

# Progress on day-ahead European market coupling

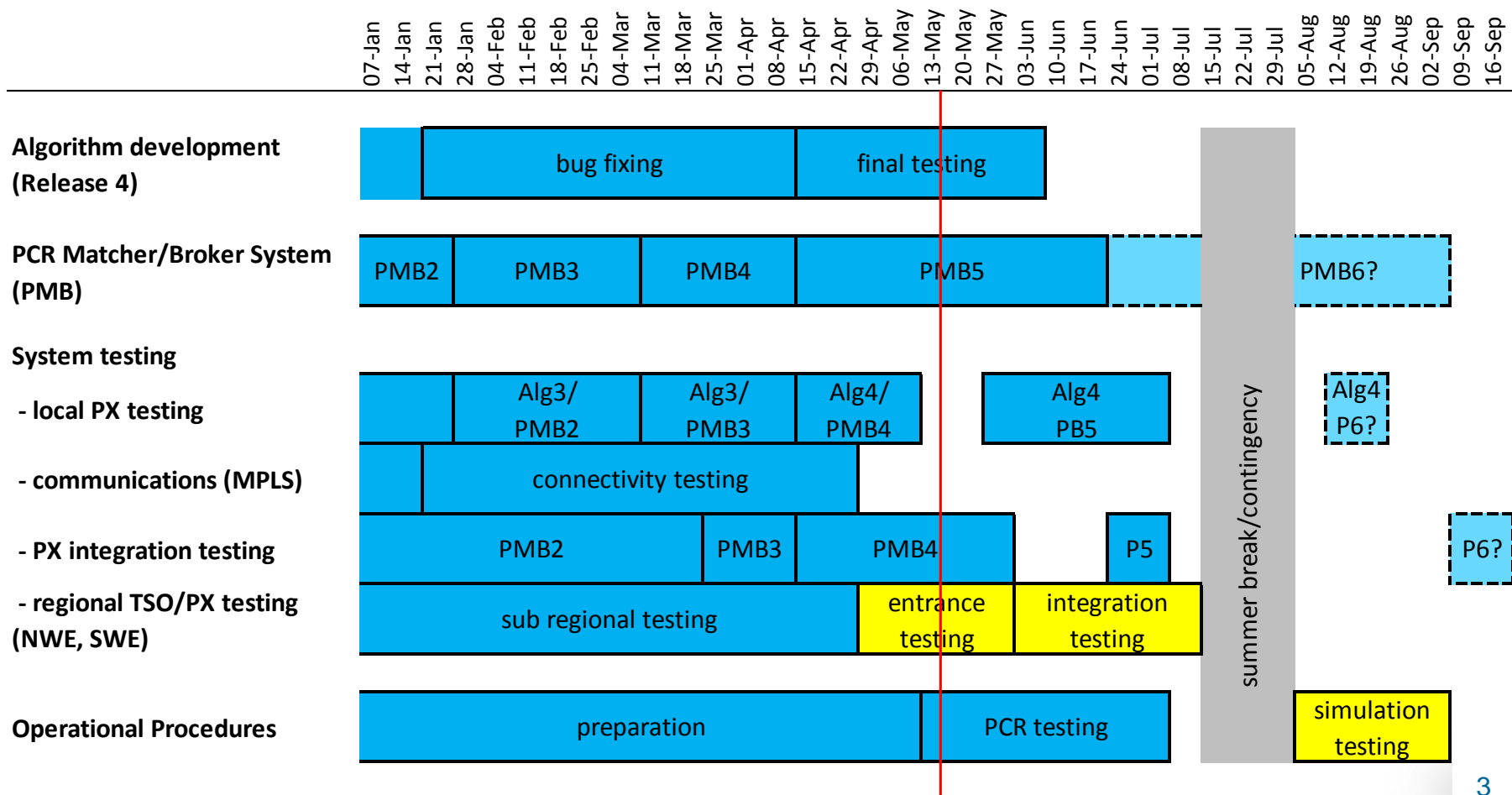
Florence Forum – 15 May 2013



# Status of PCR implementation

- Price Coupling of Regions decentralized solution is the basis of market coupling EU wide
- An algorithm (Euphemia) will be run in parallel by several PXs and a Matcher-Broker system (PMB) will facilitate IT exchanges for the pure matching phase
- Pre- and Post-Coupling processes (PPC) are subject to regional specificities
- Current activities are focused on:
  - Algorithm implementation: final handover for early July
  - PMB software: currently delivered, go-live version planned for summer as well
  - Testing: connectivity and sanity ongoing. Entrance testing (first phase of TSO/PX integration testing) started in NWE and SWE regions on 29 April
  - Procedures: all delivered for final review. Market Coupling processes run from 12h00 (gate closure) till 15h30 (nomination deadline) CET at the latest in exceptional cases
- PCR common implementation costs (Algorithm + PMB):
  - 8,4 M€ shared equally between PCR PXs: 50% in NWE (costs incurred by APX/BELPEX, EPEX & NPS recovered via NWE TSOs), 50% supported by OMIE, GME and OTE
  - Local costs supported by each PX and recovered per regional or local arrangements

# PCR planning





# NWE pilot project

## ■ Development of Market Coupling in NW Europe

- |  |      |
|--|------|
| □ Nordic Market  | 2000 |
| □ Tri-lateral Market Coupling                              | 2006 |
| □ EMCC volume coupling between Germany and Nordic          | 2009 |
| □ CWE Market Coupling and coupling to Nordic-Baltic (ITVC) | 2010 |
| □ Coupling of GB and NL/CWE (BritNed)                      | 2011 |

## ■ ACER Roadmap

- European Price Coupling established end of 2014

## ■ NWE covering GB, CWE, Nordic-Baltic, and Poland (via SwePol): target go-live in November 2013

## ■ TSO-PX collaboration is based on All Party Cooperation Agreement (APCA) under a NDA framework

## ■ Joint Steering Committee coordinating all WGs & TFs supported by Project Management (PMO)

## ■ Activity is now focused on Procedures, Testing and Local Implementation Projects

- Finalized: Normal Procedures, studies on Losses and Decoupling, Integration Test Scenarios and Regulatory Package
- Local testing has started and all subprojects are on track

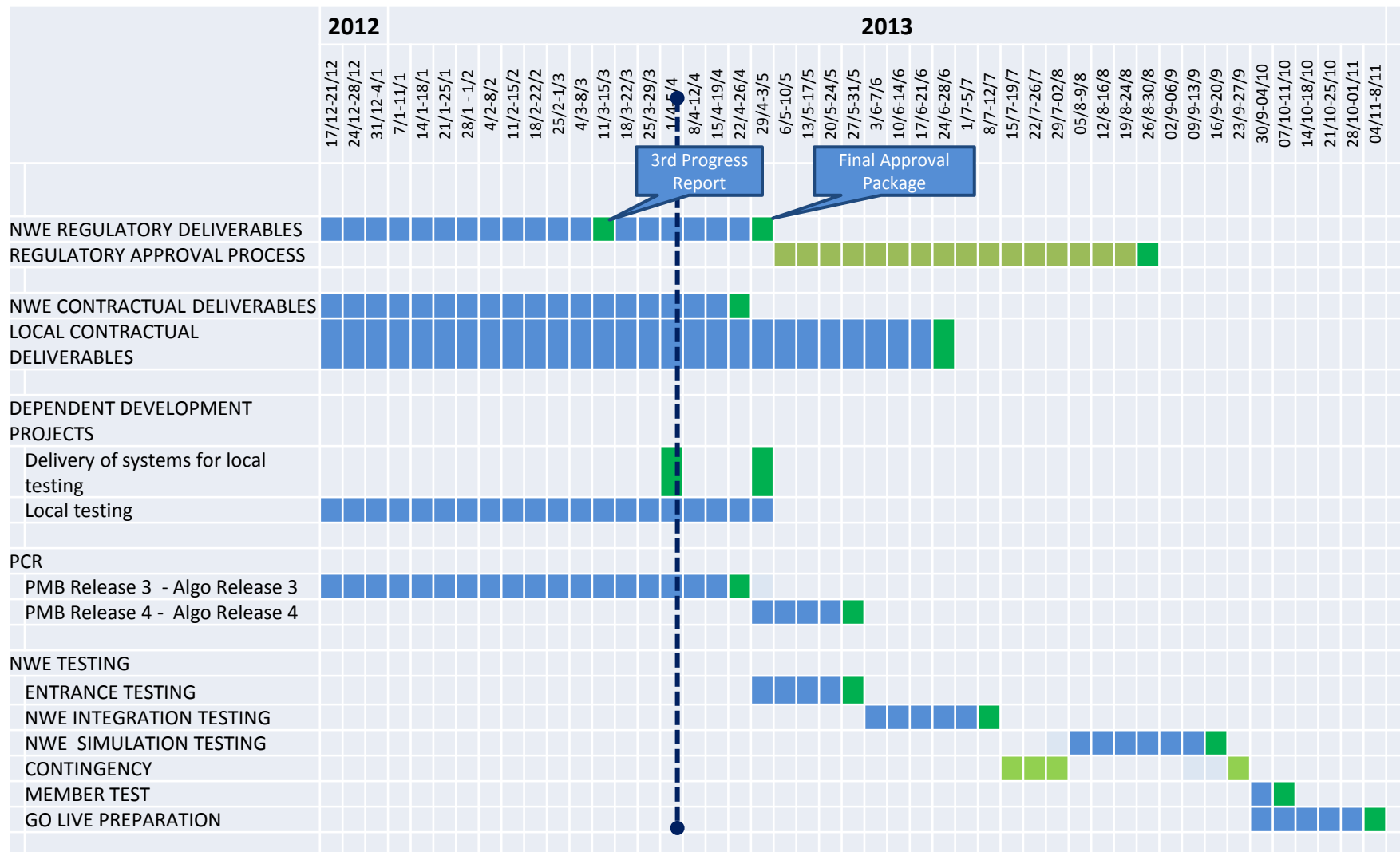




# NWE present activity

- Preparation of the agreement for the Operational Phase (DAOA)
  - Need of alignment of NWE-DAOA with CACM Network Code
- Start of integrated testing
  - The testing together with PCR involves TSOs and PXs in NWE and SWE regions
  - Markets included in the testing are BE, DK, EE, FI, FR, DE, GB, LV (June 2013), LT, LU, NL, NO, PL via the SwePol Link, PT, ES and SE as well as the interconnections between them
- Stakeholder involvement
  - AESAG and NWE IG meetings
  - Consultation with market participants recently performed
  - 2<sup>nd</sup> Stakeholder Forum to be made in June
  - NDAs to disclose information to non-NWE regions (e.g. HLFA, testing procedures, etc) ready for signature
- Regulatory reports and approvals
  - 3 reports already issued, third progress report to follow in May
  - Regulatory Approval Package to be sent out to NRAs before end of May







# Update from SWE: coupling MIBEL to NWE

- Design phase already finished:
  - ❑ High Level Functional Architecture (HLFA) finalized including design of Pre-Coupling, Post-Coupling and Exceptional Situations
  - ❑ Fallback solution based on shadow auctions aligned with NWE, with allocation in ID timeframe as a backup
- Cooperation Agreement amended by TSOs and PXs to enter into implementation phase. Steering Committee continues coordinating different WGs supported by PMO
- Regulatory / contractual framework for the operational phase:
  - ❑ Light framework agreement (DAOA) to be complemented with bilateral agreements for specific processes
  - ❑ First regulatory changes needed in Spain & Portugal, including GCT of MIBEL move to 12:00 CET already sent to Regulatory Authorities, waiting for publication
  - ❑ Ongoing preparation of other regulatory changes (PCR implementation & adaptation of Spanish Operation Procedures)
- Testing:
  - ❑ PMB and Euphemia algorithm installed and properly configured in the Iberian market to perform on-line daily parallel runs of the PCR system since 9 April. Results of parallel runs published to market participants every day
  - ❑ Collaboration of SWE and NWE regions for a joint testing phase is on track
- SWE go-live date to be defined in a reasonable manner once the project planning is finalized and the whole process is evaluated in detail together with NWE



# Update from Italian borders: PPC project

- TSOs and PXs from Italy, France, Switzerland, Austria, Slovenia and Greece signed a Cooperation Agreement for the Design Phase (PPC Design Project) by end 2012
- The aim of the cooperation is to have a coordinated approach on all Italian borders, for that purpose the project is aiming to deliver:
  - ❑ High Level Business Process (HLBP)
  - ❑ High level IT requirement (IT impact assessment)
  - ❑ Overall time schedule for the implementation phase including risk assessment
  - ❑ Proposal for a Project budget for the implementation phase and for the operational phase
  - ❑ Contractual architecture for the implementation and for the operational phase
- Design phase is expected to last six months: until July 2013
- Steering Committee coordinating different WGs supported by PMO
- Communication to market parties on this project aiming at implementing such coupling in 2014
- Some prerequisites have still to be fulfilled in different countries on a national level, in case they cannot be fulfilled in some countries, implementation will continue on other borders





# Update from CEE: NWCE FB MC\*

## ■ Goal:

- ❑ Implementation of Flow-based Market Coupling in the CEE region in line with the CWE Flow-Based approach and compatible with NWE Price Coupling
- ❑ However, there is lacking agreement among both TSOs and NRAs/ACER on the required scope of the implementation project and acceptance criteria

## ■ Present activities:

- ❑ CEE TSOs decided to work further on a technical solution for capacity calculation of flow-based market coupling addressing current challenges in the region and Flow-Based WG has restarted its work
- ❑ CEE TSOs have liaised with PCR in order to perform an assessment of the algorithm. Confidentiality issues are not solved yet
- ❑ Cooperation between CEE PXs and TSOs has been on hold due to lacking agreement among both TSOs and NRAs/ACER. Some PXs are already decided about participation in PCR
- ❑ Ongoing discussion with NRAs on open questions raised by TSOs (e.g. the treatment of bidding zone configuration)
- ❑ Finalization of MoU might be reinitiated to establish a common basis



\* North West Central European Flow Based Market Coupling

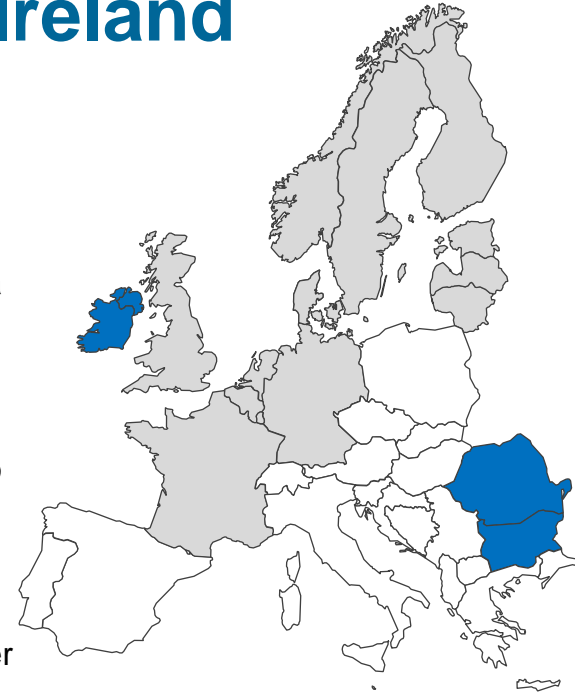
# Plans for SEE, Ireland & Northern Ireland

## ■ Romania & Bulgaria

- Willingness of Romanian NRA, TSO and PX to couple CZ-SK-HU market as expressed towards the stakeholders of these three countries
- Activities are also being deployed under the MoU between Romania and Bulgaria for preparing and implementing the coupling of the two countries

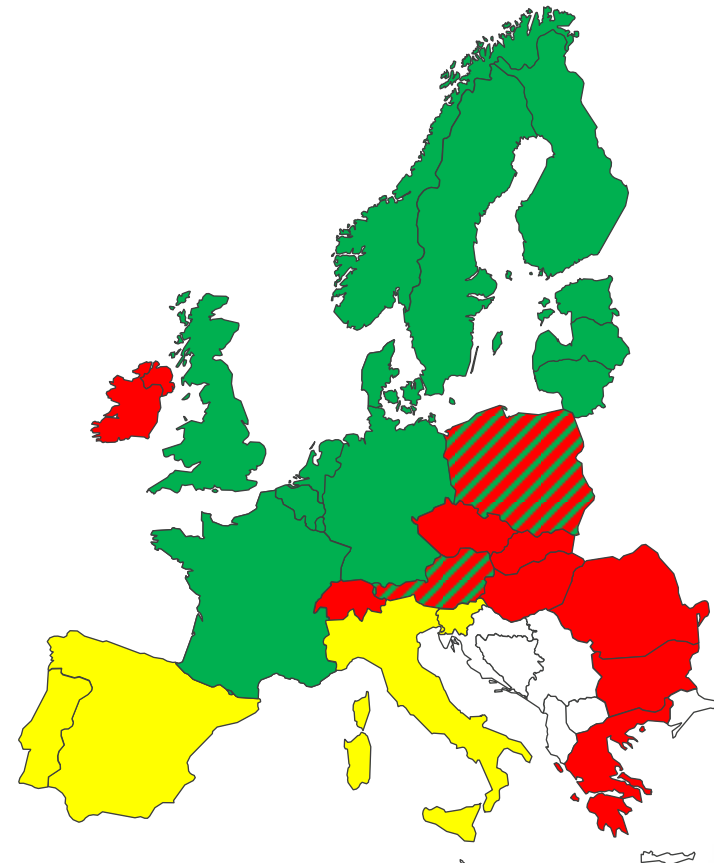
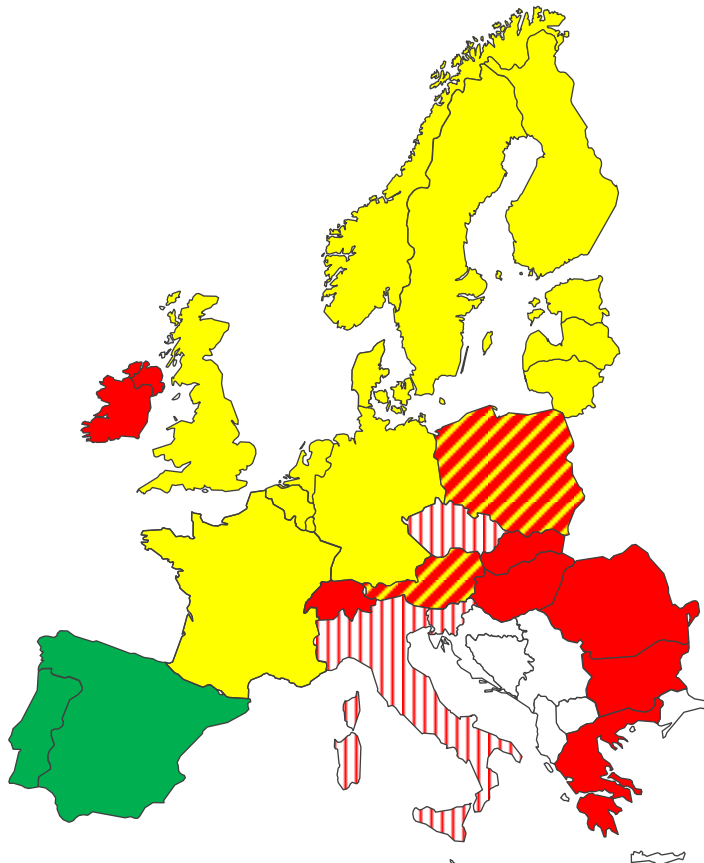
## ■ Ireland & Northern Ireland

- Following NRAs publication of the next steps decision and plan, the intention is to initiate a review of the Single Electricity Market (SEM) with proposals for a new high-level market design by early next year, followed by a more detailed design with implementation by 2016
- The design of the SEM means that implementing market coupling requires greater levels of change than in other markets and a wider review of the core market design



- Implementation of PCR algorithm and PMB (foreseen by 2013 for NWE and SWE)

- Adaptation of GCT of DA market to 12h00 CET and associated processes



# Status of (some) drivers for EU Market Coupling (II)

- Existence of a project on Pre- and Post-Coupling (PPC), for some of the borders
- Finalization of detailed PPC design and enter into implementation, for some of the borders



# Conclusions

- TSOs and PXs are working together at regional level in different market coupling initiatives (NWE, SWE, IT borders, CEE, ...) to ensure EU-wide rollout of market coupling
- The NWE market coupling planned for November 2013 is expected to be a cornerstone of the process
- The main elements for market coupling success which are being tackled are:
  - Implementation of the coupling solution (PCR) in all Europe
  - Changes in operational processes to move the GCT of DA markets to 12h00 CET in a number of countries
  - Definition and implementation of Pre- and Post-Coupling arrangements at regional level (submission of XB capacities to the market, determination of XB schedules, settlement and congestion rent distribution)
  - Adequate fallback solutions in case of decoupling
  - Robust governance framework

# Challenges for DA EU market coupling

- Different progress towards DA market coupling can be recognized in Europe. The complexity of the different implementation projects is based on the following:
  - Coordination of a number of NRAs, TSOs and PXs
  - Regulatory uncertainty in all the process, as network codes/governance guideline are not ready yet
  - Difficulty of implementing Pre- and Post-Coupling arrangements, particularly in case of Flow-Based, and adapting TSO and PX timing processes
  - Incorporation of current market coupling projects either already implemented (MC CZ-SK-HU, MC IT-SI) or under implementation (possible extension of MC CZ-SK-HU to PL and RO being evaluated as an interim step) into European market coupling
- Given that NWE delivery is expected soon and other regions such as SWE and CSE are well advanced along the same path, 2014 is a realistic date for a significant part of Europe to be coupled in the day-ahead timeframe in accordance with the target model