

Enduring Day-Ahead Market Coupling Initiatives

Florence Forum
13-14 December 2010

Content

Part 1: CWE/ITVC successfully launched

Part 2: NWE TSO Day-ahead Project

Part 3: PX Price Coupling of Regions (PCR)

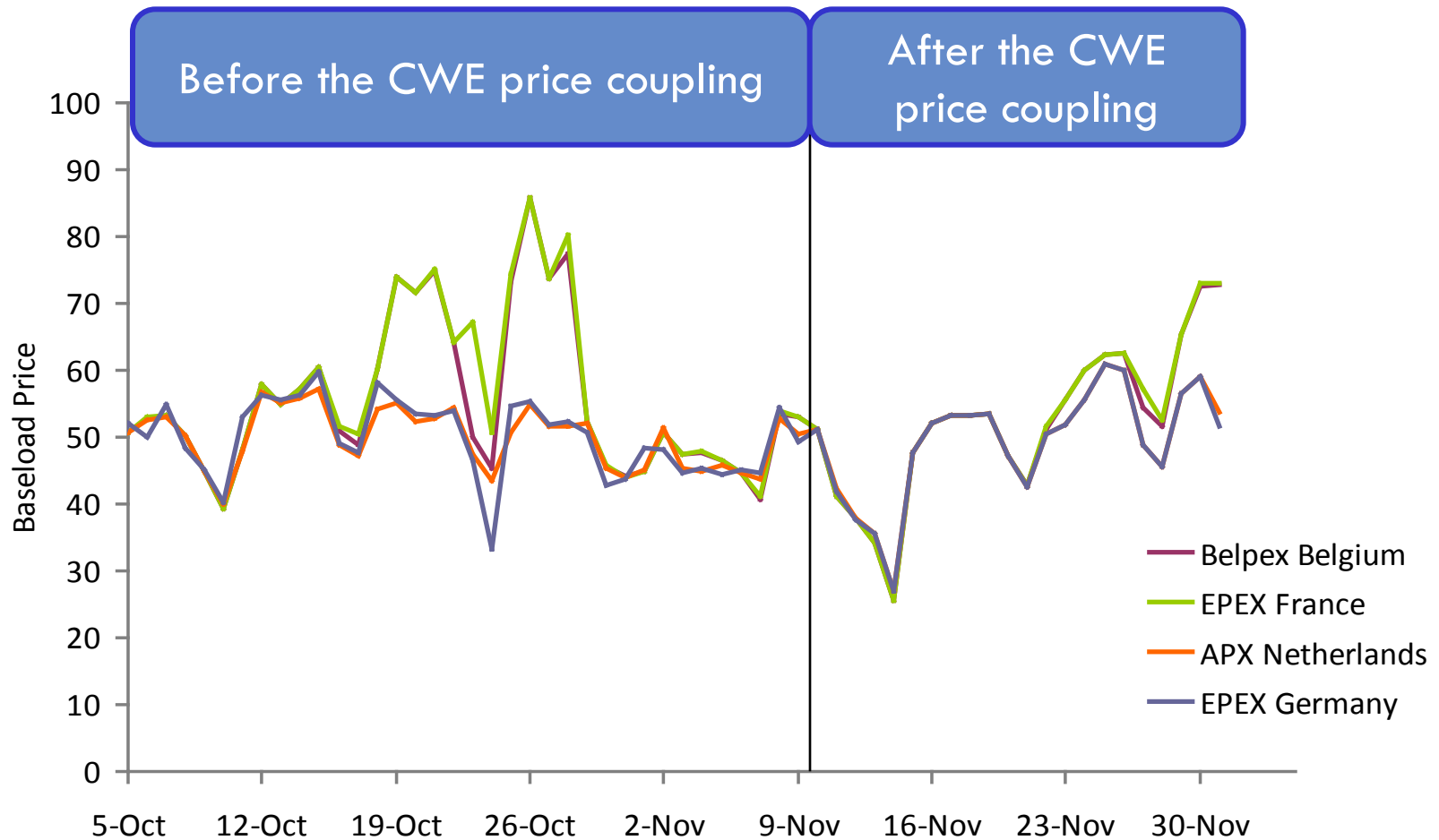
Part 4: Conclusions

1. CWE/ITVC successfully launched (i)

- **Quality criteria met:**
 - Simultaneous start of price coupling in CWE and interim tight volume coupling (ITVC) between CWE and Nordic regions
 - Good quality results
 - Operational procedures have performed well
- **Results so far:**
 - Very good utilization of capacity leading to good price convergence
- **Planning:**
 - NorNed to be included in ITVC by mid January latest
 - ITVC to be replaced by enduring solution

1. CWE/ITVC successfully launched (ii)

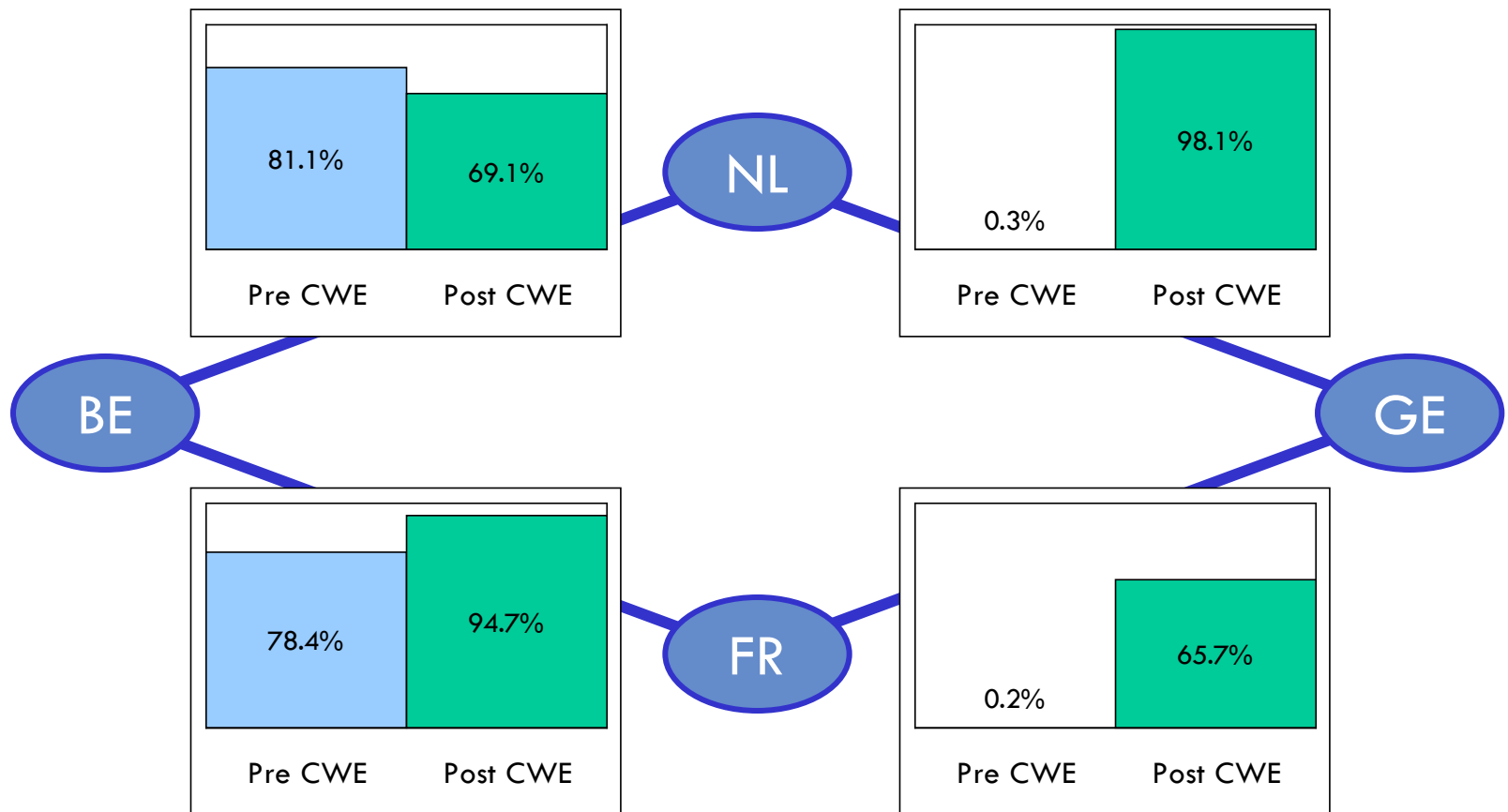
Illustration of CWE region results



1. CWE/ITVC successfully launched (iii)

Illustration of CWE region results

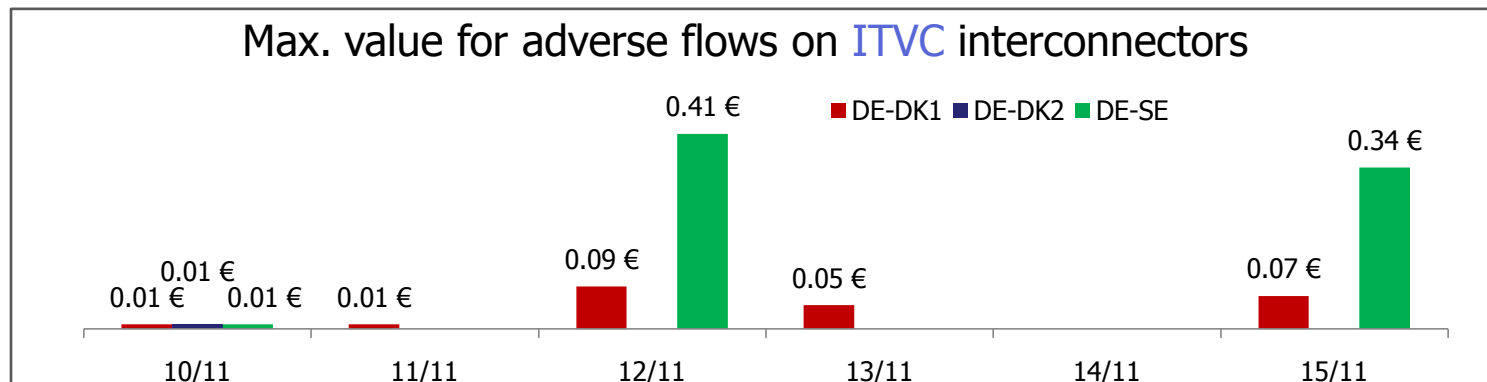
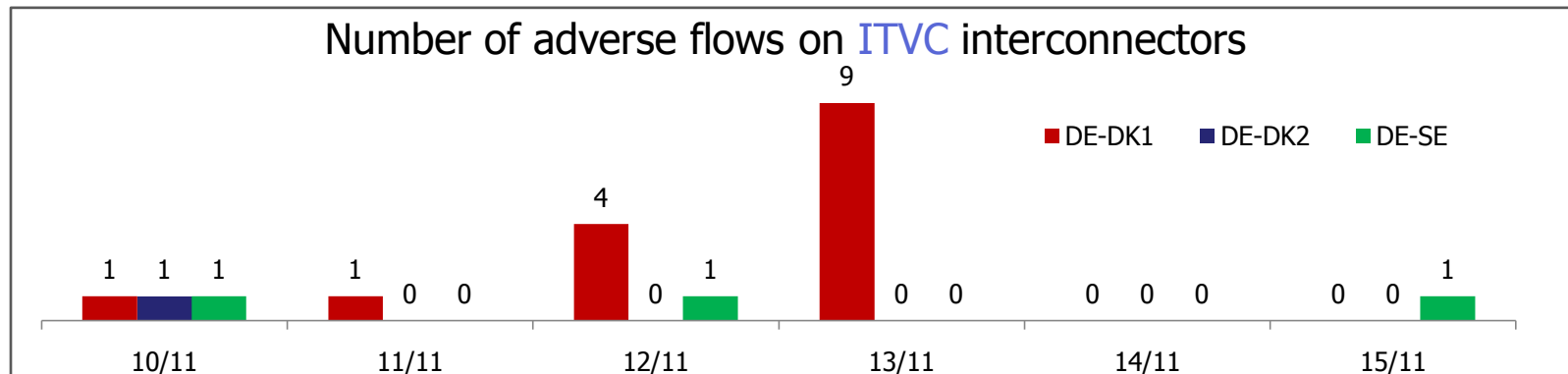
Hourly price convergence (single price area 66% of hours since CWE)



1. CWE/ITVC successfully launched (iv)

Illustration of adverse flows ITVC

Good integration of the ITVC solution implemented between CWE and the Nordic area, with only few and small price discrepancies

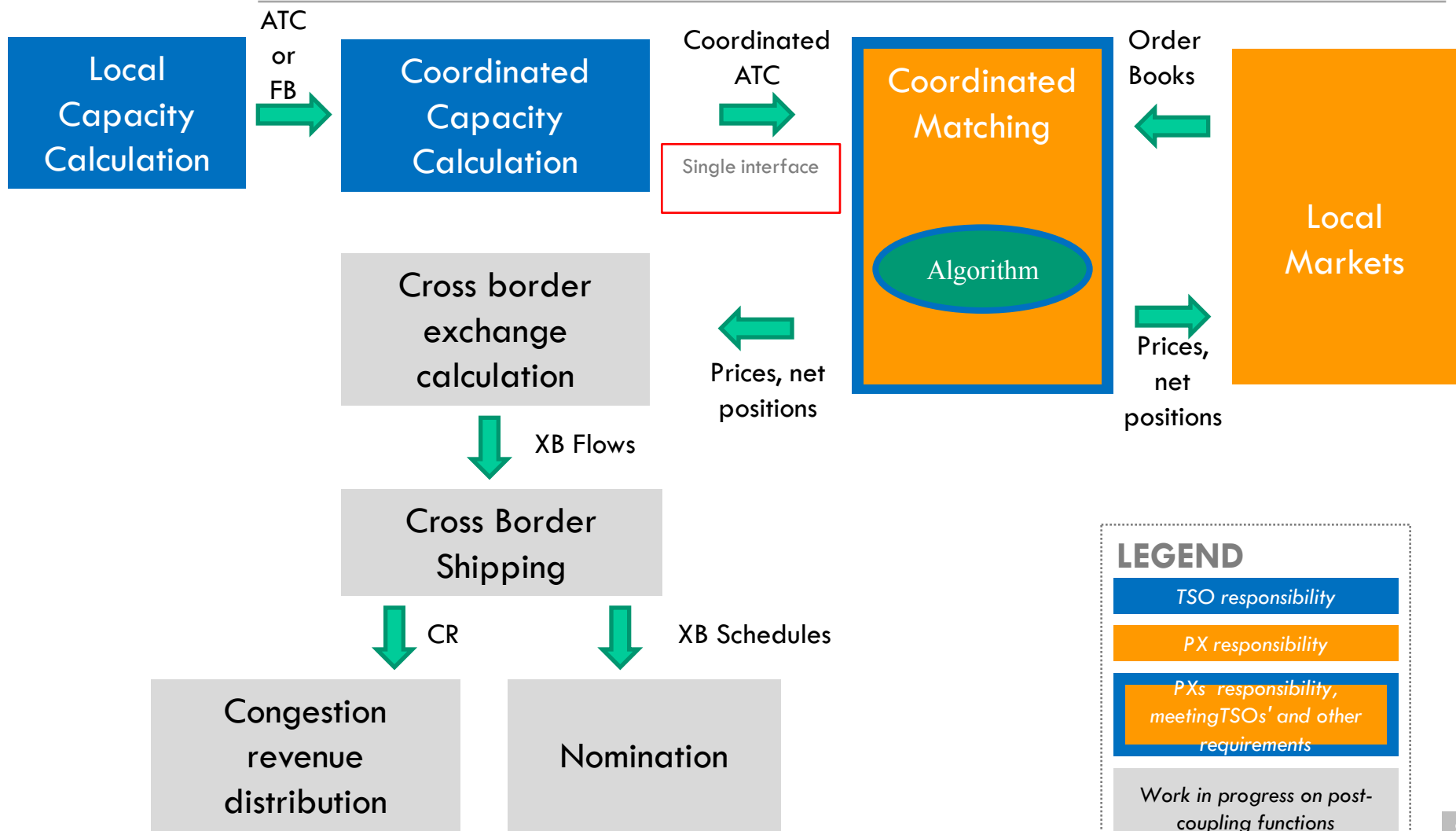


2. TSO Enduring Coupling Initiatives

- ENTSO-E NWE TSOs launched a Day-Ahead enduring project initiative (*)
 - 13 TSOs covering Nordic, CWE and GB + several observers from other regions
 - On the Day-Ahead, ENTSO-E NWE published a position paper to set the basic principles for solutions
 - On-going discussions with PXs on principles and framework to pave the way to concrete implementation project:
 - Scope, roles/tasks, contracts, congestion revenues, cost recovery, project organisation, timetable
- (*) ENTSO-E NWE TSOs also launched an Intraday enduring project initiative. TSOs support parallel development of both Day Ahead and Intraday initiatives due to governance synergies and similarities (NWE Intraday to be tackled under another agenda point)

2. Target NWE TSOs Day-Ahead solution (i)

Key functional blocks



Status NWE TSOs Day-Ahead Project (ii)

- NWE TSOs and PXs to cooperate with respect to:
 - Single Market Coupling using one common algorithm
 - Economic, technical and transparent performance of the algorithm
 - One overall governance arrangement and one single technical interface
 - Open for other TSOs/PXs to join on equal basis
- NWE TSOs decided to investigate the creation of a company to handle single contractual relationship
- NWE PXs proposing to use PCR solution to meet NWE TSO requirements

Status NWE TSOs Day-Ahead Project (iii)

Current main tasks/challenges:

- Develop an efficient governance in-line with the AHAG Day Ahead Governance Project provisions
- Define the TSO requirements
- Assess PCR as meeting TSOs' requirements (in addition to market needs)
- Capitalise on existing solutions where possible

3. PX Day-ahead Initiative PCR (i)

- Project established:
 - European scope
 - Six parties: Nord Pool Spot, EPEX, GME, OMEL, Belpex and APX-ENDEX covering Nordic, CWE, GB, Iberia and Italy
 - Four additional associate members in CEE
- Position paper published early November
 - Solution description
 - Governance aligned with AHAG proposals
 - Solution contemplates TSOs' and other stakeholders' requirements
- Practical legal framework to facilitate progress
 - Addressing implementation within existing regional frameworks: variety of local regulatory and TSO interfaces
 - Joint PX agreement anticipated

3. PX Day-ahead Initiative PCR (ii)

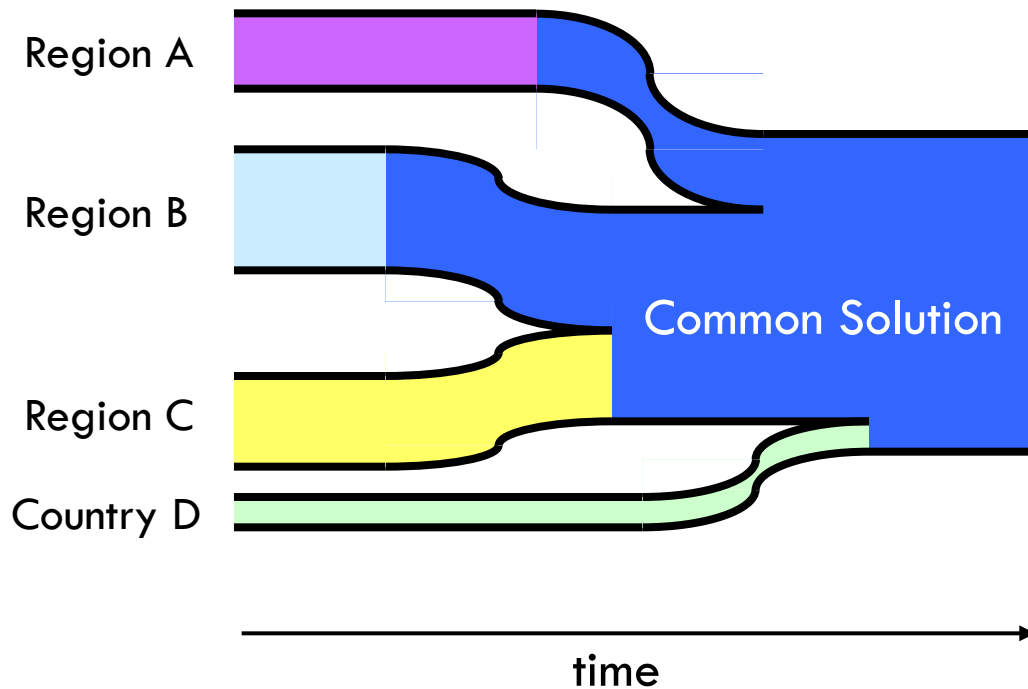
- Development of common algorithm progressing
 - Proof of concept shown by earlier simulations
 - Description of core requirements completed
 - Currently assessing “starting point“ algorithm(s) based on expert review
- Decentralised parallel operations approach
 - Maintain local PX accountability
 - Ensure strong operational resiliency
 - High level functional architecture for normal operations completed; underway for exceptional scenarios (target Feb/Mar 2011)
 - Specification of system and interface requirements started (Target May 2011)

4. Conclusions: NWE status

- Talks on the principles are progressing between NWE TSOs and PXs
- Once completed, an implementation project to be kicked-off
- Target dates
 - Principles cleared, leading to cooperation agreement early 2011
 - Price coupling implementation before end 2012
- Other markets (TSOs/PXs) to join on equal basis, as best suits for them

4. Achieving a European single price coupling

Road map (illustrative)



- Regions/countries can join when they are ready to comply with the common requirements
- Approach is flexible and encourages early participation
- Facilitated by Governance Guideline, FG CACM and Network Codes