

Connection & Compliance processes

Experts Group – Implementation NCs (session 1)

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Agenda

- 1 Network Codes requirements
- 2 Current versus Future
- 3 Procedure for type A Generators
- 4 Procedure for type B/C Generators
- 5 EON-ION-FON Procedure
- 6 Limited Operational Notification

Network Codes requirements

NC	Categories of Grid Users	Procedure	NC Articles
RfG	Generators type A/B/C/D	Scope of application	Art. 3
RfG	Generators type A/B/C/D	Regulatory aspects	Art. 7
Rfg	Generators type A/B/C/D	Generalities	Art. 29
RfG	Generators type A	Installation Document	Art.30
RfG	Generators type B/C	Power generating module document	Art. 32
RfG	Generators type D	EON / ION / FON / LON	Art. 33-37
DCC	Transmission-connected demand facility / distribution facility / distribution system	Scope of application	Art. 3/4
DCC	Transmission-connected demand facility / distribution facility / distribution system	Regulatory aspects	Art. 6
DCC	Transmission-connected demand facility / distribution facility / distribution system	EON / ION / FON / LON	Art. 22-26
DCC	Demand response services > 1000V	Installation Document	Art. 32
DCC	Demand response services < 1000V	Demand response unit Document	Art. 33
DCC	Transmission-connected demand facility / distribution facility / distribution system	Responsibility of DSO and demand facility owner	Art. 34
DCC	Transmission-connected demand facility / distribution facility / distribution system	Tasks of SO concerning compliance	Art. 35

Network Codes requirements

Rfg Art. 3 & DCC Art. 3/4

Application of the NCs to new users and for substantial modifications

The definition of a substantial modification will be discussed later in the topic "Modernization of interconnection point".

Rfg Art. 7

The topic "Compliance verification" can influence the connection and compliance process

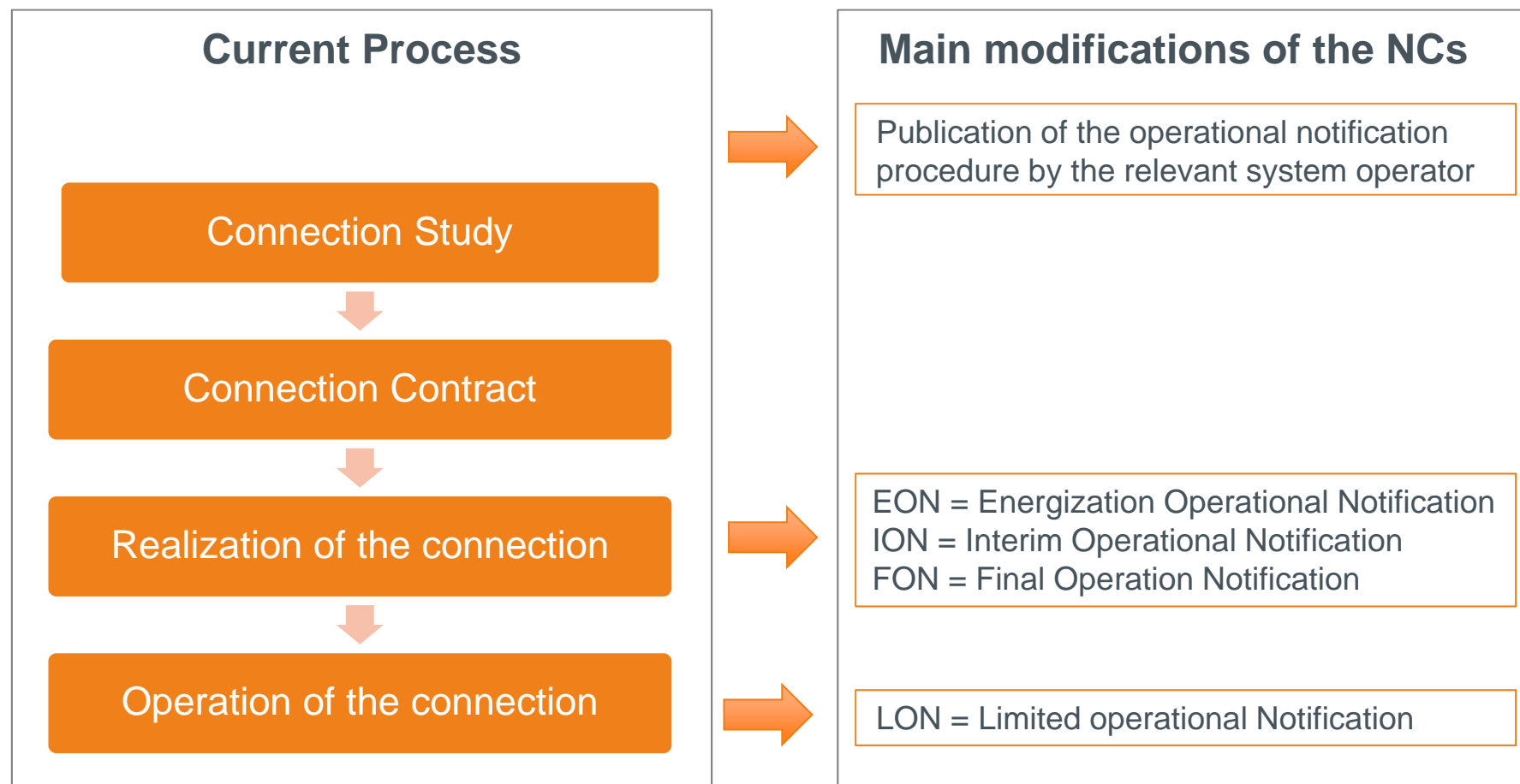
DCC Art. 6

The topic "Common regulatory provisions" can influence the connection and compliance process, but actually no impact or compliancy detected.

DCC Art. 32-35

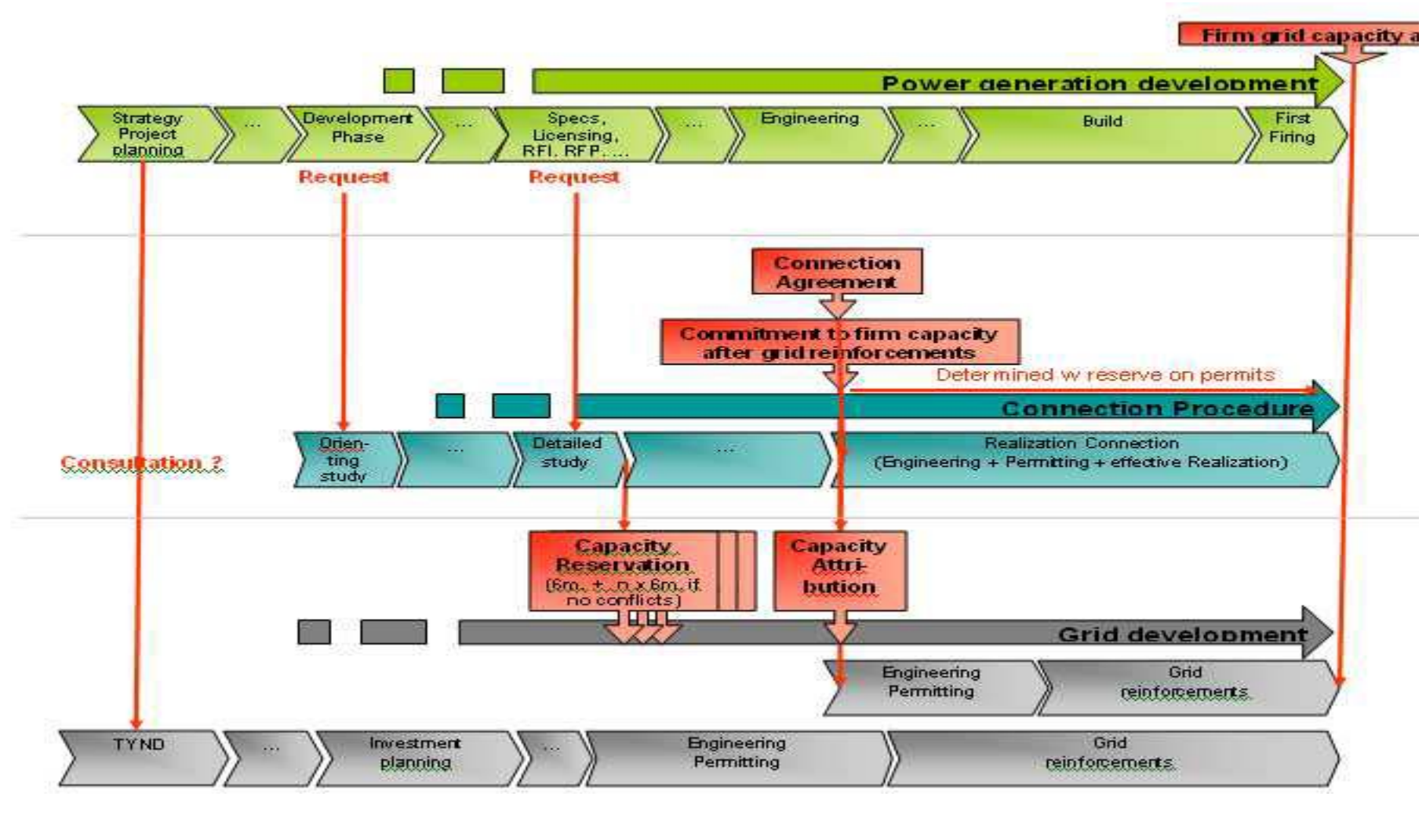
This this process (DSR) will be examined in a second step

Current versus Future connection process

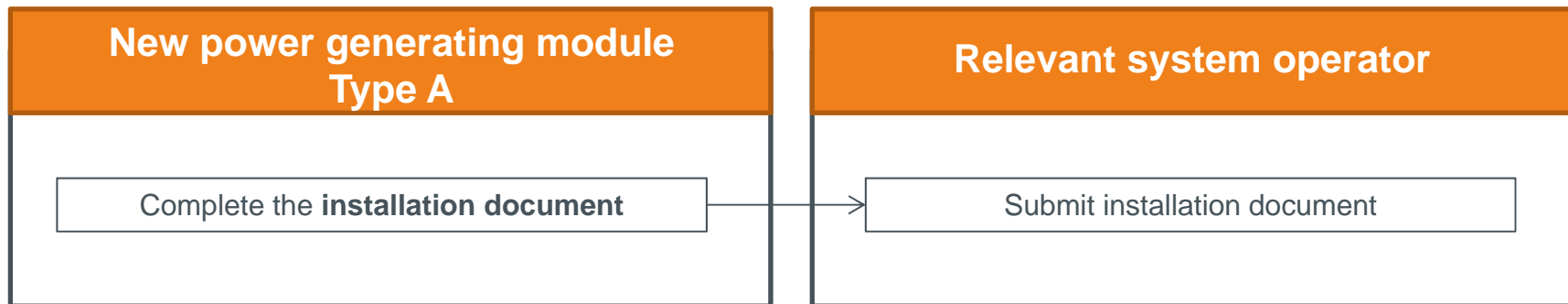


Elia philosophy: Integrate the NCs requirements for the connection of grid users (generation and demand facilities) in the existing process. No intention to completely modify the process if not required, but potential re-evaluation of specific points are possible.

Capacity reservation



Process generators type A

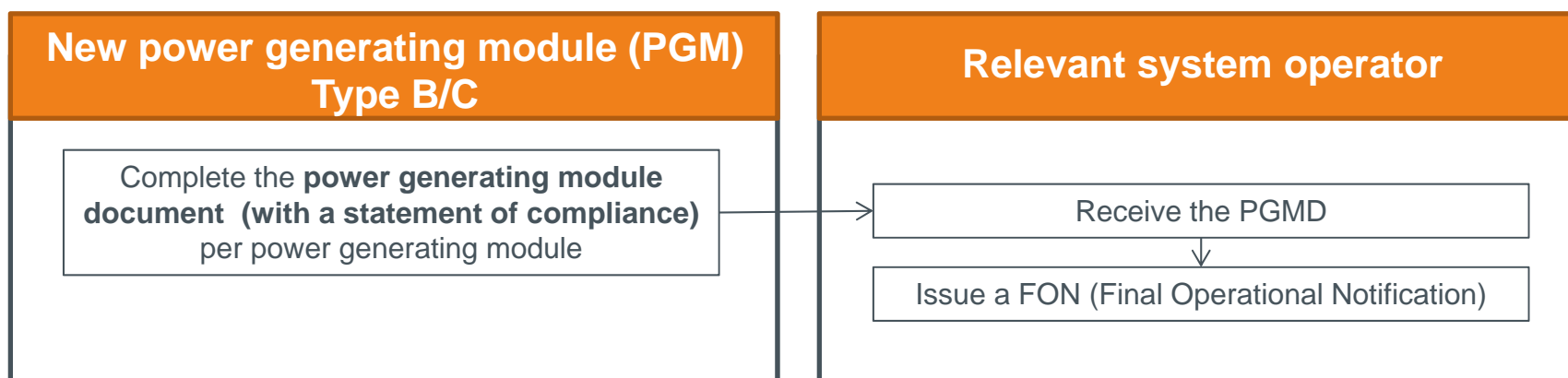


 Installation document with at least (content specify by the NCs, Art. 30.2):

- the location at which the connection is made
- the date of the connection
- the maximum capacity of the installation in kW
- the type of primary energy source
- the classification of the PGM as an emerging technology according to Title VI
- reference to equipment certificates / information to provided
- the contact details & signatures (owner and installer)

If Elia must connect generators type A: minor modifications of annex 1 of the connection contract are needed to include all the required information

Process generators type B/C



Based on the RfG NC, Power generating module document may contain:

- evidence of an agreement on the protection and control settings
- itemized statement of compliance
- detailed technical data of the power generating module
- equipment certificates issued by an authorized certifier
- for Type C power generating modules, simulation models
- compliance test reports demonstrating steady-state and dynamic performance, including use of actual measured values during testing
- studies demonstrating steady-state and dynamic performance

The information to provide will be determined and discussed in the related topics.

Elia proposal: modification of the annex 1 of the connection contract and/or TR most probably

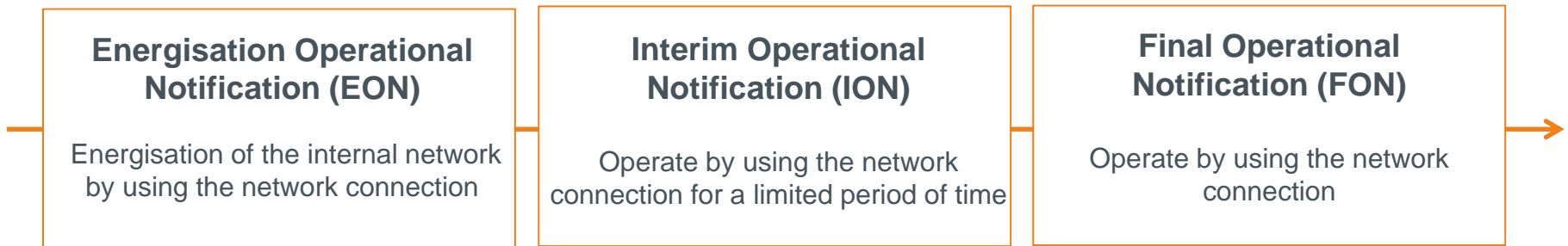
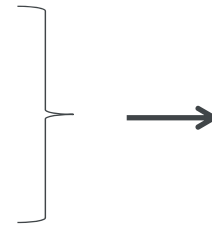
Operational notification procedure EON-ION-FON

Procedure applicable to:

- Generators of type D
- Demand facilities
- CDS
- Distribution systems

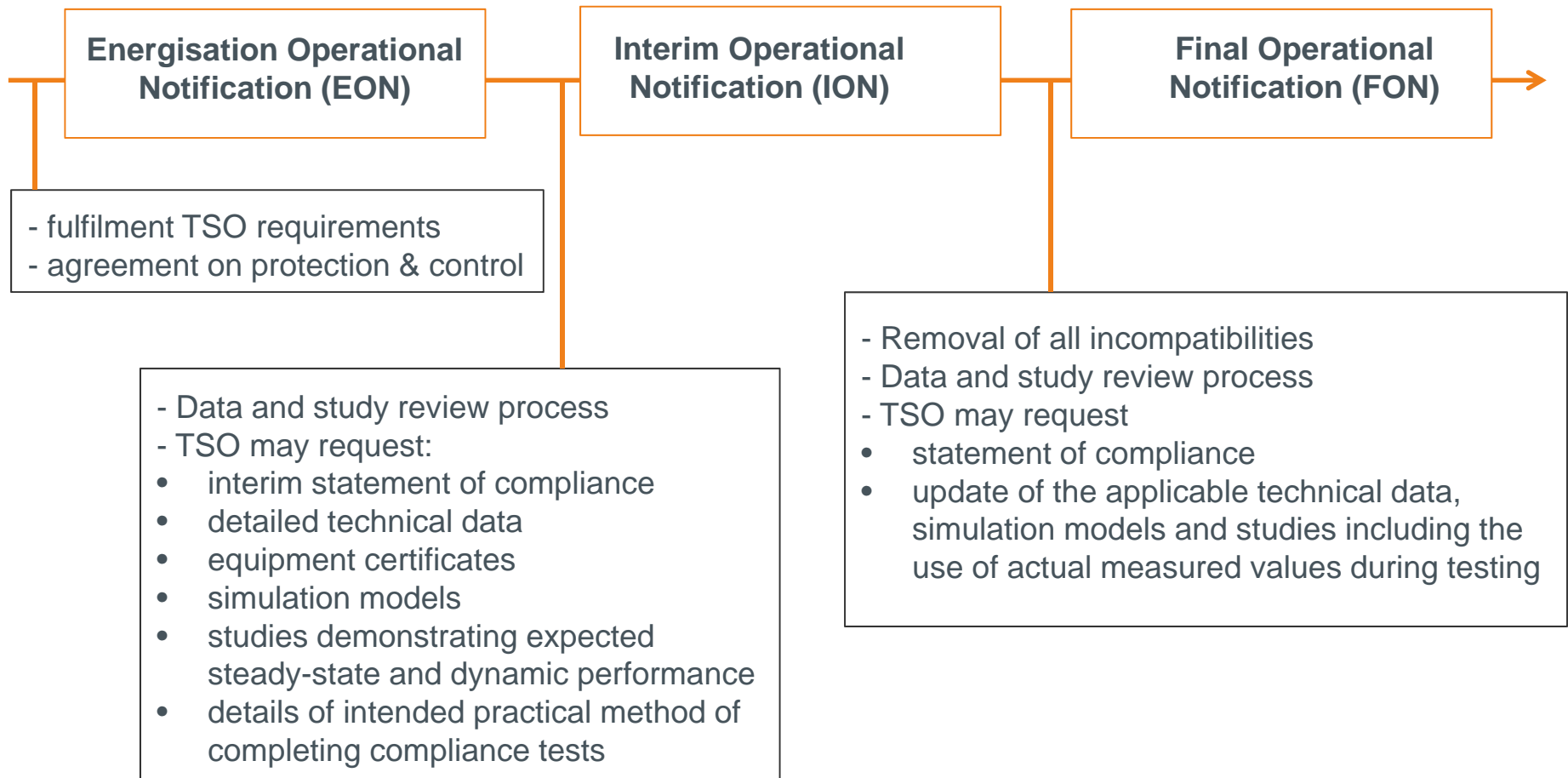
Compliance to demonstrate to:

The relevant system operator



Elia proposal: modifications of the connection contract and it will impact the TR and SOK

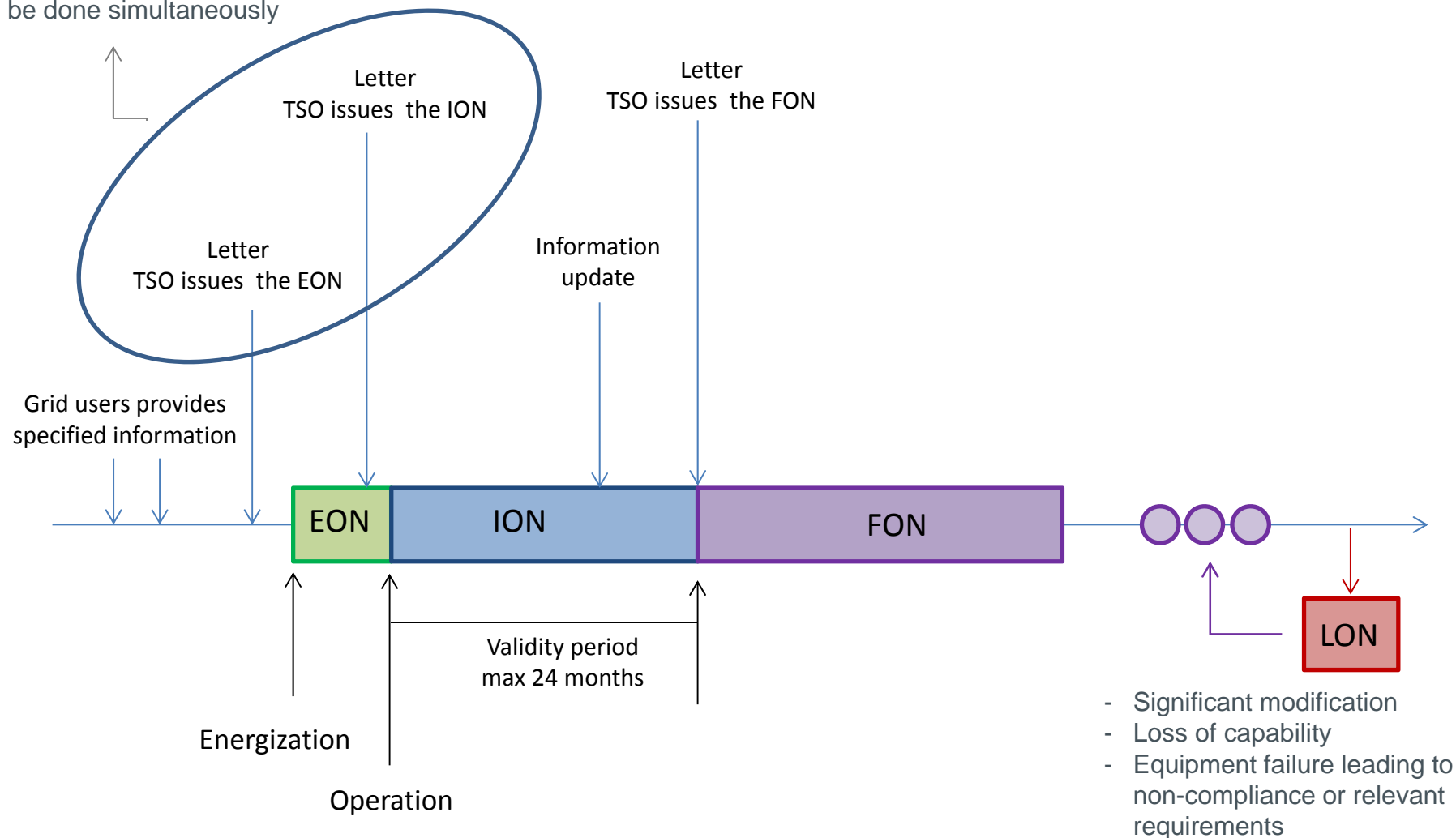
Operational notification procedure - Requirements



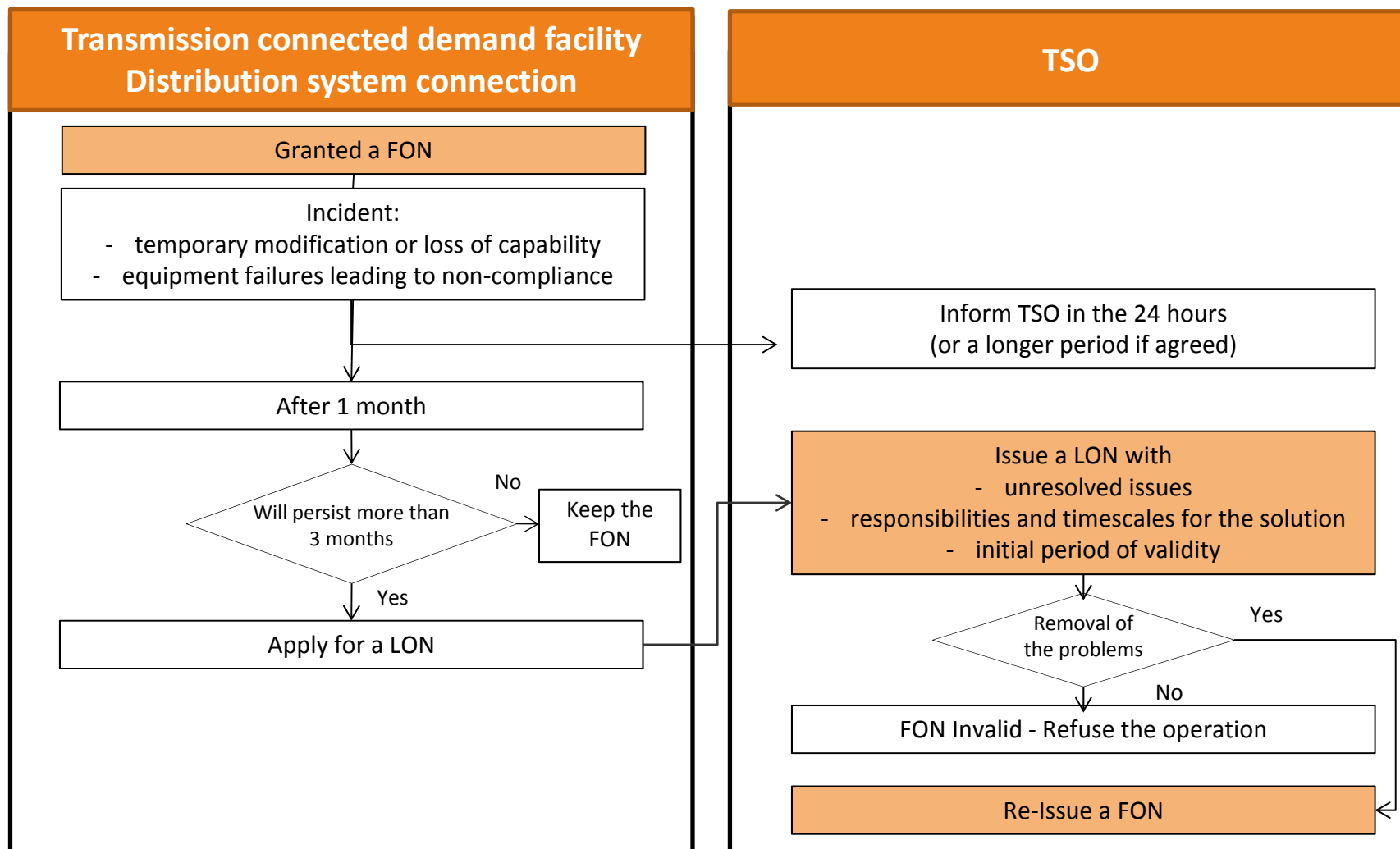
The requested information will contain at least what is asked currently.

Operational notification procedure – TSO Implementation

To be analyzed if it could be done simultaneously



Limited operational notification (LON)



Elia proposal: modifications of the connection contract and it will impact the TR and SOK

Many thanks for your attention!

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