction.

entso**e**

The involvement of DSOs is included.

Inclusion of respecting safety limits:

Upon the request of a TSO or DSO before executing an unavailable status of a Relevant Asset which puts the system in an Alert, Emergency or Blackout State, each concerned party shall delay the corresponding unavailable status according to the instructions of the TSO or DSO to the extent possible while respecting the technical and safety limits of the Relevant Assets.

entso e