



Information Workshop on Emerging Electricity Target Models

“Role of TSOs in Market Integration”

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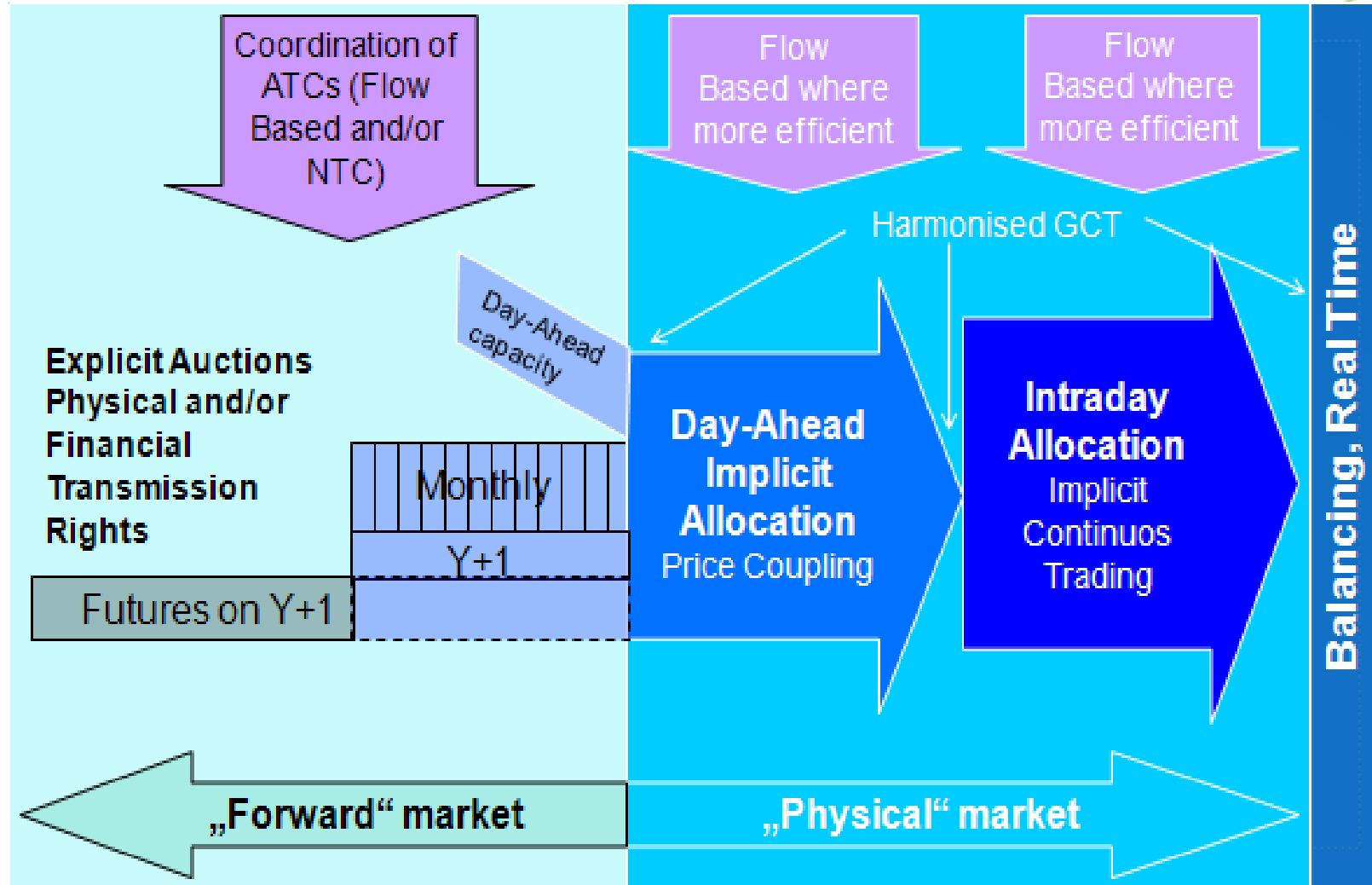
3rd June 2011

Agenda



- **The Target model**
- **Network codes**
- **NWE Pilot**
- **Target model Implications for SEM**
 - Developments to 2014 and beyond
 - Fundamentals of SEM issues
- **What's Required**

European Target Model (1)



European Target Model (2)



- The target model covers all timeframes:
 - Long-term trading coordination required across the interconnectors
 - Day ahead (Coupling the preferred model)
 - Intraday trading (Continuous implicit and implicit)
 - Balancing (mainly SO-SO in real-time)
- The target model for each of these timeframes is made up of a high-level design
- The detail is being worked out through:
 - Network Codes (framework and the codes); and
 - Pilot Projects such as NWE

The Network Codes



12 areas of Network Code development

Operations-related code topics:

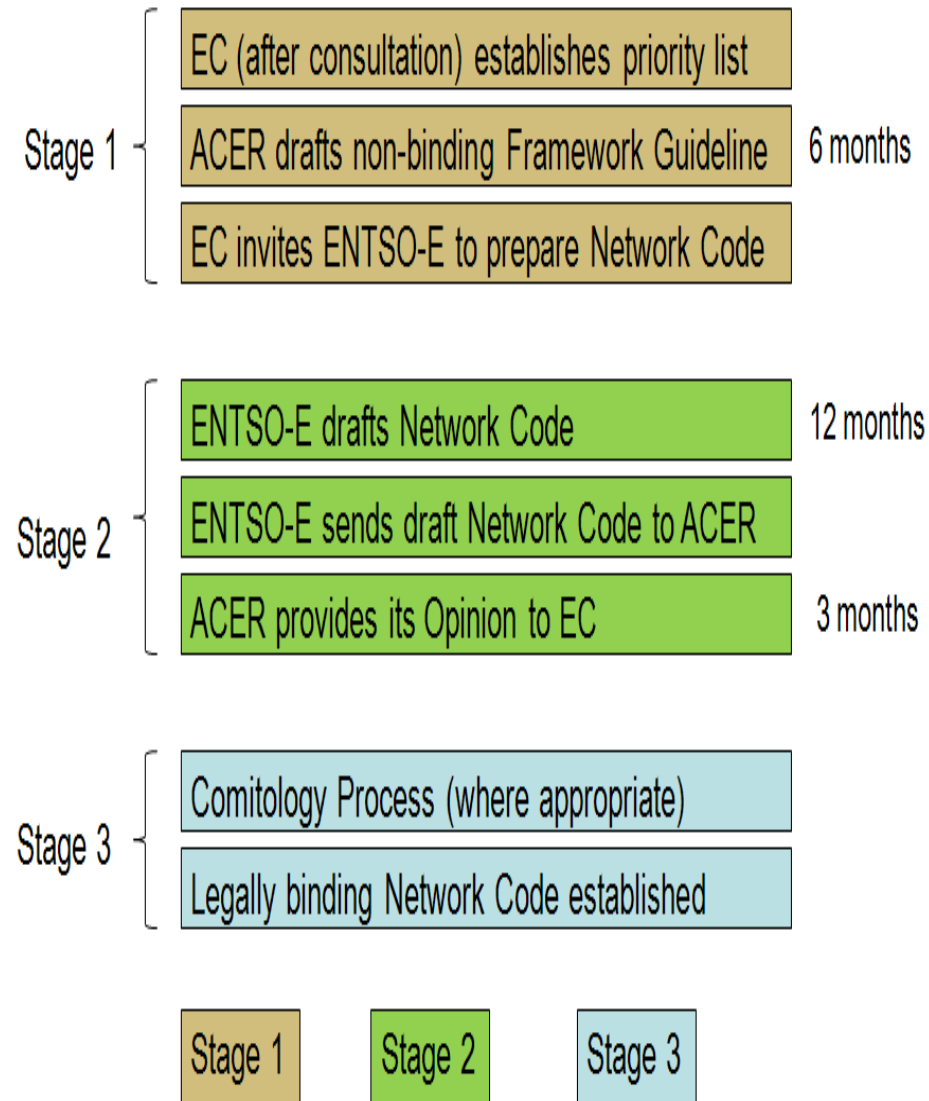
- 1) Network security and reliability rules including rules for technical transmission reserve capacity for operational network security;
- 2) Interoperability rules;
- 3) Operational procedures in an emergency;
- 4) Balancing rules including network-related reserve power rules

Development-related code topics:

- 5) Network connection rules;
- 6) Energy efficiency regarding electricity networks;

Market-related code topics:

- 7) Third-party access rules;
- 8) Data exchange and settlement rules;
- 9) Capacity allocation and congestion management rules;
- 10) Rules for trading related to the technical and operational provision of network access services and system balancing;
- 11) Transparency rules;
- 12) Rules regarding harmonised transmission tariff structures, including locational signals and inter-transmission system operator compensation rules.



How it's happening in practice



- Framework Guideline for CACM is being consulted on
- ENTSO-E (the TSOs) working on the Network Codes
- TSOs developing the detailed designs and implementation based on the target model
- NWE is the key pilot project developed by TSOs
 - Delivering detailed solutions for both Intraday and Day ahead
- RAs to will review, consult on and approve the designs/network codes

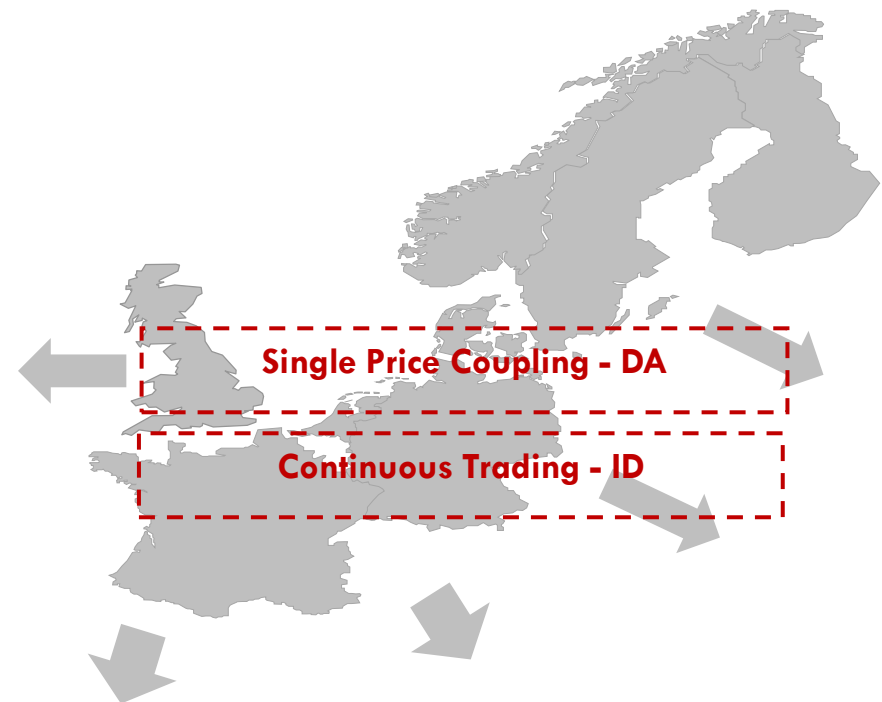
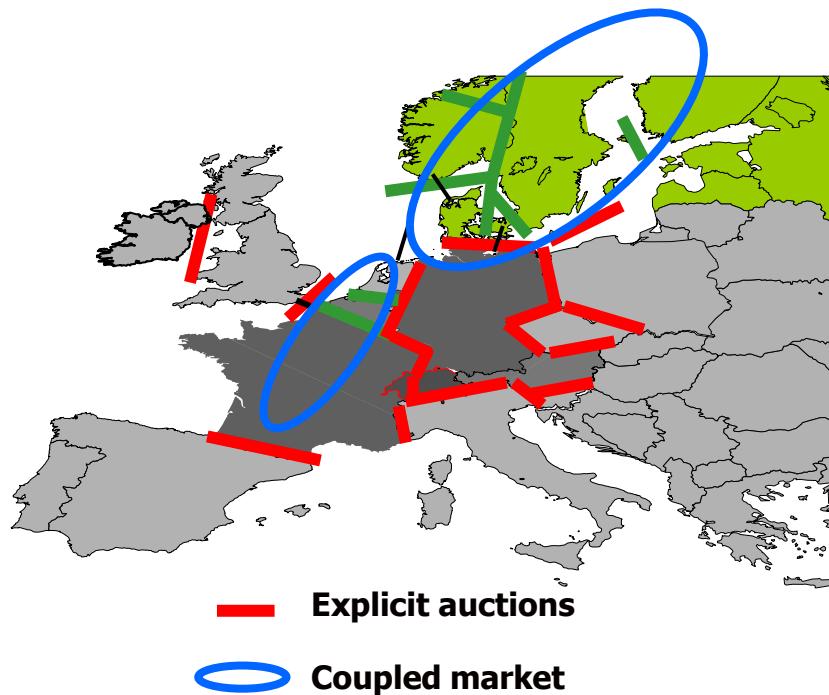


- Active across European developments and key member of ENTSO-E
- Member of the Market Integration working group (one of the principal stakeholders who developed the Target Model and roadmap for implementation)
- Member of the drafting team for the Network Code on Capacity Allocation and Congestion Management
- Member of both NWE Monitoring Groups
- EirGrid is leading the drafting team for the network code on the use of implicit auctions as they are to compliment continuous trading.

North West Europe Pilot Project



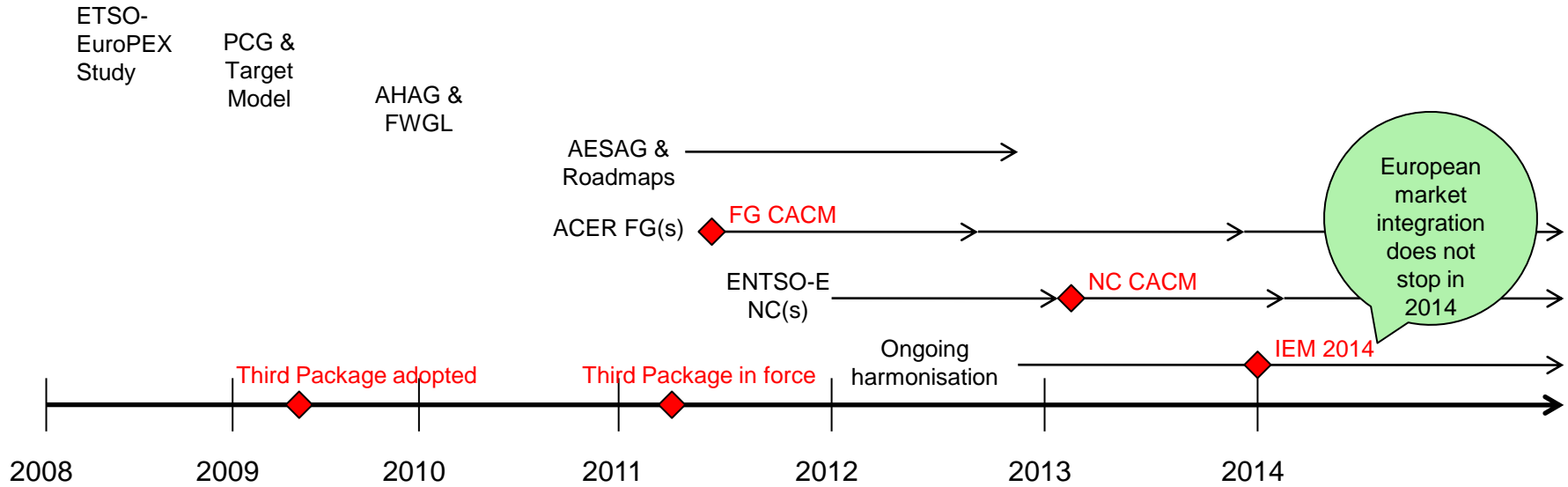
- NWE is recognised as the pilot project for IEM
- ENTSO-E to ensure further extendibility to other European regions
- NWE Monitoring Groups established (with non NWE TSOs)
- EirGrid is sitting on both the NWE Day ahead and Intraday monitoring groups



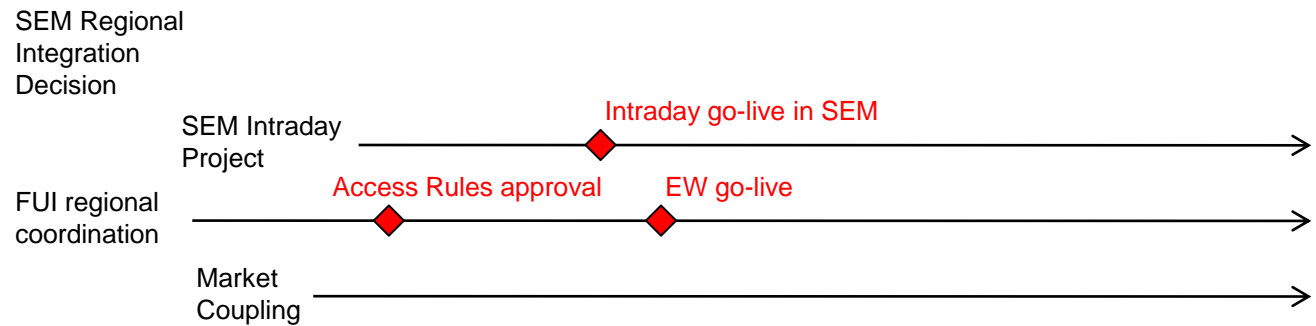
Developments to 2014 and beyond



Europe



SEM



SEM and the Target Models



SEM issues

- Most markets in Europe are based on Bilateral Contracts with an Imbalance Market, SEM is not.

Central dispatch means quite different things to self dispatch

- Trading closer to real time poses challenges for the SOs
- Security Options need to be expanded
- Continuous trading with central dispatch needs detailed analysis

Complex Bids

- Simple bids more compatible with coupling
- Capacity payments add to the complexity

Wind Penetration

Target model not necessarily designed with the current levels of penetration in mind

- Support payments not necessarily considered
- Intraday – Closer to real-time
 - Allows dispatch closer to real-time
 - Better trading and hedging
 - Wind forecasting – greater accuracy

What's required



- Implement intraday
- Greater coordination across the interconnectors and TSOs on access rules, products, scheduling, compensation.
- Develop and Introduce Network Codes
- Evolve SEM
 - An Ex-ante price for SEM
 - Engage with NGUK and RTE to deliver coupling in conjunction with the MOs and PXs
 - Participate in the NWE pilot project
 - Deliver a market design that achieves target model compliance and greater integration

Questions?





EIRGRID

TSO's role in Europe (Congestion Management Guidelines)



- Transmission system operators shall promote operational arrangements in order to ensure the optimum management of the network and shall promote:
 - the development of energy exchanges,
 - the coordinated allocation of cross-border capacity through non-discriminatory market-based solutions,
 - the integration of balancing and reserve power mechanisms
- TSOs shall define an appropriate structure for the allocation of capacity between different timeframes. Such an allocation structure shall be subject to review by the respective regulatory authorities. In drawing up their proposals, the TSOs shall take into account:
 - the characteristics of the markets;
 - the operational conditions, such as the implications of netting firmly declared schedules;
 - the level of harmonisation of the percentages and timeframes adopted for the different capacity-allocation mechanisms in place.



How can you participate?

Extensive Stakeholder involvement so opportunity to provide feedback into:

- ACER Framework Guidelines (directly or via SEM Committee)
- ENTSO-E Network Codes (directly or via EirGrid)
- France-UK-Ireland (FUI) regional stakeholder group meetings
- European associations – CEDEC, CEFIC, EFET, Eurelectric, EuroPEX, GEODE, IFIEC

Important to express your views on the appropriate direction, degree and pace of European market integration to ensure Irish businesses and customers benefit

What can EirGrid do to help:

- Active member of ENTSO-E
- Will hold Stakeholder Workshop later in 2011
- Will provide information on www.eirgrid.com on European Developments
- Available to discuss/present on issues as required

Customer Relations

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