

# European Market Coupling

apx power spot exchange



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# Operational Department Visit

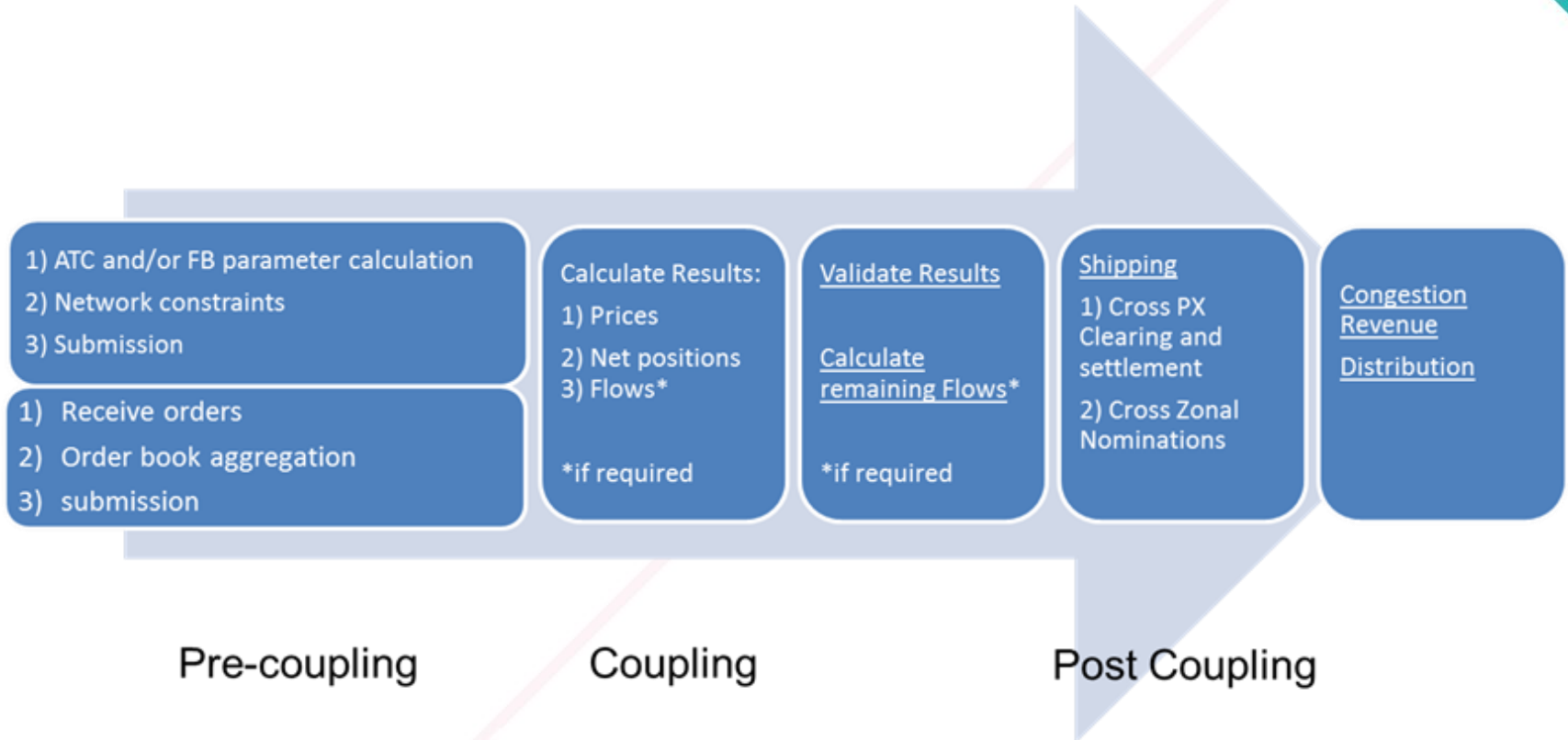
**To manage the numbers within a live working environment it is necessary to split the group into two**

- **Operational department visit (30 mins)**
- **Presentation on Market Business Run (30 mins)**

High level overview

# MARKET BUSINESS RUN

# Price Coupling Process



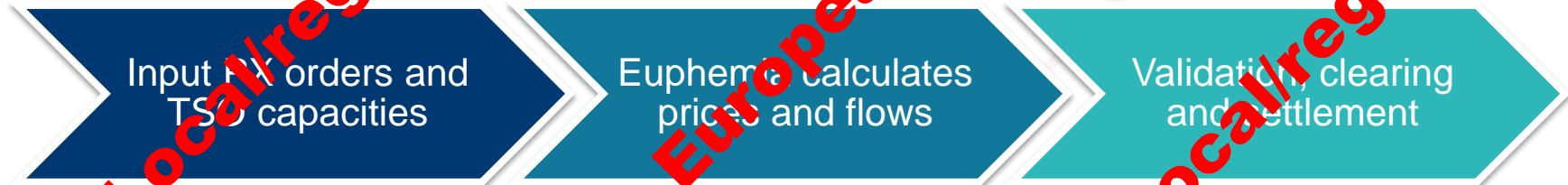
General term for ATC and/or FB parameters used = CZCs: Cross Zonal Capacities

# MRC – Decentralized approach

Pre-coupling

Coupling

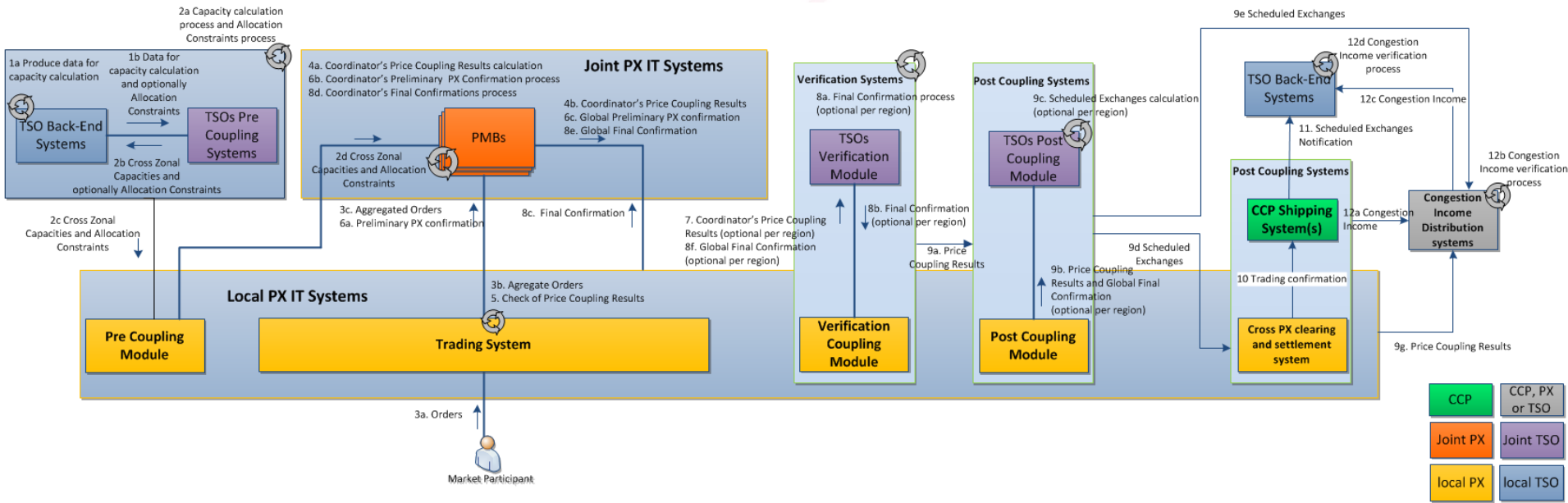
Post-coupling



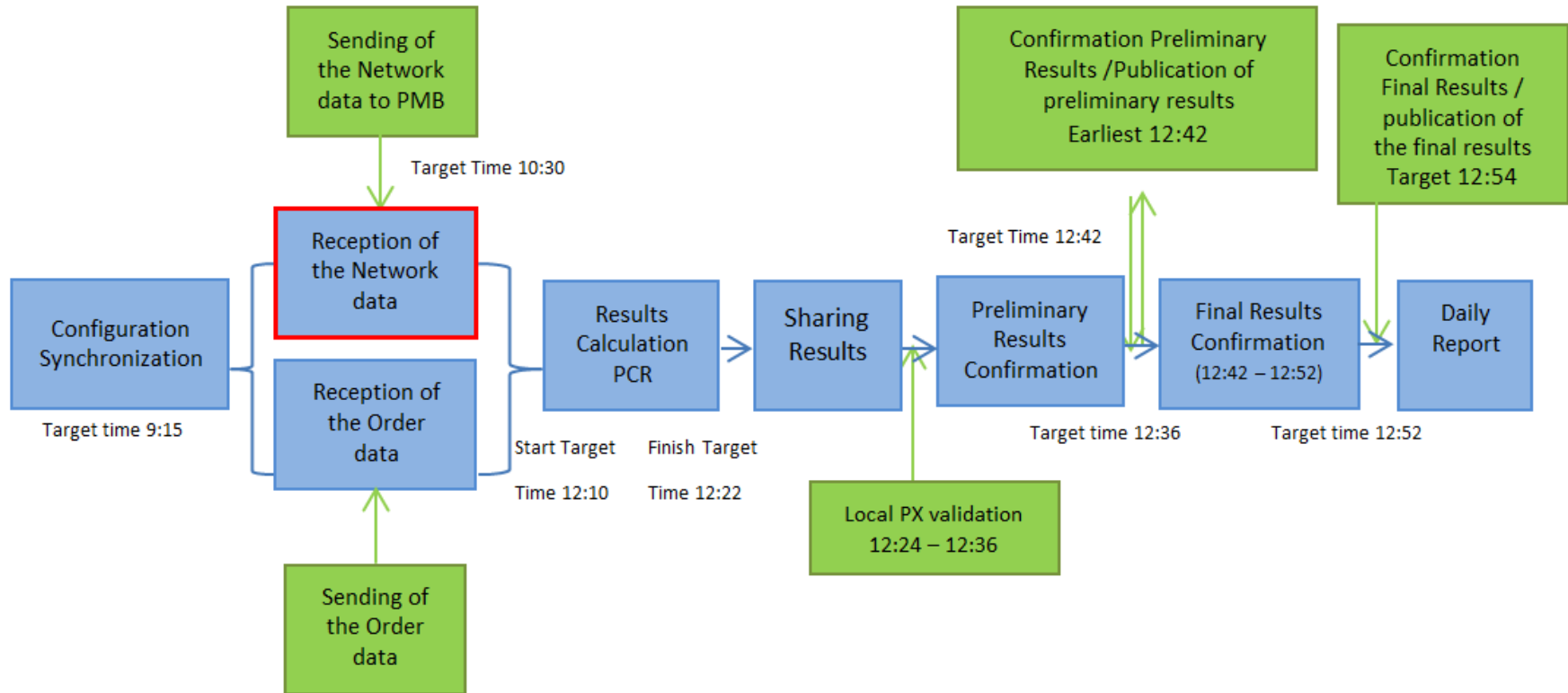
Local/regional

European

Local/regional

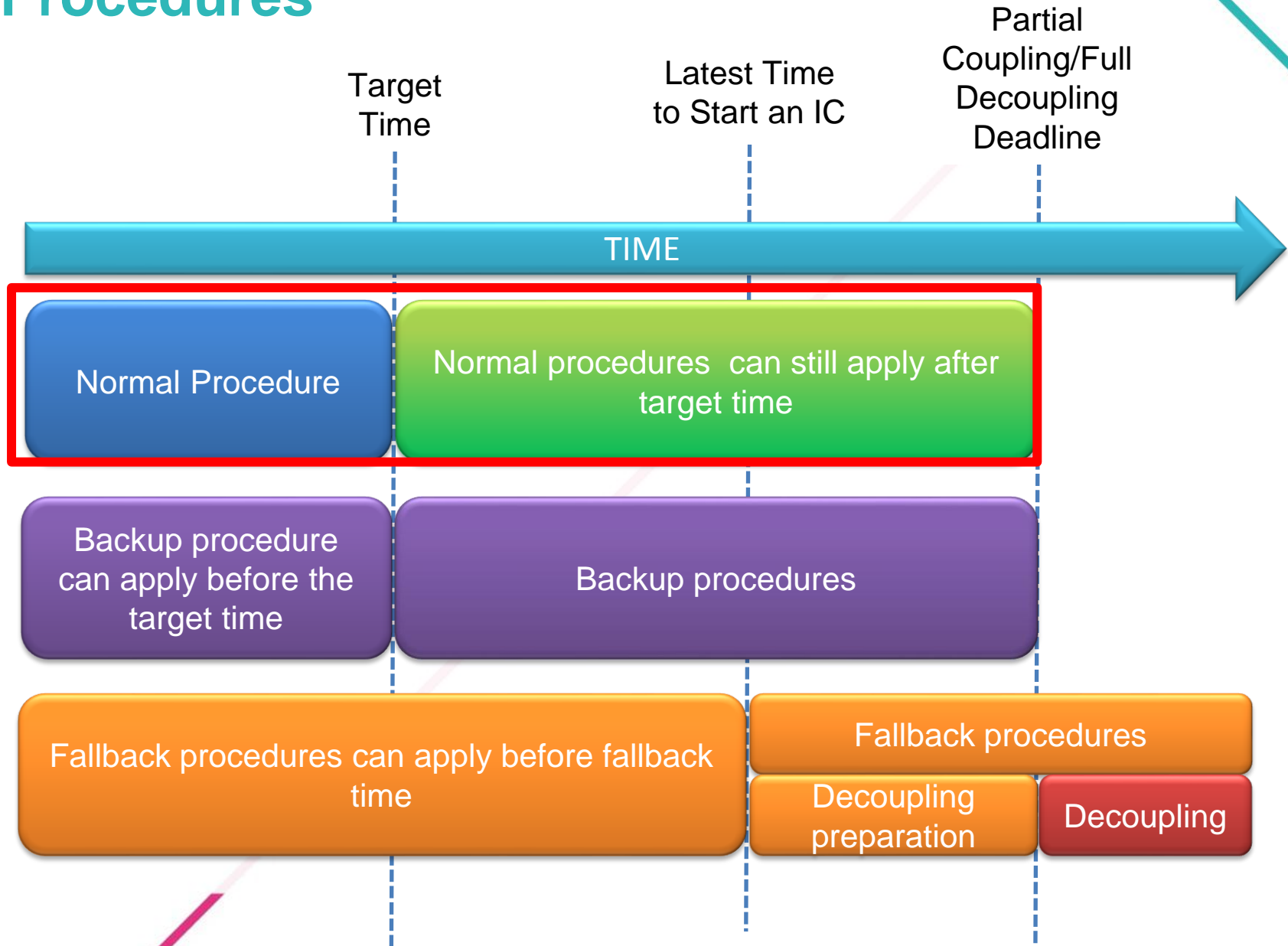


# MRC – Target Operational Timeliness

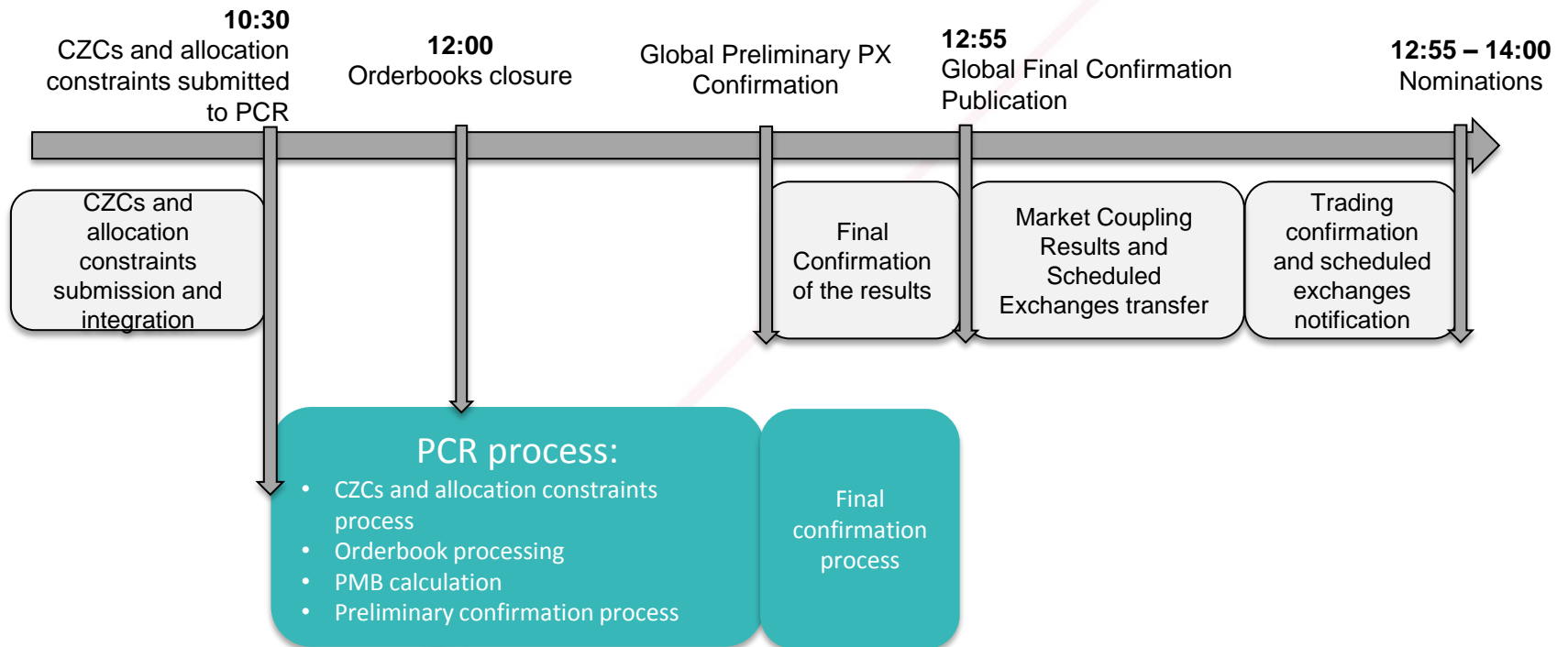


PCR in blue /Own PX in green

# Procedures

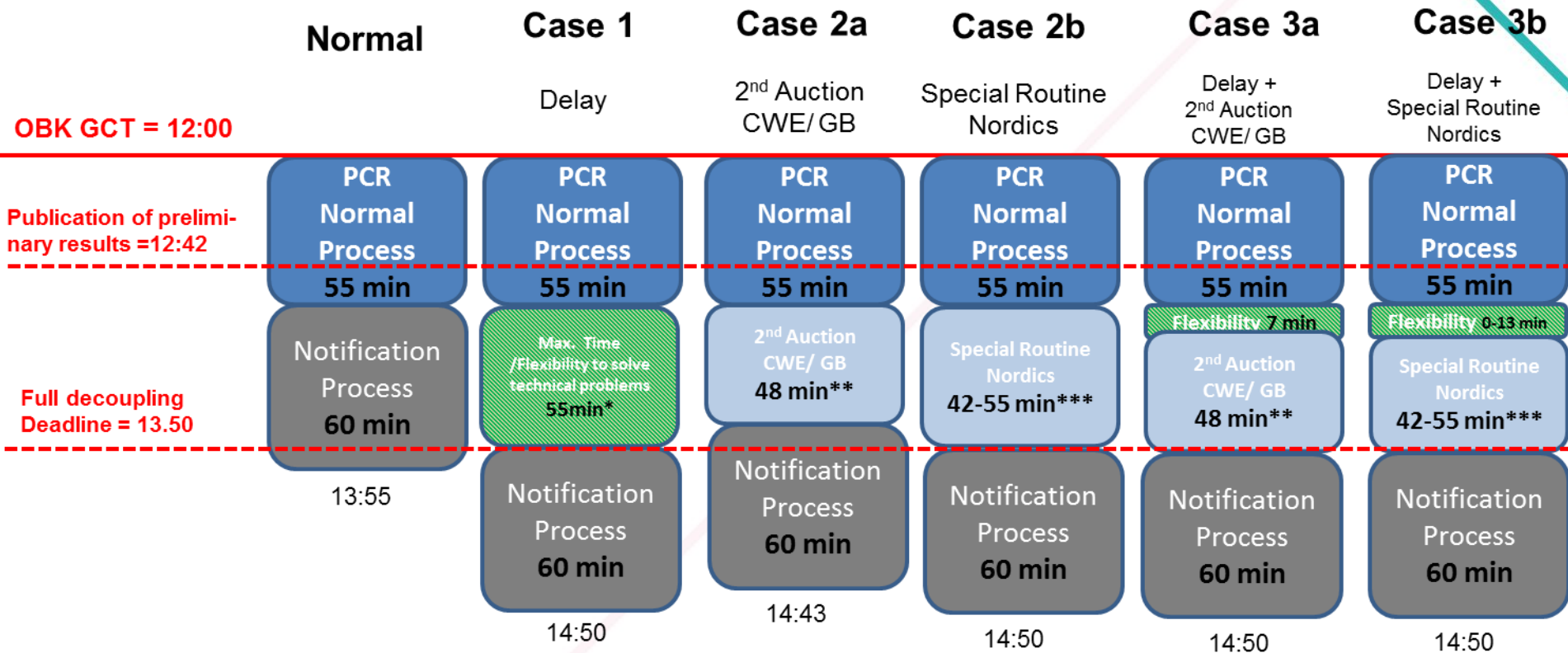


# NWE Business Process





# PCR Process Timings for NWE



**Final Notification deadline = 15:30 which applies to:  
Internal CWE, CWE-GB and CWE-Nordic interconnectors**

- \* This is the **maximum** time which could be used to solve a technical problem in order to avoid a decoupling. If the technical problem is resolved in less than 55 min than the next processes will start earlier.
- \*\* the Second Auction in CWE / GB is a single process taking 48 minutes.
- \*\*\* the Special Procedure for the Nordics is an iterative process which will run the number of times necessary taking into the 13.50 full decoupling deadline when NWE is coupled.

# Pre-Coupling Process

The Pre-coupling process consists three steps:

Start

A green arrow pointing downwards from the 'Start' text to the first step box.

1 - Shared configuration file & Systems check (PCR Coordinator role)

A large, light blue downward-pointing arrow connecting the first step box to the second step box.

2 - Receive BritNed, NorNed & CWE CZCs and the FX-Rate (CWE MO role)

A large, light blue downward-pointing arrow connecting the second step box to the third step box.

3 - Validation of all network data in the cloud (PCR Coordinator role)

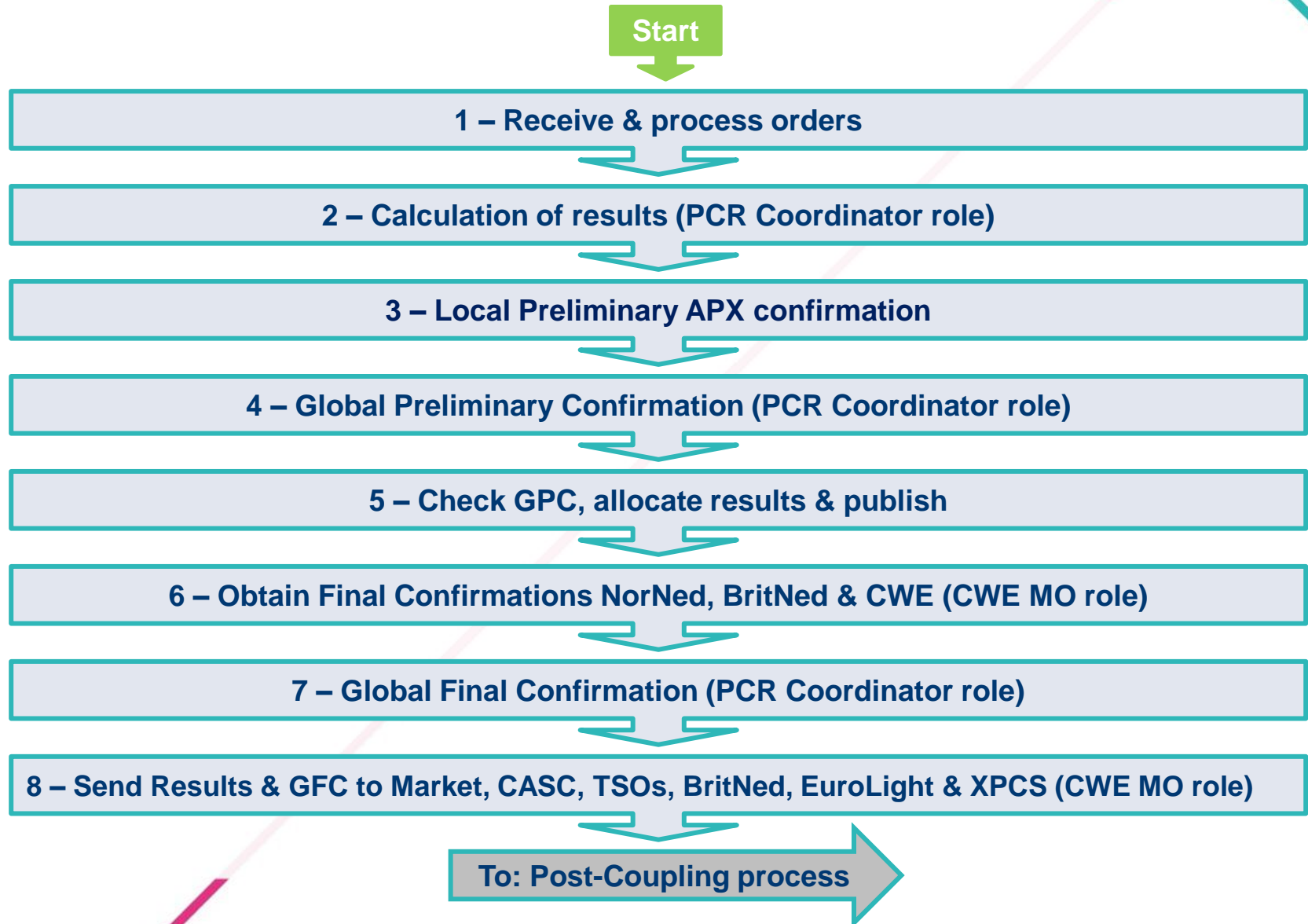
A large, light blue downward-pointing arrow connecting the third step box to the final arrow.

To: Coupling process

A large, light blue rightward-pointing arrow indicating the transition from the pre-coupling process to the coupling process.

# Coupling Process (PCR)

The Coupling process consists 8 steps:



# PCR Process Timings for NWE

## Normal process – 55 minutes

**PCR  
Normal  
Process  
55 min**

12:00	OBK GCT
12:00 – 12:10	Check of OBK and sending to PMB
12:10 – 12:27	Calculation
12:28 – 12:41	Preliminary PX validation
12:42	Publication of preliminary results (incl. market clearing price) to the market and in parallel sending of these preliminary results for final confirmation/approval to the TSOs
12:42 – 12:54	Final TSO validation
12:55	Publication of Final Results (incl. market clearing price) Start of Notification Process

# Post Coupling Process – Nominations

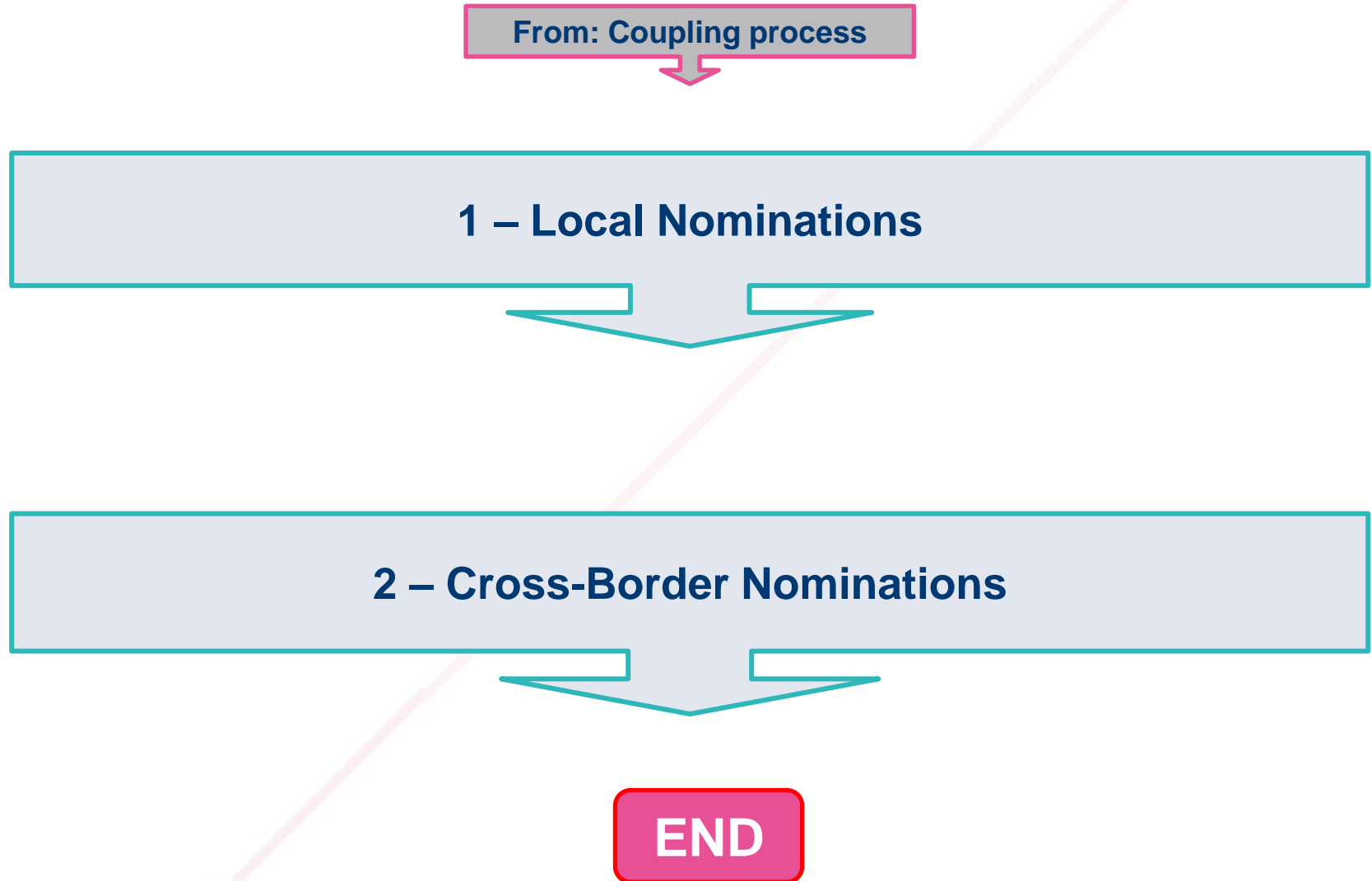
The Post coupling process consists 2 steps:

From: Coupling process

1 – Local Nominations

2 – Cross-Border Nominations

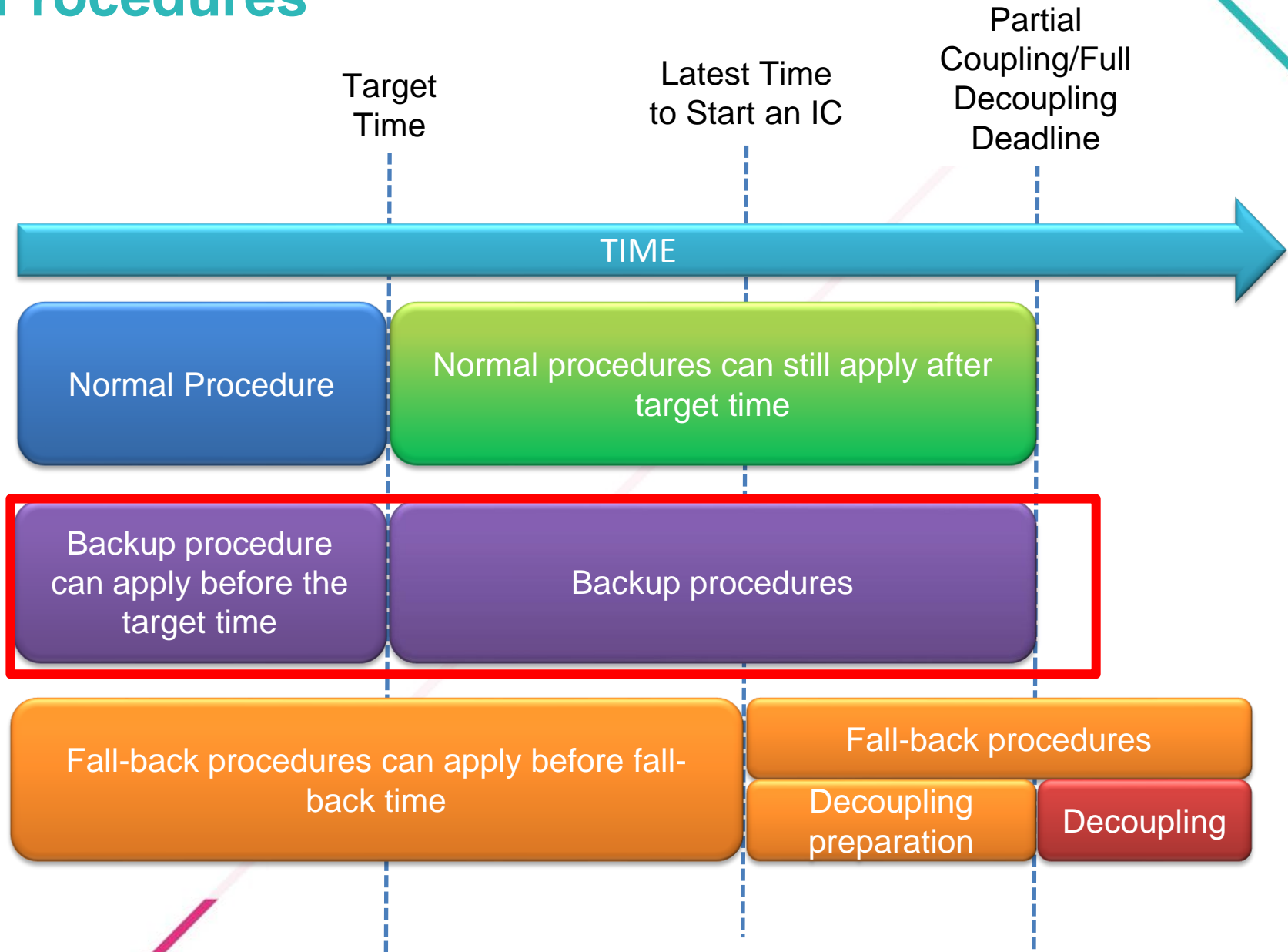
END



**MARKET BUSINESS RUN**

# **BACKUP SCENARIOS**

# Procedures



# Process Delayed

## Pre-coupling

- Deadline to solve incidents with Network Data (CZCs) publication is 11:45 CET

## Coupling

- Time allowance for **technical problem** solving up to 55 min
- Time allowance for special market procedures such as handling of curtailment situations or price threshold reached via a **second auction** used by CWE PXs or the NPS-applied regulated routines that include peak load capacity (production/load) reserves activation.
- **Deadline for final Market Results is 13:50 CET**

Max. Time  
/Flexibility to solve  
technical problems  
55min

2<sup>nd</sup> Auction  
CWE/ GB  
48 min

Full decoupling  
Deadline = 13.50

## Post-coupling

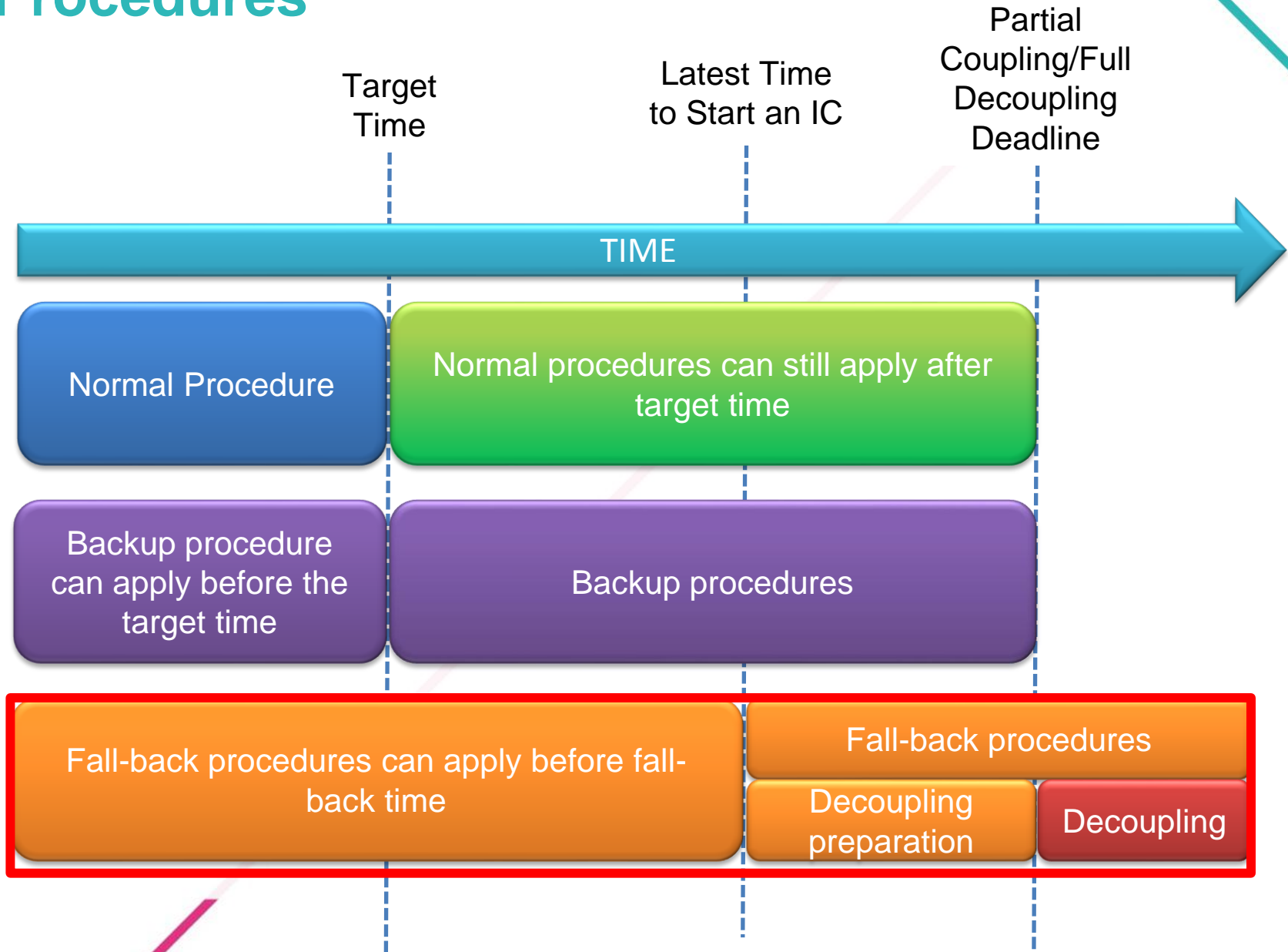
- **Final notification deadline of 15:30 in CWE, CWE-GB and CWE-Nordic interconnectors**








**MARKET BUSINESS RUN**

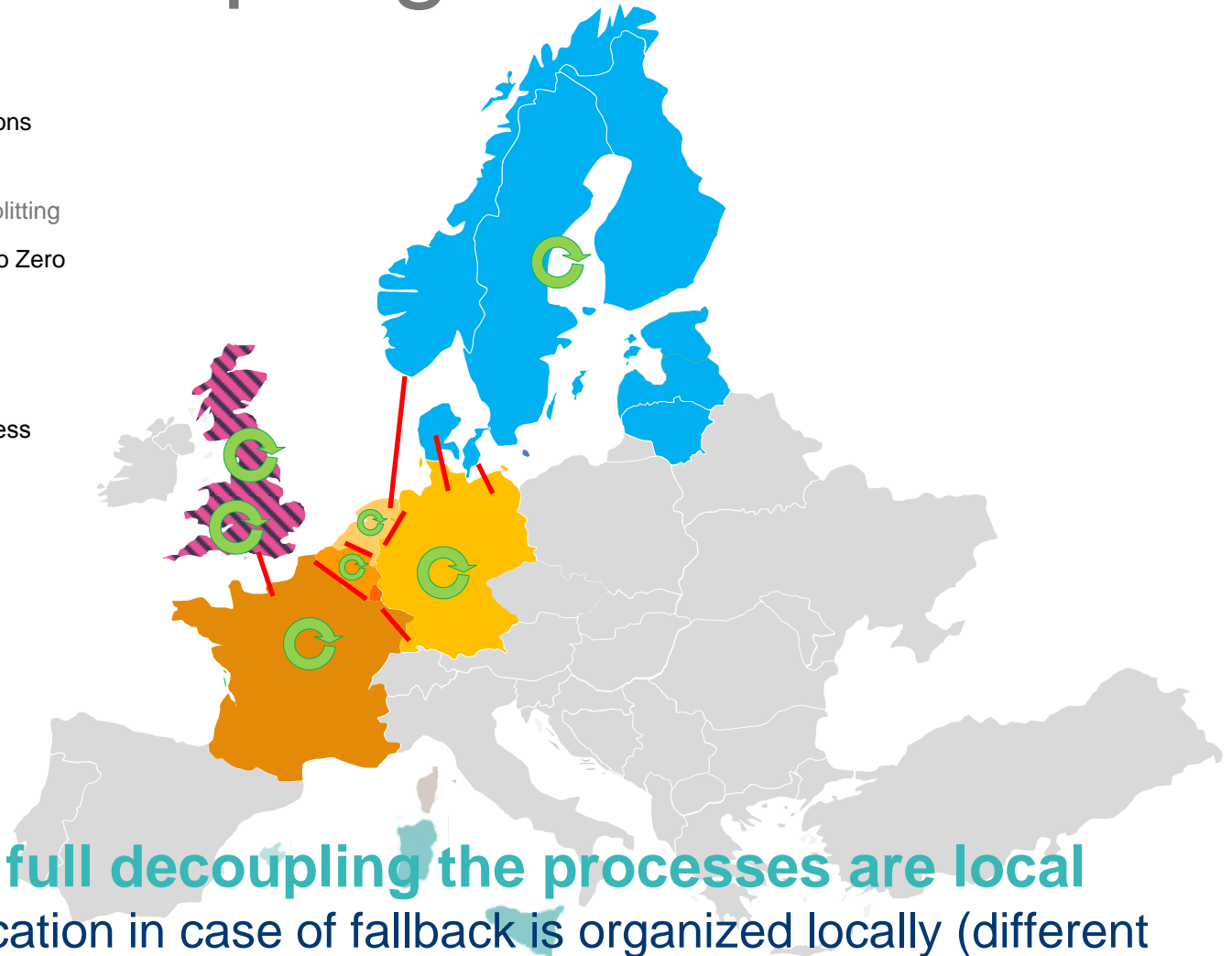
# **FALL BACK SCENARIOS**

# Procedures



# Full Decoupling scenario

-  CWE : 4 local PX auctions
-  Nordic-Baltic Market Splitting
-  Virtual Capacity is set to Zero  
2 local PX auctions
-  Shadow Auctions
-  "Local" matching process



**In case of full decoupling the processes are local**

- Communication in case of fallback is organized locally (different info, different timings)

# PCR Process Timings for NWE

## Case 4

Full Decoupling

## Case 5a

Full Decoupling  
+ Local 2<sup>nd</sup> Auction CWE /GB

## Case 5b

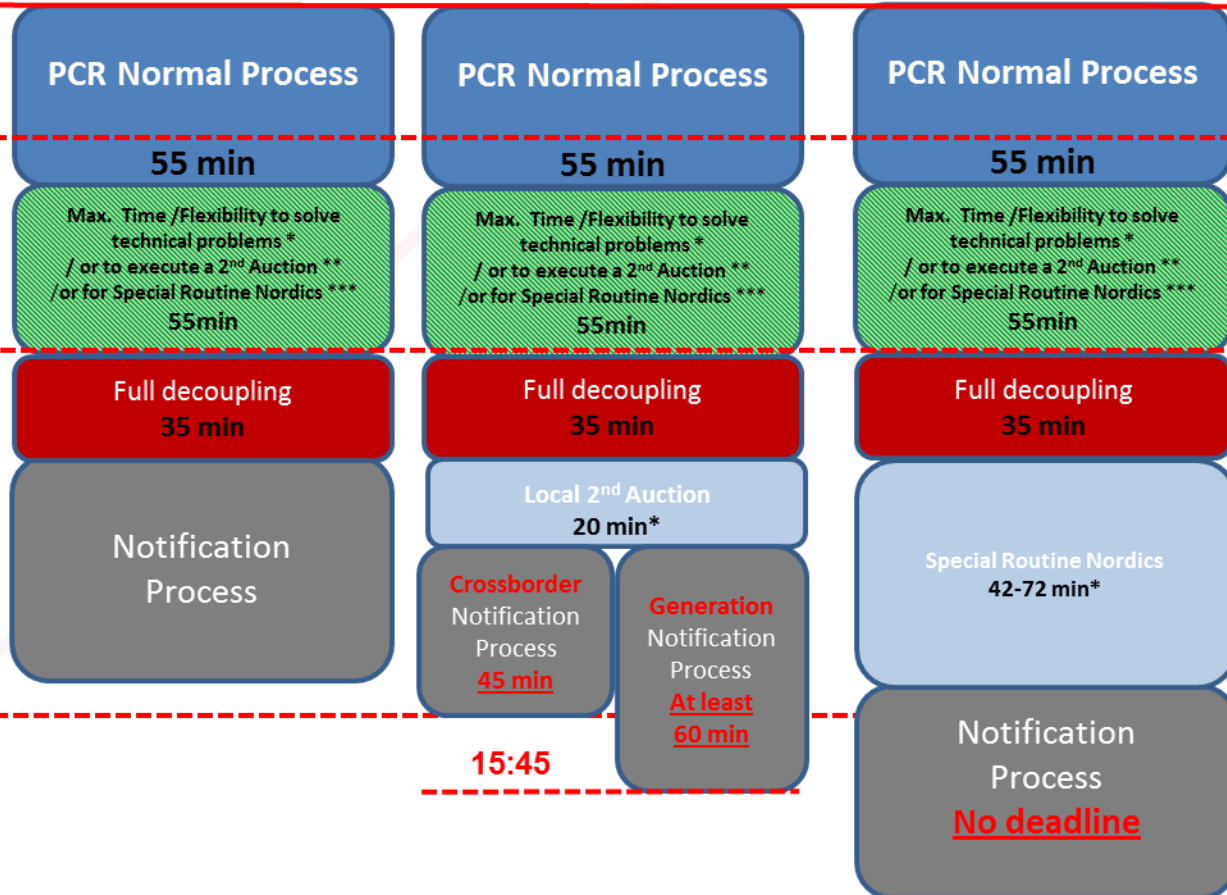
Full Decoupling  
+ Special  
Routine Nordics

OBK GCT = 12:00

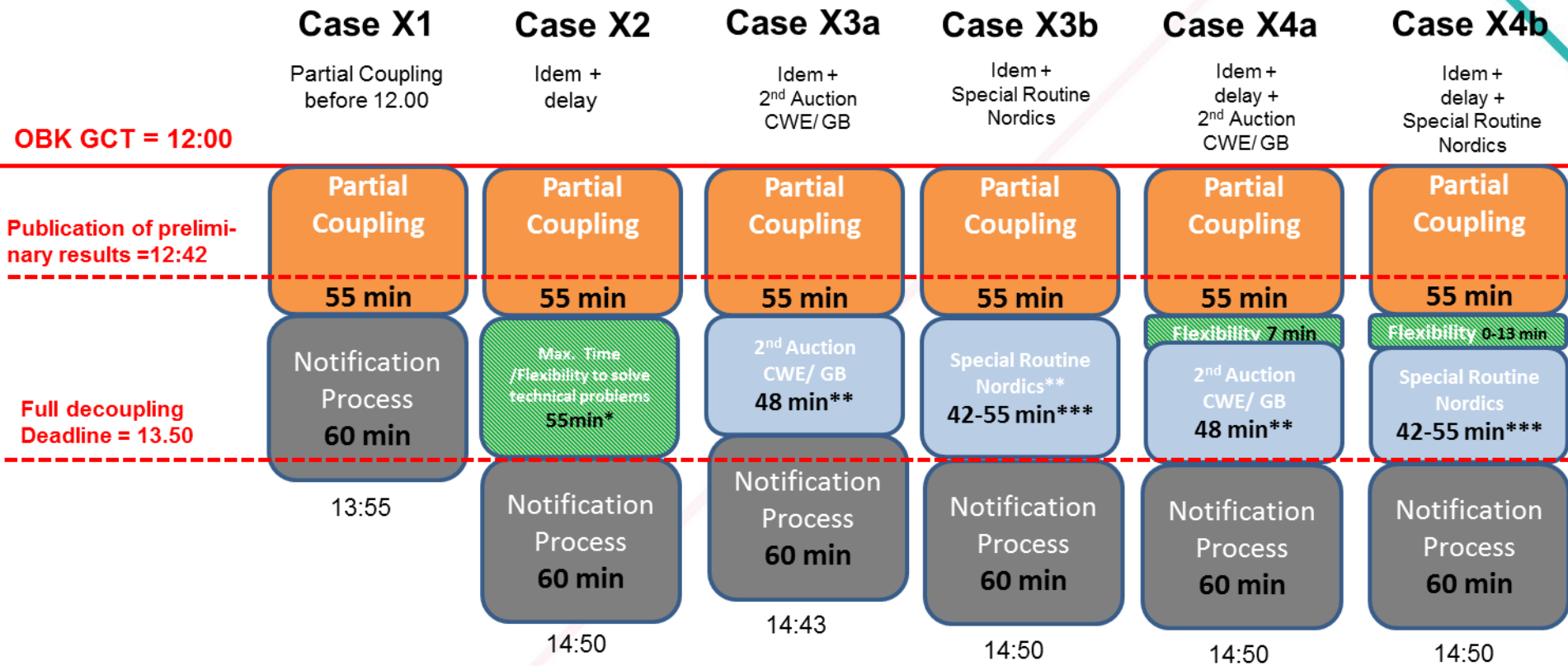
Publication of preliminary  
results =12:42

Full decoupling  
Deadline = 13.50

Final Notification deadline =15:30  
which applies to: Internal CWE,  
CWE-GB and CWE-Nordic  
interconnectors



# Partial Decoupling before OBK GCT (12:00)



**Final Notification deadline = 15:30 which applies to: Internal CWE, CWE-GB and CWE-Nordic interconnectors**

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# Partial Decoupling after OBK GCT (12:00)

## Case X7

Partial Coupling after OBK GCT (12:00)

## Case X8

Idem + followed by full Decoupling

## Case X9a

Idem + full Decoupling + Local 2<sup>nd</sup> Auction for CWE / GB

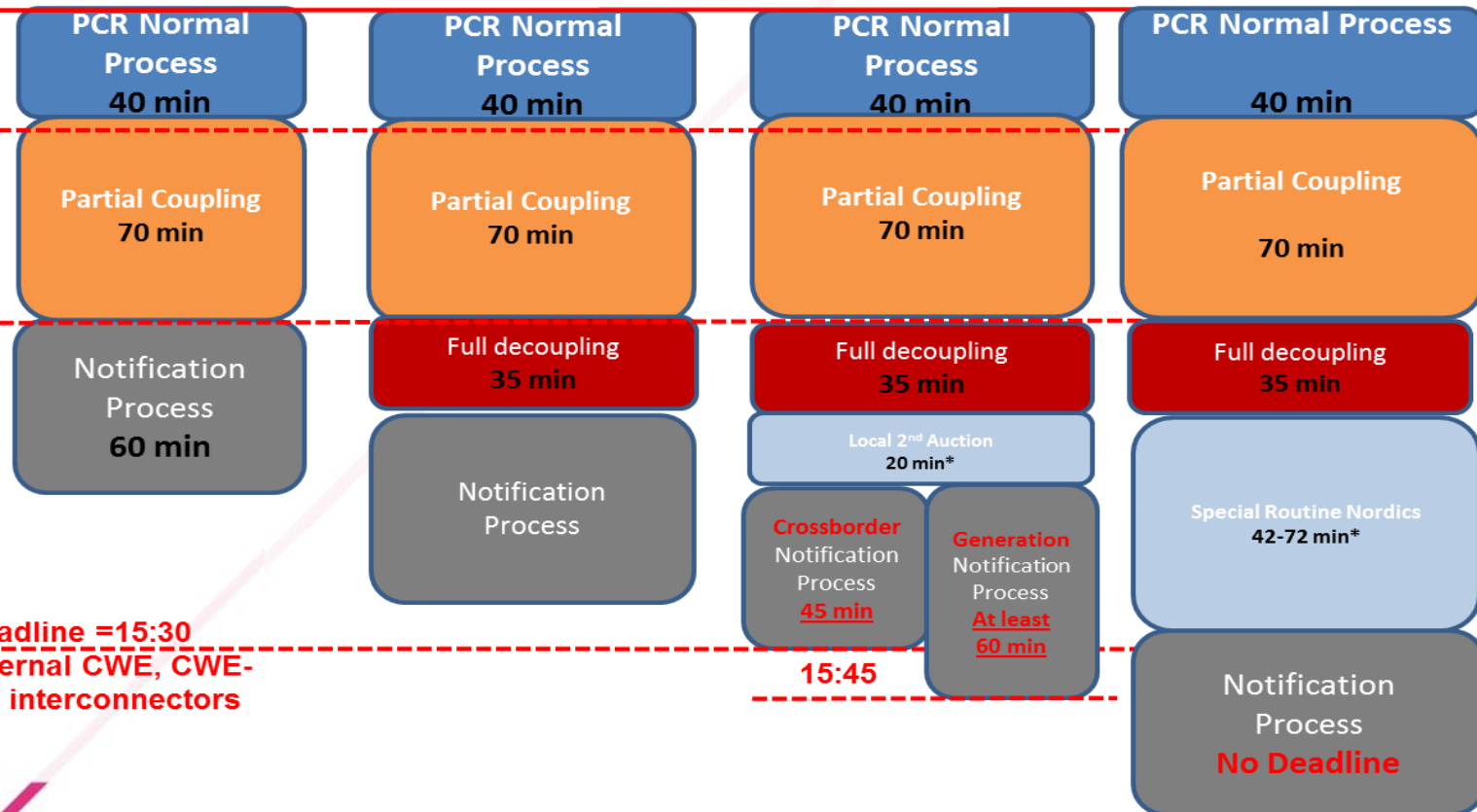
Idem + full Decoupling + Nordic Special Routine

OBK GCT = 12:00

Publication of preliminary results = 12:42

Full decoupling Deadline = 13:50

Final Notification deadline = 15:30 which applies to: Internal CWE, CWE-GB and CWE-Nordic interconnectors



# Decoupling scenarios

Where's the problem	What decouples?	Resulting configuration
APX/Belpex	CWE internal borders (FR-DE, FR-BE, BE-NL, NL-DE) and NorNed and BritNed and GB-GB	NL, BE and APX UK markets isolated
EPEX	CWE internal borders and IFA, DK-DE, DE-SE	DE, FR, and BE markets isolated
NPS (Nordic)	Nordic area, NorNed, DE-DK, DE-SE	Nordic markets isolated (but internally coupled)
N2EX	GB-GB, IFA	N2EX market isolated
CWE TSOs	CWE internal borders	BE market isolated
BritNed	BritNed	No market isolated
NorNed	NorNed	No market isolated
Any other individual interconnector	That interconnector	No market isolated
PMB, or problem after 11:20	Entire region	All markets isolated (but Nordic markets internally coupled)



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