

# NWE DA market participant consultation paper.

## Introduction

This document lists the questions for which the NWE Price Coupling Project would like to know the opinions of market participants.

The questions are related to:

1. The foreseen timings of the NWE operational processes at NWE go-live
2. Possible changes in process timings after NWE go-live
3. Harmonization of price boundaries in NWE – questions received from the NRAs.

This paper will first give an overview of all possible price coupling scenarios (normal and fallback) and will then describe the scenarios which are feasible within the foreseen deadlines of NWE.

The NWE parties also propose a few alternative process timings for introduction at NWE go-live; it concerns scenarios related to some particular cases of decoupling.

All timings in this document refer to CET Timings.

## Terminology

To make sure that the terminology used in this document is interpreted in the right way, we list here some terms and their definition / explanation related to the NWE Price Coupling project.

Cross Zonal Capacities:	the capability of the interconnected electricity transmission network to accommodate energy transfer between Bidding Zones. It can be expressed either as NTC value or flow based parameters, and takes into account operational security constraints;
Partial coupling:	is any scenario where one or more bidding areas and/or interconnectors are temporary not participating in NWE Market Coupling while the remaining bidding areas/interconnectors still participate in NWE Market Coupling. The DA capacities for the non-participating interconnectors are allocated in fallback mode.
Full decoupling:	is full suspension of the NWE Market Coupling for the duration of at least one day i.e. the DA cross-border capacities on the internal CWE borders, on the 2 UK-CWE and 4 CWE-Nordic interconnectors (except for Baltic Cable) are allocated via Shadow Explicit Auctions and the day-ahead electricity auction is afterwards performed by the local Power Exchange - for example, NPS for the Price Coupled Nordic-Baltic market.

Second auction	a second auction can be requested by the CWE PXs if the market results do not remain within the result boundaries defined in their respective trading rules, i.e. always when max/min price is reached that causes curtailment on purchase or sales side, and also if prices are reached that are higher or lower than predefined limits even though not max/min.
Shadow Auction	An explicit auction of given cross border capacities that is called after a partial or full decoupling of Day Ahead Price Coupling has been declared, and which can be followed by a short period of time when PXs re-open the OBK to enable market parties to reflect what they buy in the given cross border capacity shadow explicit auctions.
Special Market Situation	is a market situation which requires specific measures, such as for example handling of max price curtailment situations by either calling a second auction as used by CWE PXs or the NPS fully regulated special routine that among others includes peak load (production/load) capacity activation.
Notification process	is the process of sending the local and cross border trading and generation and consumption notifications to the TSOs. (local notifications are not mandatory for every TSO in NWE)

## **Overview of the possible and feasible price coupling scenarios.**

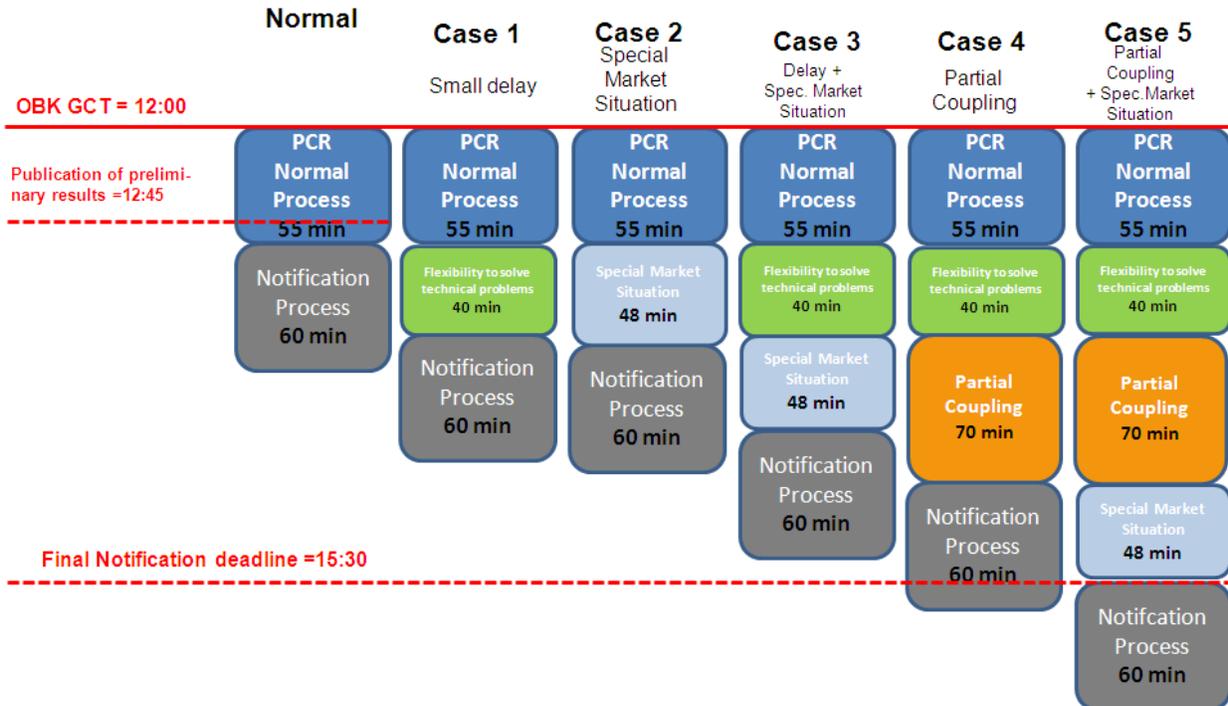
The NWE project, in cooperation with PCR, has established a list of all possible operational scenarios in NWE and a list with all feasible scenarios.

Following constraints were taken into account:

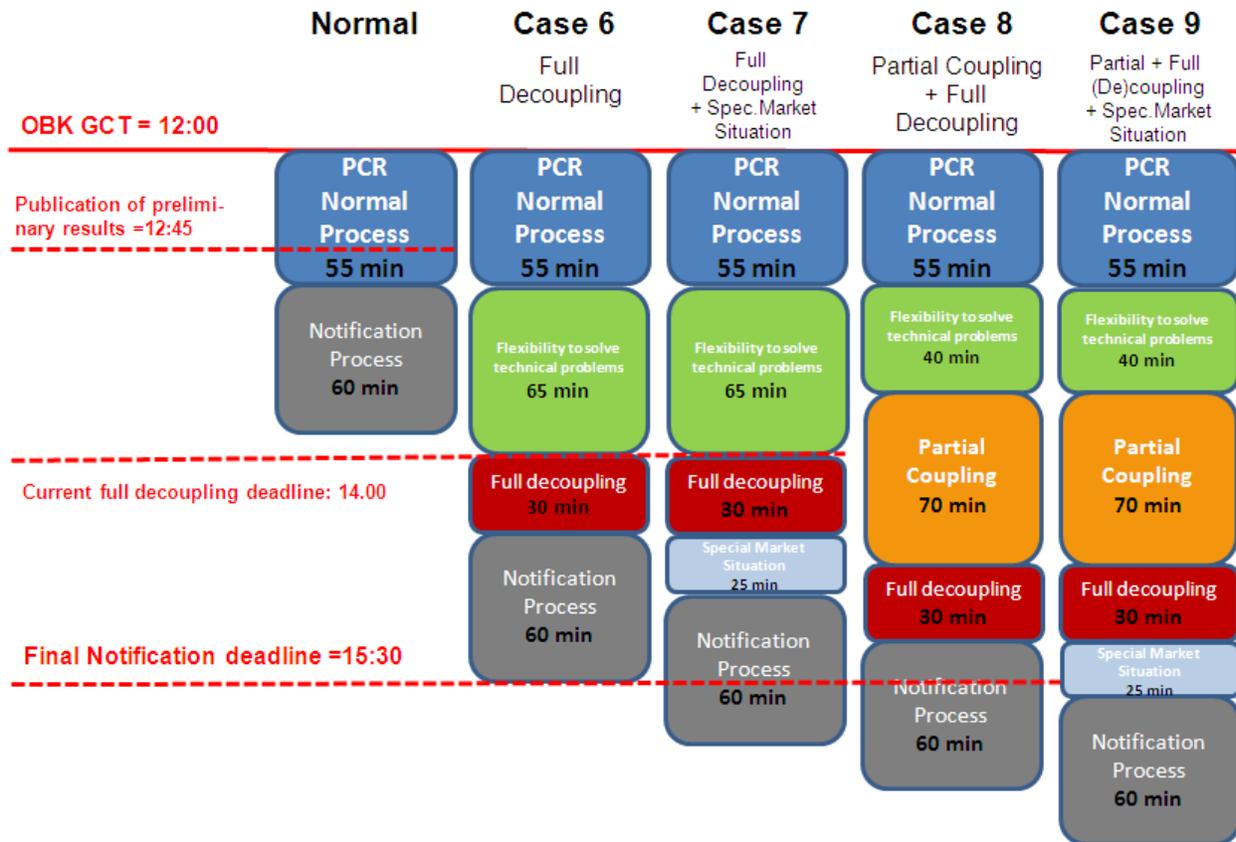
- 1) Gate Closure Time of the Order books (OBKs) at the PXs of 12.00 hrs CET
- 2) PCR expected process timings (for normal processes and partial coupling processes)
- 3) Notification process time, following the publishing of the confirmed NWE results, for CCPs and market participants of 1 hour as currently needed in CWE (and CWE-Nordic shadow auctions). The notification process includes local and cross border trading, generation and consumption notifications to the TSOs
- 4) Time allowance for technical problem solving
- 5) Time allowance for special market procedures such as handling of curtailment situations via a second auction used by CWE PXs or the NPS-applied regulated routines that include peak load capacity (production/load) reserves activation in several countries.

- 6) Time allowance for partial/full decoupling (this includes : re-opening of Order books, closure of Order books, recalculation and publication of (local PX market) results)
- 7) Final notification deadline in CWE of 15.30 hrs. This is the latest starting point for the security assessment processes which are fixed in ENTSO-E’s Operational Handbook and apply to all Continental European TSOs. TSOs consider that a change of this deadline will be very complex and has very low probability to be able to be moved at all in short or mid-term future.

The following 2 pictures show the possible operational scenarios with the timings of the processes.



Picture 1: Possible operational scenarios, not all feasible within the current deadlines.



Picture 2: Possible operational scenarios, not all feasible within the current deadlines.

### Explanation of certain aspects of the pictures 1 and 2 above

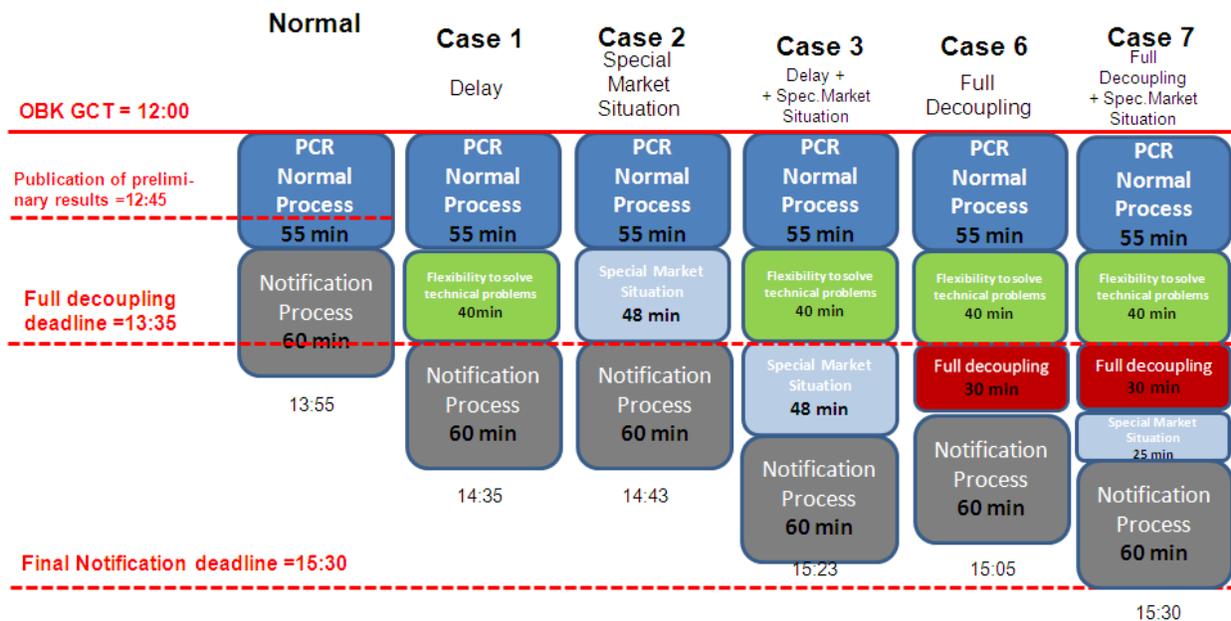
- In the current CWE Market Coupling and volume coupling with the Nordic-Baltic Region the possible partial coupling scenarios as foreseen in NWE do not exist (except for the case where there is no volume coupling between CWE and the Nordic-Baltic Region and the ITVC interconnectors are decoupled). There is a full decoupling scenario (case 6) where partial decoupling is not an option with the decoupling deadline at 14.00 hrs, as in CWE today. This is also the reason why in this scenario 65 minutes of flexibility to solve technical problems is shown, because PXs will continue trying to solve the issue until this deadline. However, even in today's CWE/ITVC solution, there is the risk that if a special routine is required after a decoupling (Case 7), the notification period is less than 60 min (given the 15:30 deadline).
- The picture shows processes run by the NWE Power Exchanges. In case of partial coupling or full decoupling the shadow auctions for the decoupled interconnectors organized by CASC or the explicit auctions organized for the IFA cable are run in parallel with the processes above, so that the results of these explicit auctions can immediately be published when partial coupling or full decoupling is confirmed.

- If procedures for Special Market Situations must be run in coupled mode the process takes at least 48 minutes (and in worst case scenario possibly up to 75 minutes) due to the fact that the recalculation is done in coupled mode by the PCR algorithm for all NWE areas. When a procedure for a Special Market Situation is run after a full decoupling, less time is needed (25 minutes) because it only concerns a local auction (NWE areas are not coupled to each other).
- In case of partial coupling, the order books of all NWE PXs will be re-opened for about 15 minutes, after which the NWE Price calculation process is run again (55 minutes), which is why this process takes 70 minutes. Full decoupling, on the other hand, is a process run locally by each PX and can be handled in a shorter time frame (30 minutes).

**Conclusion drawn from the pictures above**

The Normal case where the preliminary results are published at approx. 12.45, together with Case 1, 2 and 3 remain perfectly within the deadlines.

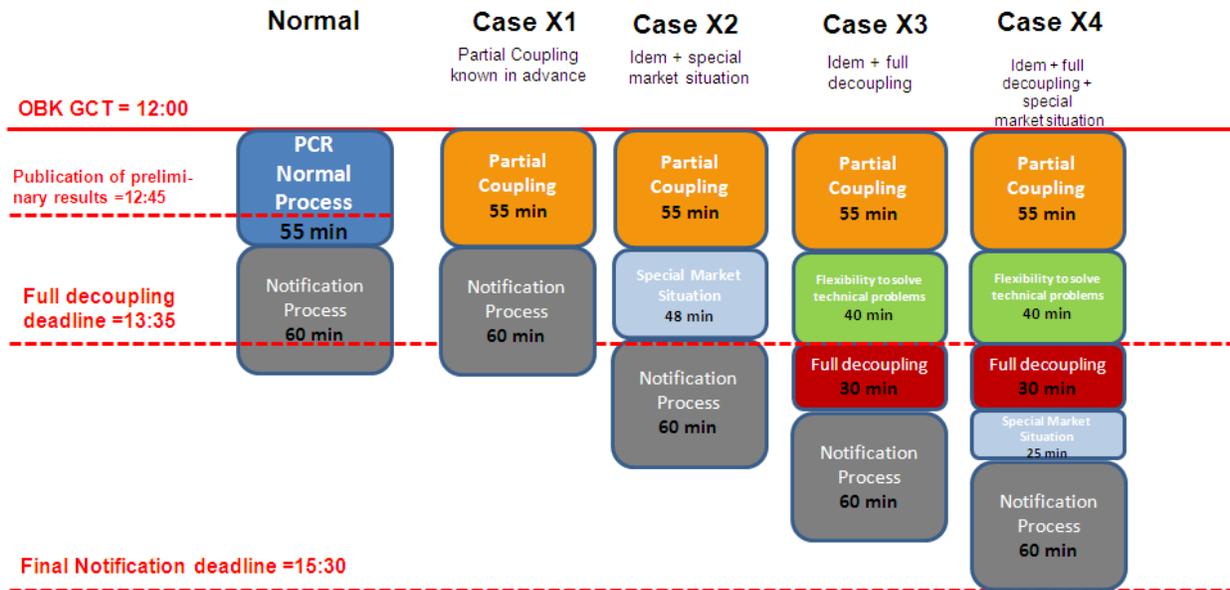
However in the rare cases that NWE can only partially couple or needs to fully decouple there are some scenarios as shown in the pictures above that exceed the CWE final notification deadline of 15.30. Therefore the NWE Price Coupling project has concluded that, taking into account the 7 aforementioned conditions, only the six scenarios and timings depicted in picture 3 are feasible in NWE at go-live.



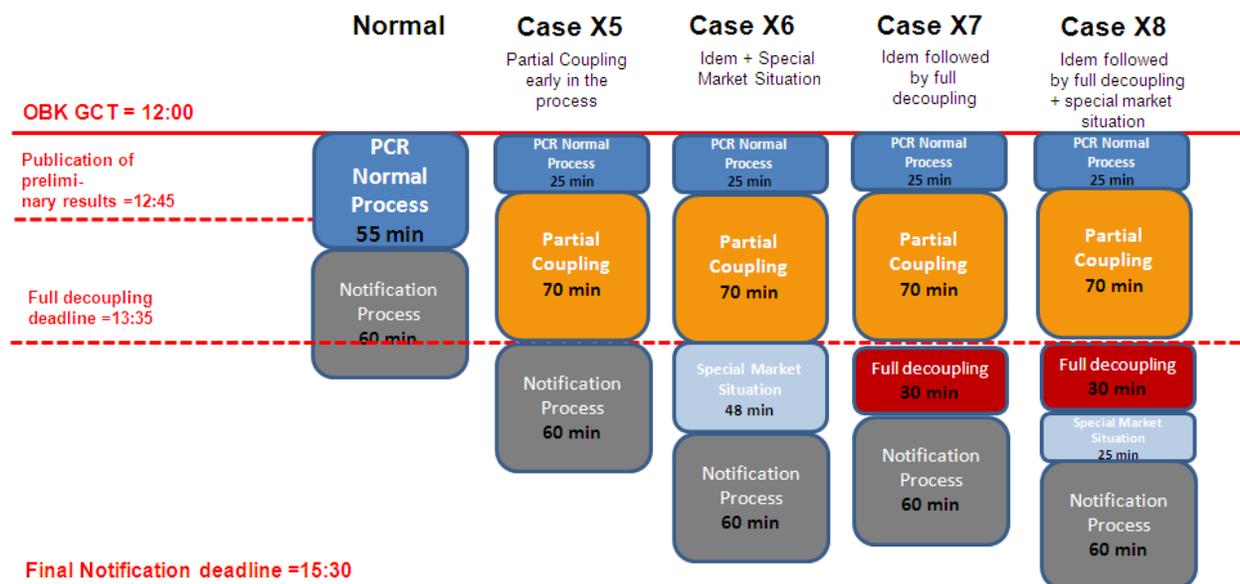
Picture 3: Feasible NWE operational scenarios at NWE go-live

The flexibility for technical problem solving in cases 6 and 7 has been reduced from 65 min to 40 min in order to be able to accept a possible Special Market Situation after full decoupling before the final notification deadline of 15:30 (case 7).

Partial coupling is only possible in the event that it is known either (1) before the daily process starts, or (2) during the pre-coupling phase (e.g. CZC for a particular border not delivered) as depicted in picture 4, or (3) if the issue (e.g. a power exchange cannot deliver its order books) is known early in the normal process (see picture 5).



Picture 4: Feasible NWE operational scenarios at NWE go-live (partial decoupling known in advance)



Picture 5: Feasible NWE operational scenarios at NWE go-live (partial decoupling known early in the process)

## **Alternative timings proposal – proposal at NWE DA go-live**

Looking at the feasible scenarios, the deadline for announcing full decoupling ends up at 13.35 hrs. The decoupling deadline is established by applying the “smallest common denominator rule” on the full set of feasible scenarios, which yields 13:35. This is earlier than today in CWE (14.00 hrs); it indicates a higher risk of decoupling. Alternatively, if we would keep the deadline of 14.00 hrs the possibility to perform a second auction within CWE would in some cases cease to exist. The experience of CWE decoupling in March 2011 showed that this is not acceptable for some countries.

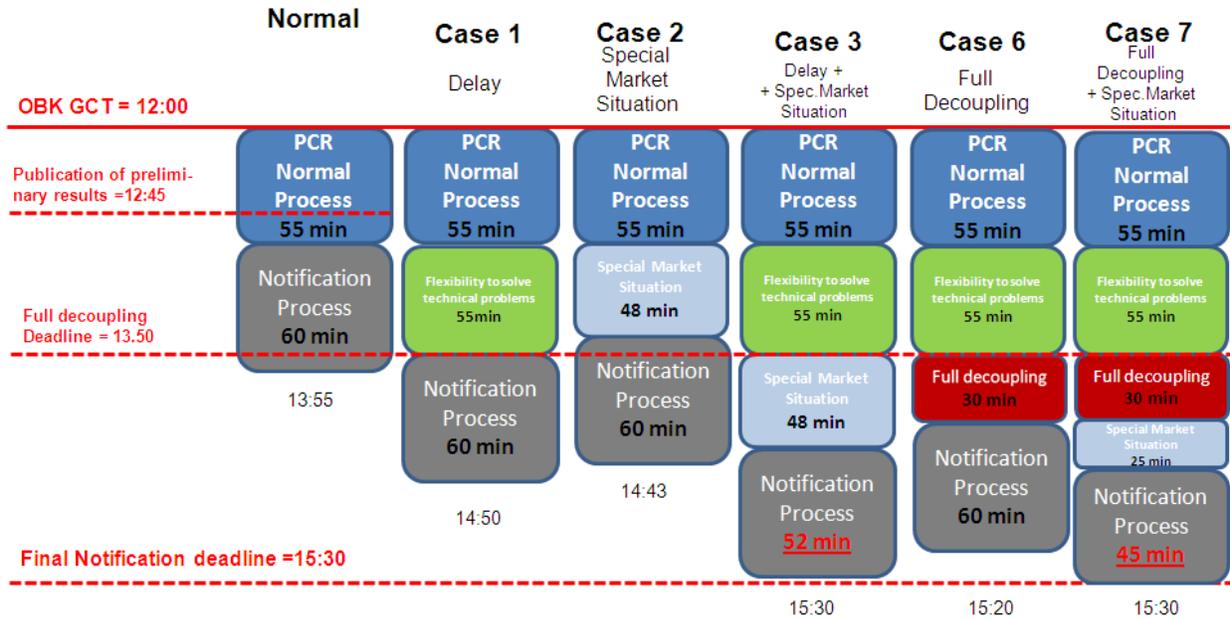
The CWE Power Exchanges estimate from experience that by allowing 55 minutes rather than 40 minutes for technical problem solving, the decoupling risk may be reduced by up to 50%.

Therefore the NWE parties propose the following alternative timings for the period following NWE go-live:

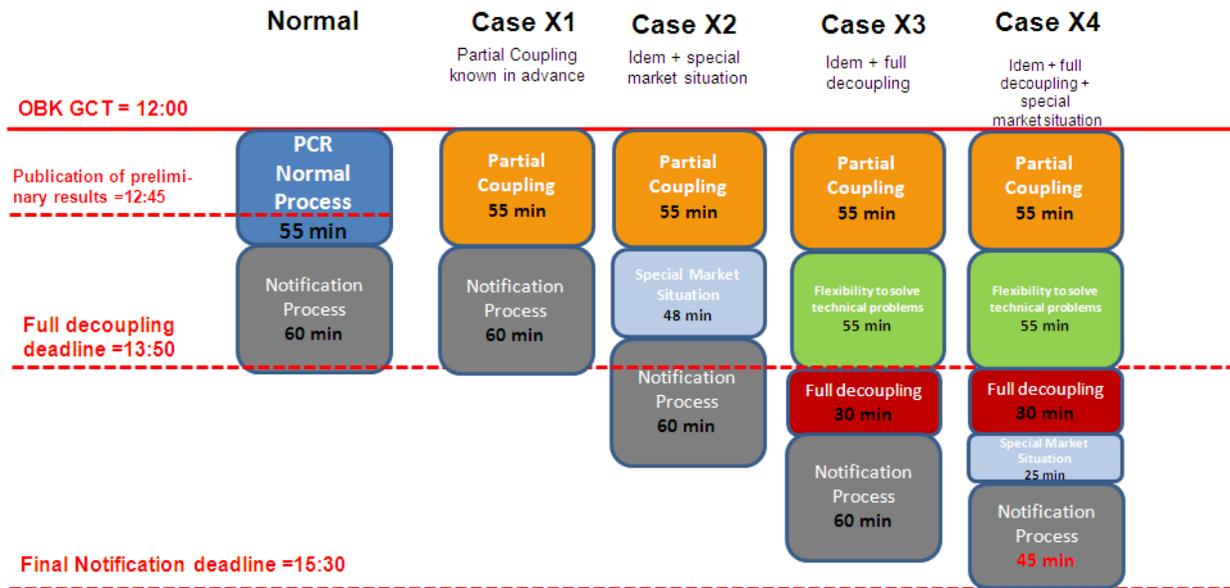
- The maximum time slot for technical problem solving flexibility to be set at 55 minutes rather than 40 minutes
- The deadline for decoupling will to be set at 13.50 hrs.

The following 3 pictures (picture 6, 7 and 8) show the effect of these procedures, proposed at NWE go-live, in the different scenarios. The key impact is to reduce the potential time for notifications in some scenarios with a particular combination of events:

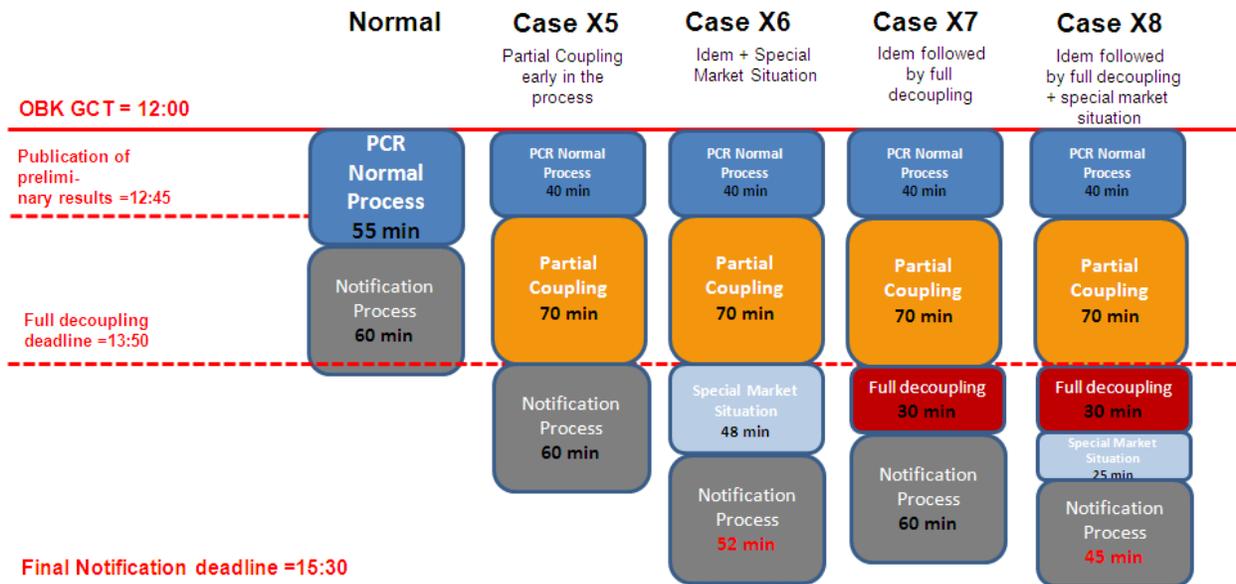
- If the coupling completes just ahead of the cut-off time at 13.50 and following this special routines are required in the NWE region, the nomination time will be reduced to 52 min in CWE (Case 3);
- If the coupling is abandoned at 13.50 leading to a full decoupling and following this special routines are required in the CWE region (i.e. second auction), the nomination time will be reduced to 45 min in CWE (Case 7);
- If the full NWE coupling is replaced by a partial decoupling and this partial decoupling is abandoned at 13.50 leading to a full decoupling and following this special routines are required in the CWE region (i.e. second auction), the nomination time will be reduced to 45 min in CWE (Case X4 and X8);
- If the full NWE coupling is replaced by a partial decoupling and the coupling completes just ahead of the cut-off time at 13.50 and following this special routines are required in the NWE region, the nomination time will be reduced to 52 min in CWE (Case X6).



Picture 6 : Alternative proposal - Feasible operational scenarios at NWE go-live if shorter notification process is accepted in rare market situations.



Picture 7: Alternative proposal - Feasible operational scenarios at NWE go-live (partial coupling known in advance) if shorter notification process is accepted in rare market situations



Picture 8: Alternative proposal - Feasible operational scenarios at NWE go-live (partial coupling known early in the process) if shorter notification process is accepted in rare market situations.

## Questionnaire

Part 1: Questions regarding the alternative timings proposed by the NWE parties at NWE go-live (pictures 6, 7 and 8).

1. Would it be possible, in the rare case of decoupling, to reduce the current CWE internal (and CWE-Nordic shadow auction) notification process time slot of 60 minutes? (this includes local nominations, generation nominations, cross border nominations, ...), knowing that this is a way to reduce the number of unavoidable decouplings ( as can be seen in the overview above)?
  - a. No, I need 60 minutes also in the rare cases when the DA Price Coupling processes are significantly delayed in comparison with the normal process.
    - i. I need 60 minutes for all nominations
    - ii. I need 60 minutes for the generation nominations, the other nominations I can handle faster.

Can you please motivate your answer?
  - b. Yes, I would be able to handle all my notifications faster in such rare cases, namely in
    - i. max . 45 minutes
    - ii. max. 30 minutes
    - iii. any other:

Do you have additional comments?

Part 2: Questions regarding the possible measures to extend the overall process time in the future, in order to make feasible the scenarios that are currently not feasible.

2. A possible solution to solve the timing issue, is to move the Gate Closure Time (GCT) for order book submission to an earlier moment to allow more time for the entire price coupling process, which may be needed in rare circumstances. Would you be prepared to accept an earlier order book GCT to reduce the number of inevitable decouplings? (taking into account that the publication of ATC / Flow Based values will not be earlier than 10:00 (Nordic-Baltic) and 10:30 (CWE) hrs as today)

a. No, it is not feasible for me to have a GCT earlier than 12.00 hrs

Can you please motivate your answer?

b. Yes, it would be feasible for me to advance the GCT, namely

i. At 11.30 hrs

ii. At 11.00 hrs

iii. Other suggested GCT

3. If you have answered negative both on question 1 (of part 1) and on question 2 above, but the NWE parties are forced to either advance the GCT or reduce the notification process time of 60 minutes, which measure would you prefer?

a. Advance the GCT permanently

b. Reduce the notification process time of 60 minutes in rare cases.

4. Can you please motivate your answer to the previous question? For example is the choice you prefer based on a different assessment of efficiency of the day ahead price formation, cost of implementation of changes on your side, or something else that an advancement (earlier) of GCT or delay of notification can cause?

5. In order to get the complete picture of complexities surrounding this 15:30 notification deadline, the NWE project wants to know if there are negative impacts or clear advantages on market participants' side in case that the nomination deadline would be extended after 15:30. Would an extension of the CWE TSOs notification deadline be acceptable for you?

a. No, my internal processes are organized in such a way that all notifications must go out before 15.30 hrs.

b. Yes, an extension would be acceptable in rare situations

6. Another possible operational scenario involves NWE TSOs and PXs trying to keep the NWE region coupled or partially coupled as long as possible. If this however ultimately fails, there may be no day-ahead price as no time is left before the 15.30 deadline to perform nominations

following a full decoupling and an isolated run of the markets. It is suggested to have the cross border capacity allocated in the intraday timescale and not have a day-ahead allocation of cross-border capacities on the CWE-UK, CWE-Nordic and possibly the internal CWE interconnectors. Would you accept having no day-ahead price in such rare case provided the cross border capacity is allocated in the intraday timescale??

- a. Yes, in rare cases this is acceptable.
  - b. No, this is not acceptable under any circumstance
7. In relation to the previous question (6) please if possible comment on the following:
- a. If you answered No to the question above, would you change your opinion if each PX were able to establish in some way (which would remain to be determined) day-ahead area price(s) for its own isolated market even while some of the Area-to-Area capacities linked to that market has been handed over already to Implicit Continuous Intra Day Market?
  - b. In case you have answered YES to the previous question could you describe how, when and under what conditions the capacities could be given to the implicit continuous cross border intraday market? The reason for asking is that such details are still to be produced in case this option would be plausible to consider further in case market and regulatory support would be given for it.
8. Another scenario could be to investigate the parallelization of partial coupling and full decoupling after go-live in terms of technical and procedural feasibility. Knowing that there is no certainty whether it can be implemented after go-live, shall NWE parties start the investigation?
- a. Yes.
  - b. No.

Please motivate your answer.

### Part 3: Questions regarding the harmonization of price caps in NWE

9. Currently min/max price caps vary across the NWE region. This could result in price differences even where there is spare transmission capacity and generation potentially being curtailed first in the country with the least restrictive limit, with the market with the lower limit still able to export. Which of the following do you prefer and why?
1. Harmonised price caps across all NWE markets
  2. Non-harmonised caps provided that measures are taken to prevent curtailment being exported

3. Non-harmonised caps with no special measures
10. Below you find 4 possible scenarios for future price caps in the whole NWE. Which of the scenarios do you prefer and why?
1. Price caps as in Nordic-Baltic (-200€; +2000€)
  2. Price caps as in CWE (-3000€; + 3000€)
  3. Wider price caps than one or both of the CWE limits -3000€; + 3000€
  4. Price caps narrower than those of CWE, but different to one or both of the -200 € and +2000 € applied in Nordic-Baltic
- Can you please motivate your answer?
11. What would constitute a good basis for determining cap and floor on the DA market?

## Process to answer to the questions

The NWE parties would appreciate your feedback on these questions **by March 15, 2013 24h00 CET** at the latest using the following link:

<https://www.surveymonkey.com/s/D6FSDX7>

The feedback on this consultation will be reported to the regulators and market participants by end of March 2013.