

# FCA & CACM

SEM Network Code Forum  
Belfast - 5<sup>th</sup> Sept 2013



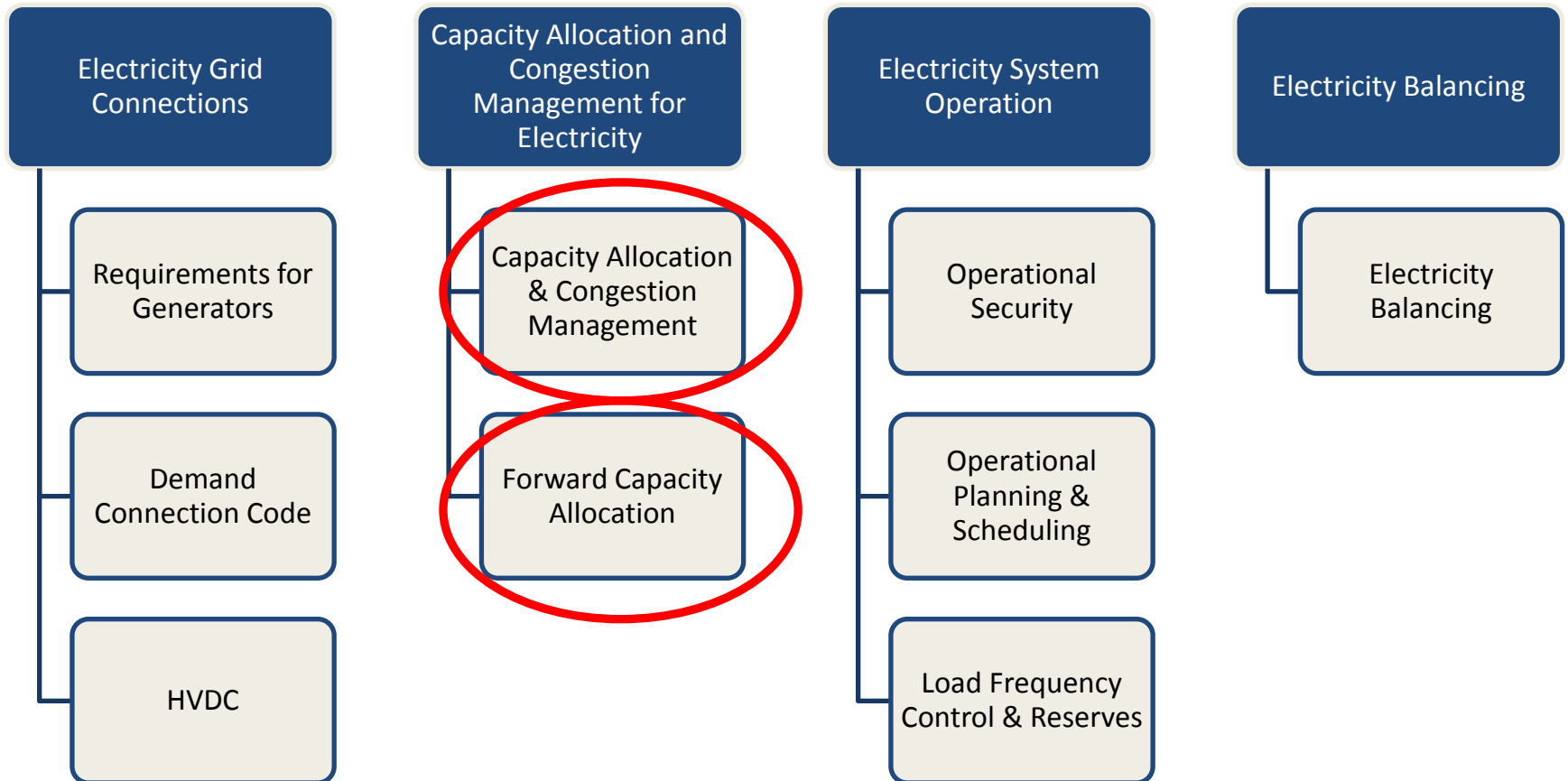
# Development of the Network Codes

Collectively “the Third Energy Package”

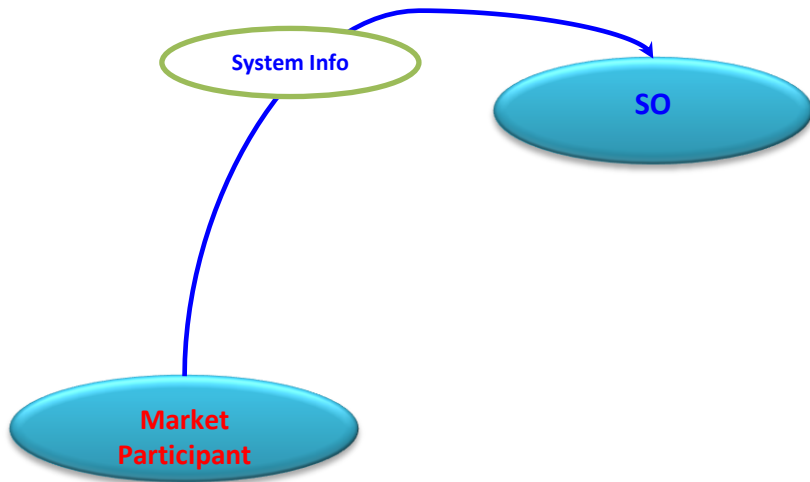
Directive 2009/72/EC

Regulation EC/714/2009

Regulation EC/713/2009



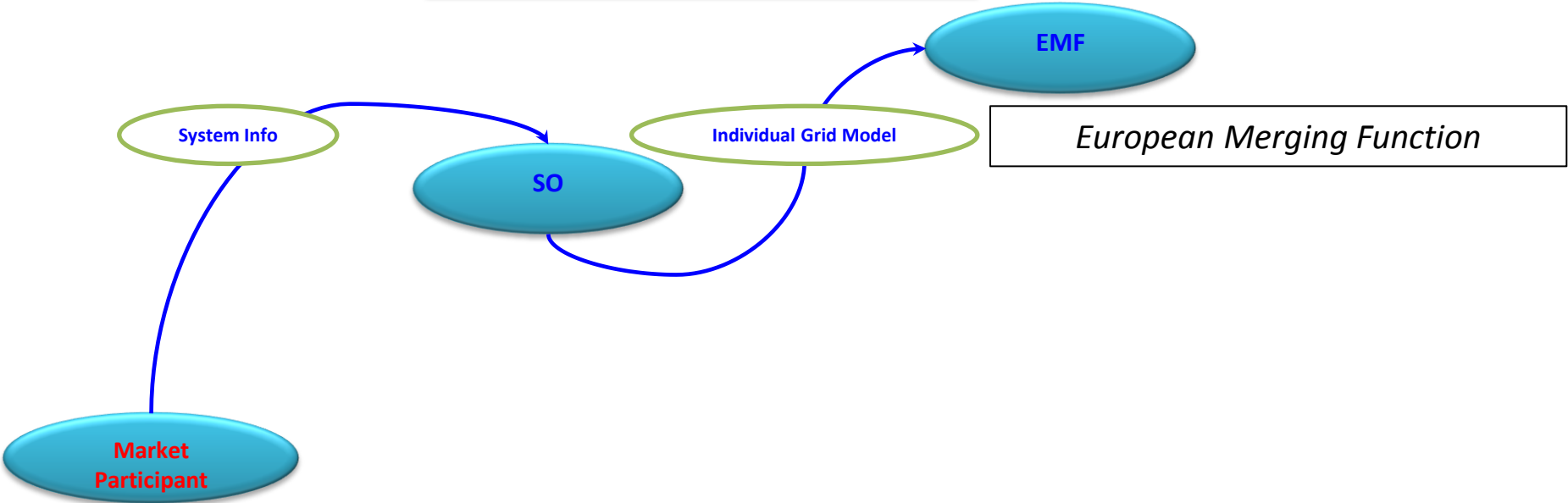
## Forward Process Flow



### *Participant*

- Provision of generation and load data to System Operator;
  - FCA generation and load data provision methodology shall take into account and complement the generation and load data provision methodology from CACM
  - requirements set out in CACM Generation and Load Data Provision Methodology shall apply

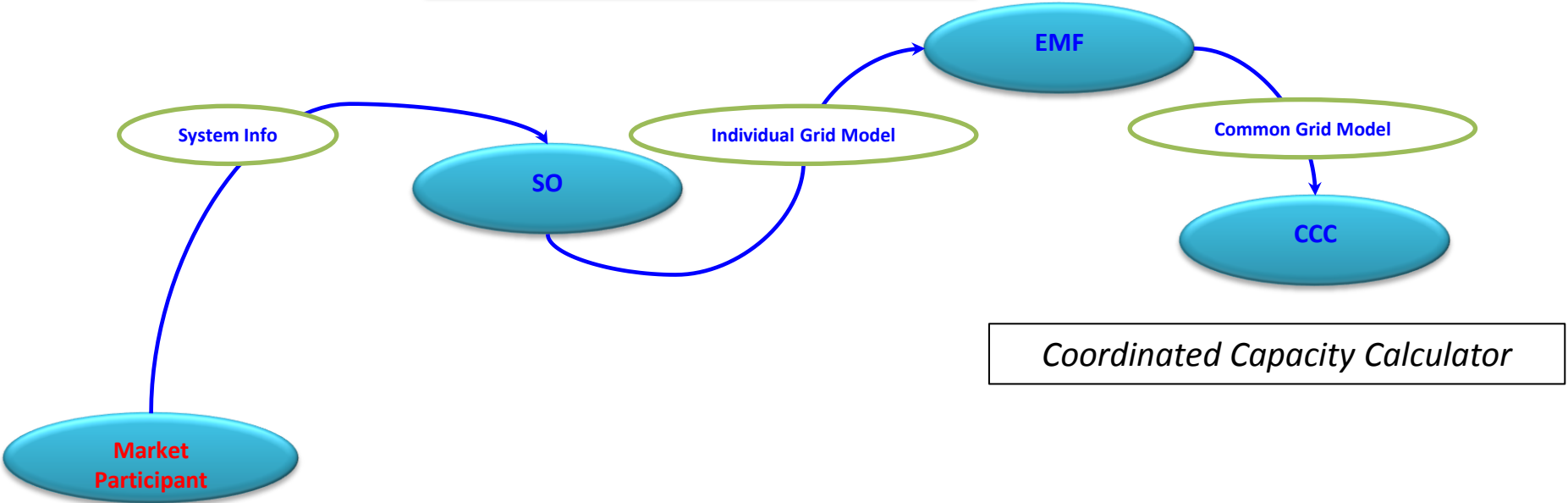
# Forward Process Flow




*System Operator*       *European Merging Function(EMF)*

- Creates Individual Grid Model where security analysis based on multiple scenarios is applied
  - requirements set out in Individual Grid Model in CACM shall apply
- The individual Grid Model feeds into the European Merging Function;
- A statistical approach based on historical Cross Zonal Capacities for DA or ID timeframes may apply if it can be demonstrated that:
  - it increases the efficiency of the capacity calculation methodology
  - better takes into account the uncertainties of LT Cross Zonal Capacity Calculation
  - increases Social Welfare with the same level of System Security

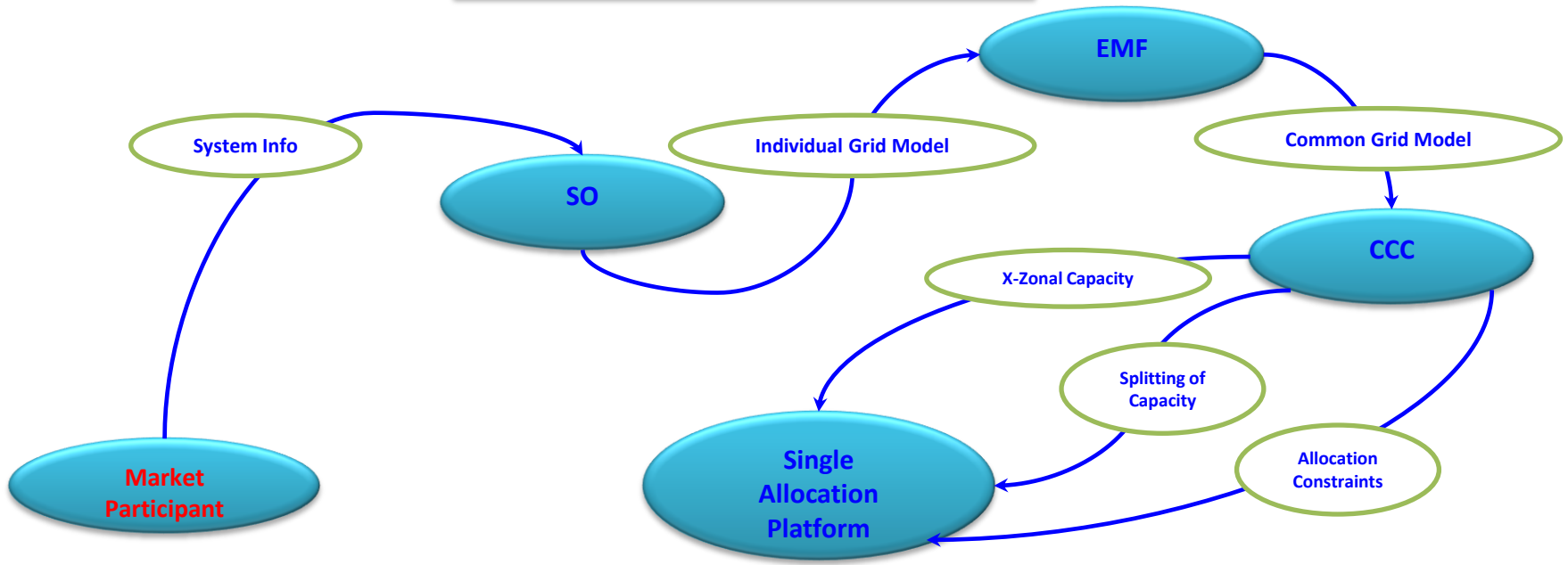
# Forward Process Flow




*European Merging Function(EMF)*  *Coordinated Capacity Calculator (CCC)*

- Role assigned to System Operators;
- Task of creating a single **Common Grid Model** for all connected areas;
- Same level of detail as the Individual Grid Models;
- A model of the transmission system with the location of relevant generation and load units;
- A Common Grid Model is to be created for each of the defined scenarios as used in the creation of the Individual Grid Models;
- Output is provided to the Coordinated Capacity Calculator (CCC);

# Forward Process Flow

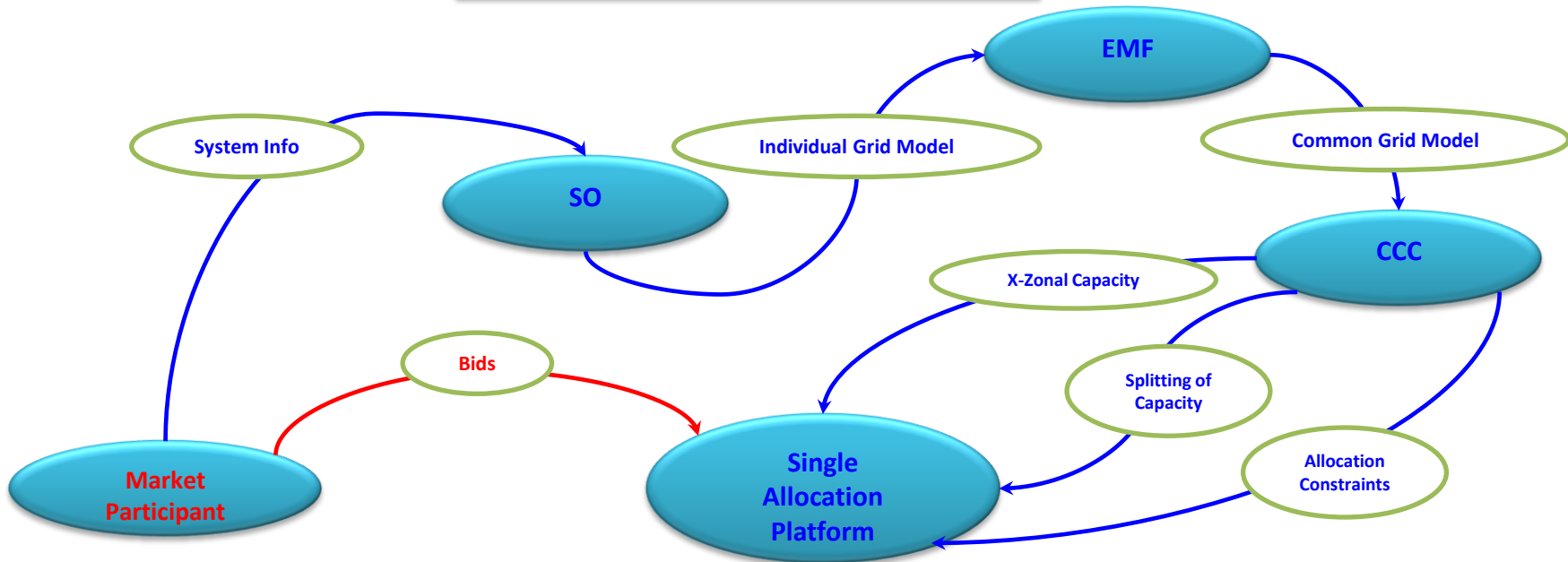




*Coordinated Capacity Calculator (CCC)*  *Single Allocation Platform*

- Each CCC carries out the capacity calculation for its capacity calculation region (CCR);
- Regions to be defined based on Regulation 714/2009
- Inputs to this process -
  - Operational Security Limits, Contingencies and Allocation Constraints as set out in CACM
  - Already allocated capacities
  - Splitting of capacities
- Methodology for splitting capacities shall be based on the following conditions:
  - it shall meet the needs of market participants;
  - it shall be coherent with the FCA capacity calculation methodology;
  - it shall not lead to restrictions in competition
- Values for Cross Zonal Capacity and Split Cross Zonal Capacity are first submitted to the System Operators of the capacity calculation region for validation;
- CCC submits data to the Single Allocation Platform

# Forward Process Flow



## *Single Allocation Platform*

Allocation Platform shall define and publish an auction specification containing, at least the following :

- date and time of auction gate opening and gate closing
- results of splitting and type of LTR to be auctioned
- format of bids
- date and time of publication of Auction results
- contestation period

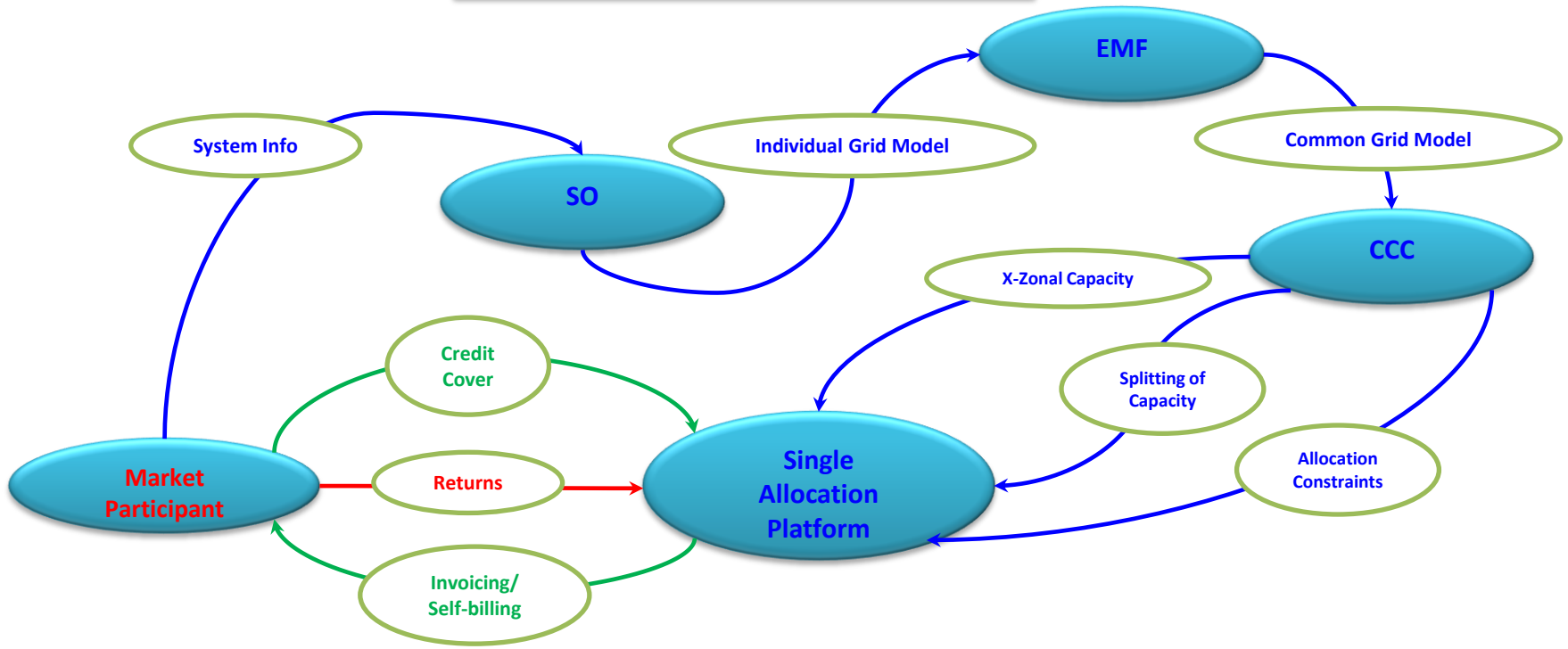
Inputs used in FCA:

- Validated results of splitting of capacities submitted by each CCC and capacities linked to returned LTRs
- Allocation Constraints, where appropriate
- Bids submitted by Market Participants

Outputs of the FCA

- volume of allocated LTRs
- price of LTRs
- execution status of bids

# Forward Process Flow



## *Single Allocation Platform*

Allocation Platform shall provide invoicing and self-billing procedures for settlement resulting from:

- Allocation of LTRs
- Return of LTRs
- Remuneration of LTRs

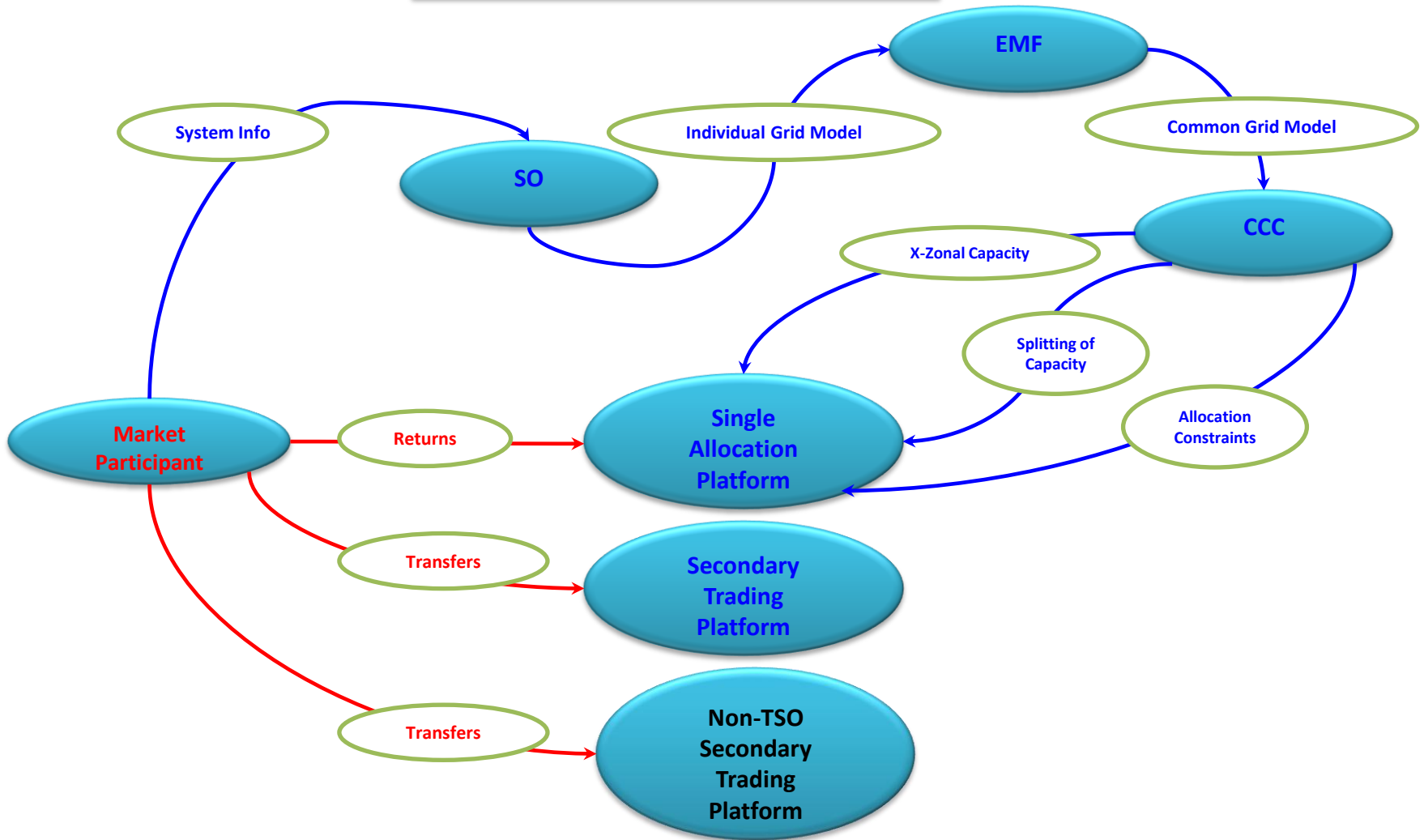
Market Participants shall provide:

- Collaterals (i.e. credit cover)

Return of LTRs

- LTR holders may return their rights for allocation in a subsequent auction
- LTR holders must notify the Allocation Platform
- LTR holders shall be reimbursed the resulting price in the subsequent auction

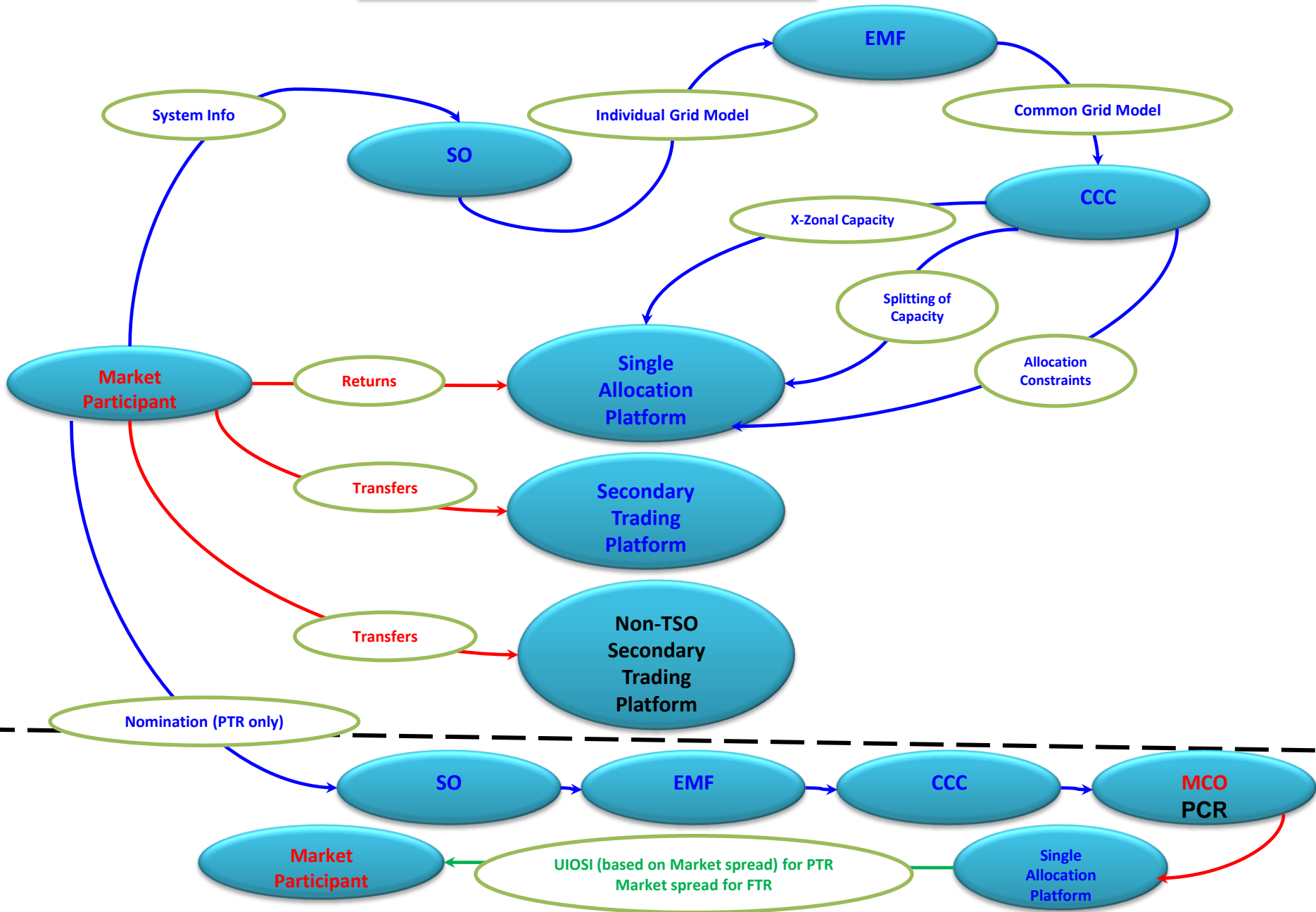
# Forward Process Flow



## *Secondary Trading*

- LTR holders are entitled to transfer all or part of their LTRs in the secondary market
- LTR holders transferring LTRs in the secondary market shall notify the Allocation Platform
- Market Participants acquiring LTRs in the secondary market shall confirm the notification sent by the LTR holder to the Allocation Platform
- The Secondary Trading Platform shall be a simple bulletin board pegged to the Single Allocation Platform
- Other entities are able to establish their own Secondary Trading Platforms

# Forward Process Flow

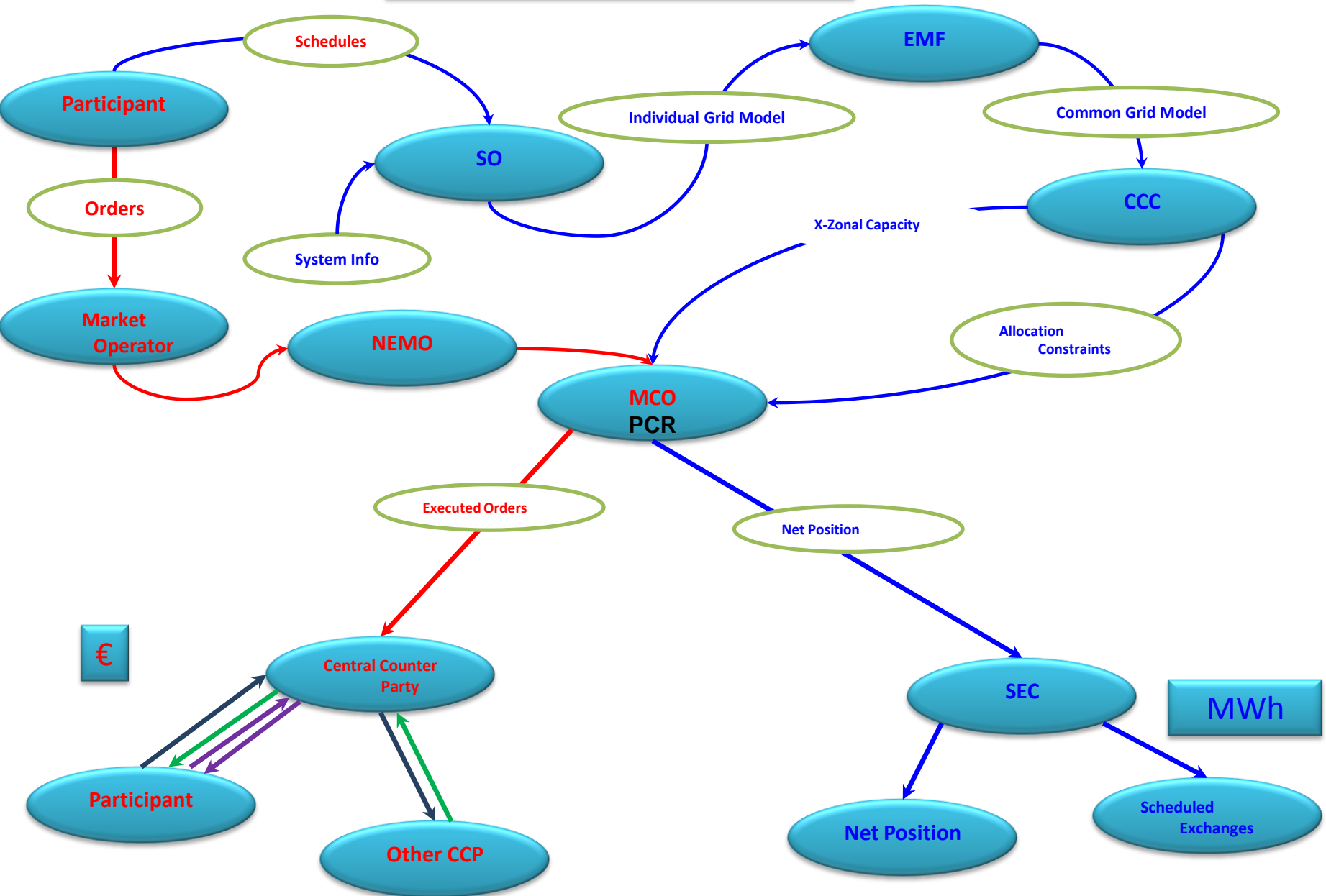




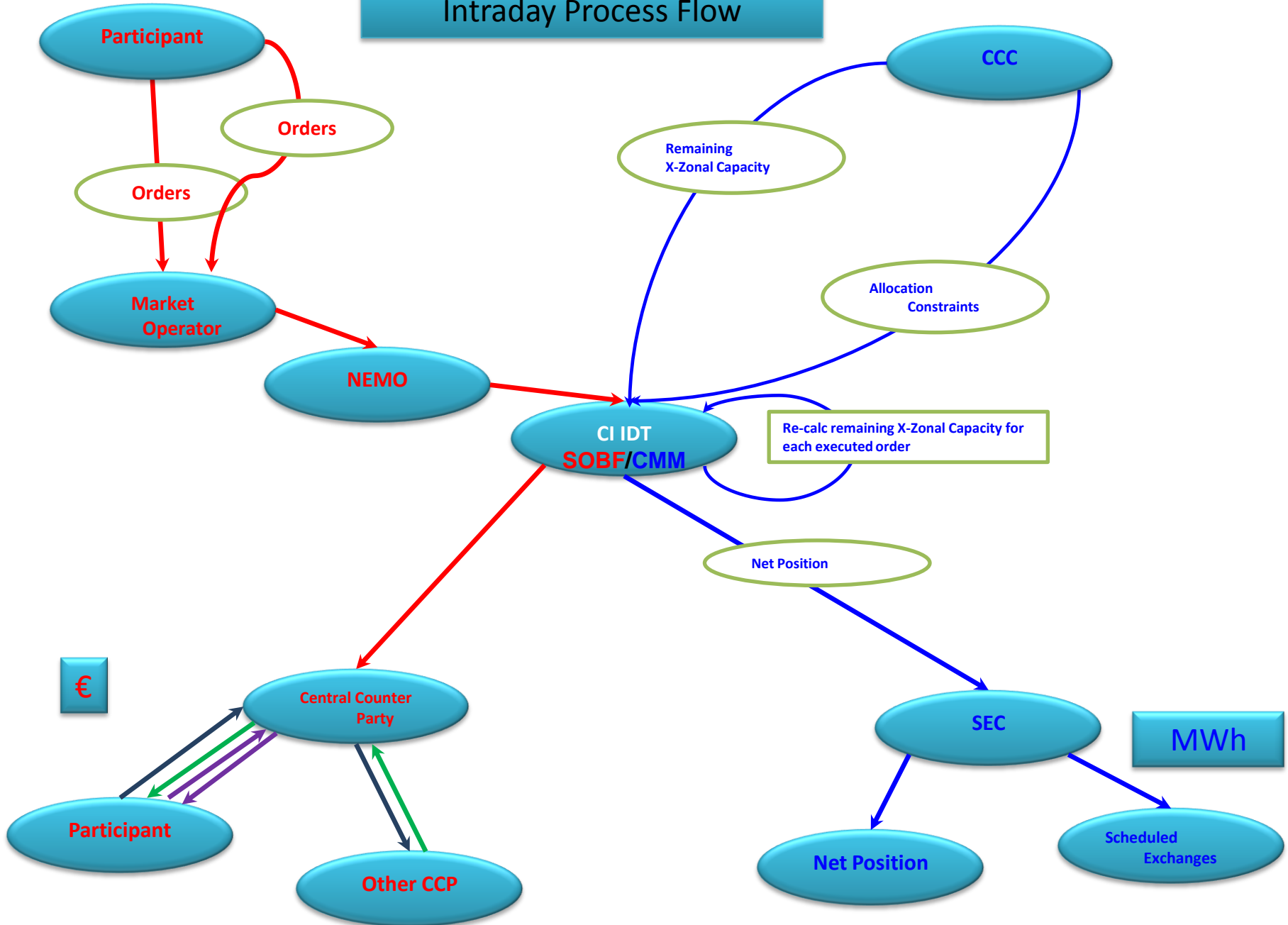
## *Nomination*

- PTR holders may nominate all or part of their Cross Zonal Capacity
- If PTR holders do not nominate their Cross Zonal Capacity they shall be entitled to UIOSI
- The UIOSI payment shall be made by the Allocation Platform to the PTR holder

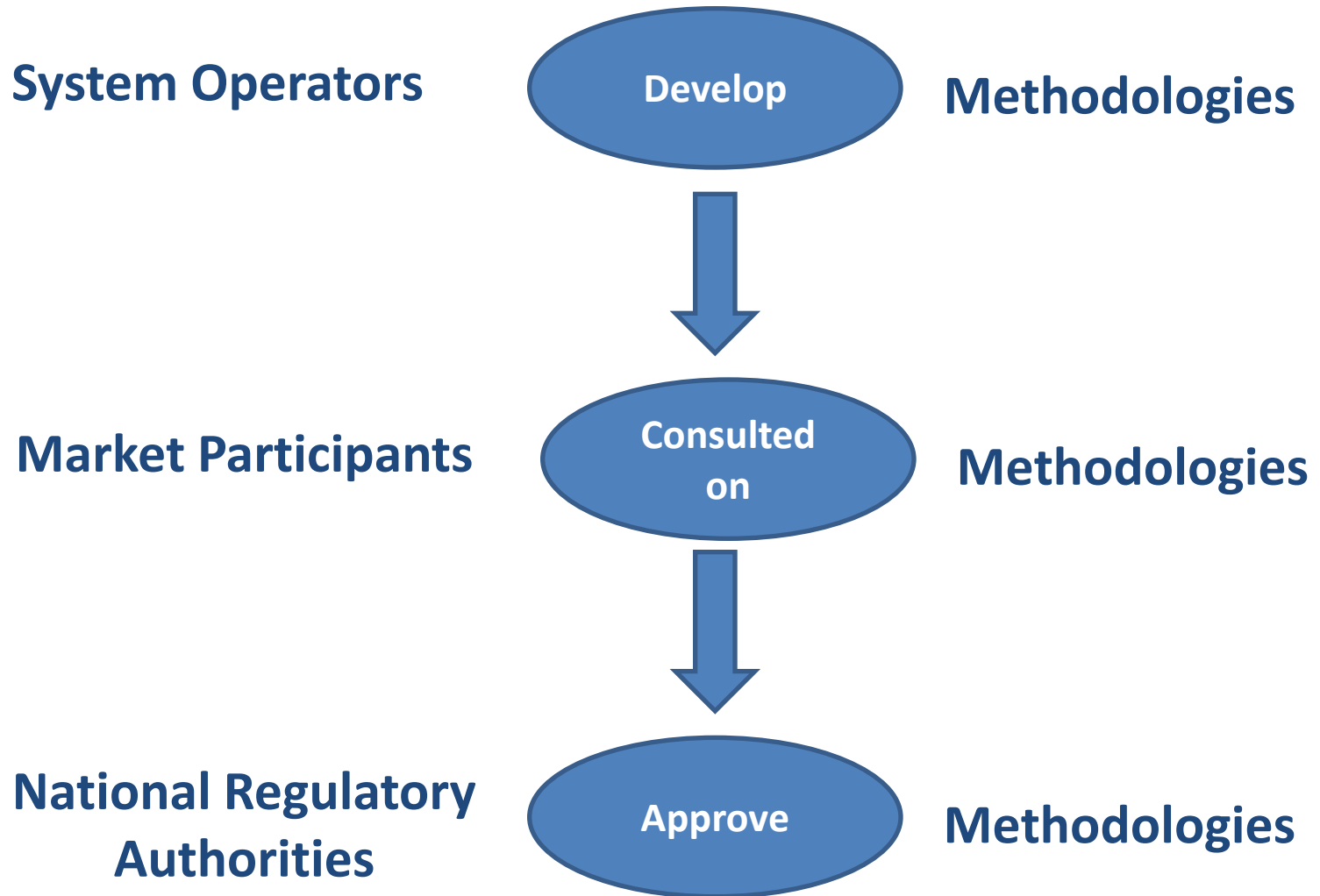
# Day-Ahead Process Flow



# Intraday Process Flow



# FCA & CACM NC - Methodologies



# Methodology Timeline for FCA

Methodology	Timeline
Capacity Calculation Region	2 months
Decision on Cross Zonal Risk Hedging Opportunities	2 months
Generation and Load Data Provision	4 months
Common Grid Model	6 months
Functional Requirements for the Single Allocation Platform	9 months
Capacity Calculation	12 months
Harmonised Allocation Rules (proposal)	12 months
Nomination Rules for PTRs	12 months
Splitting Cross Zonal Capacity	12 months
European Merging Function	12 months
Coordinated Capacity Calculator	12 months
Congestion Income Distribution	12 months
Biennial Report on Capacity Calculation	24 months
Decision on establishment of the Single Allocation Platform	27 months
Single Allocation Platform is operational	39 months

# Early Implementation Timeline for CACM

Methodology	Start	Deadline	Timeline
Capacity Calculation Region	Ongoing	Nov 2013	2 months
Generation and Load Data Provision	Not started	Apr 2014?	4 months
Common Grid Model	Not started	Jun 2014	6 months
Biennial Technical Report BZ Study	Ongoing	Dec 2014	6 months
Price Coupling/Continuous Trading - Algorithm	Ongoing /NS	Apr 2014?	6/3 months
Scheduled Exchanges – DA & ID	Ongoing /NS	Sep 2014?	12/6 months
DAFD	Ongoing	Jun 2014	12/6 months
Capacity Calculation	Not started	Dec 2014	12 months
European Merging Function	Not started	Dec 2014	12 months
Coordinated Capacity Calculator			12 months
Congestion Income Distribution	Ongoing	Jun 2014	12/6 months
Redispatching & Countertrading – cost sharing/meth	Ongoing (EU)	Jun 2015	18 months
Intraday Capacity Pricing	Not started	Sep 2015	24 months
Biennial Report on Capacity Calculation	NA	NA	24 months

# Common Grid Model Task Force

- CGM Recommendations document nearing completion
  - Current Data Exchange chapter **complete**
  - Business Needs chapter **complete**
  - Content of Common Grid Model chapter **complete**
  - Year Ahead CGM Methodology **complete**
  - D-2 CGM Methodology **complete**
  - D-1 CGM Methodology **complete**
  - Intraday CGM Methodology **complete**
  - Month-Ahead CGM Methodology **draft**
  - Week-Ahead CGM Methodology may be dropped [not required under codes]
  - Model Assembly & Processing chapter **draft**
  - Data Exchange Environment chapter **draft**
  - Data Quality chapter **draft**

# Common Grid Model Task Force

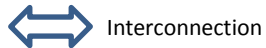
- Heavy data submission burden
  - *At least* 48 EirGrid & SONI network models to be submitted daily
  - Associated IT infrastructure & manpower overheads
- Draft CGM Recommendations document submitted to MIWG, Network Code convenors & various other WGs for comment
- ‘Roadmap’ for document approval (explanatory notes, etc.) to be drawn up
- Next meeting of CGM Task Force on 23<sup>rd</sup>/24<sup>th</sup> September [Brussels]
- Draft document & ‘roadmap’ to be presented to SOC on 17<sup>th</sup> October
- Aim: SOC approval of document on 28<sup>th</sup> November



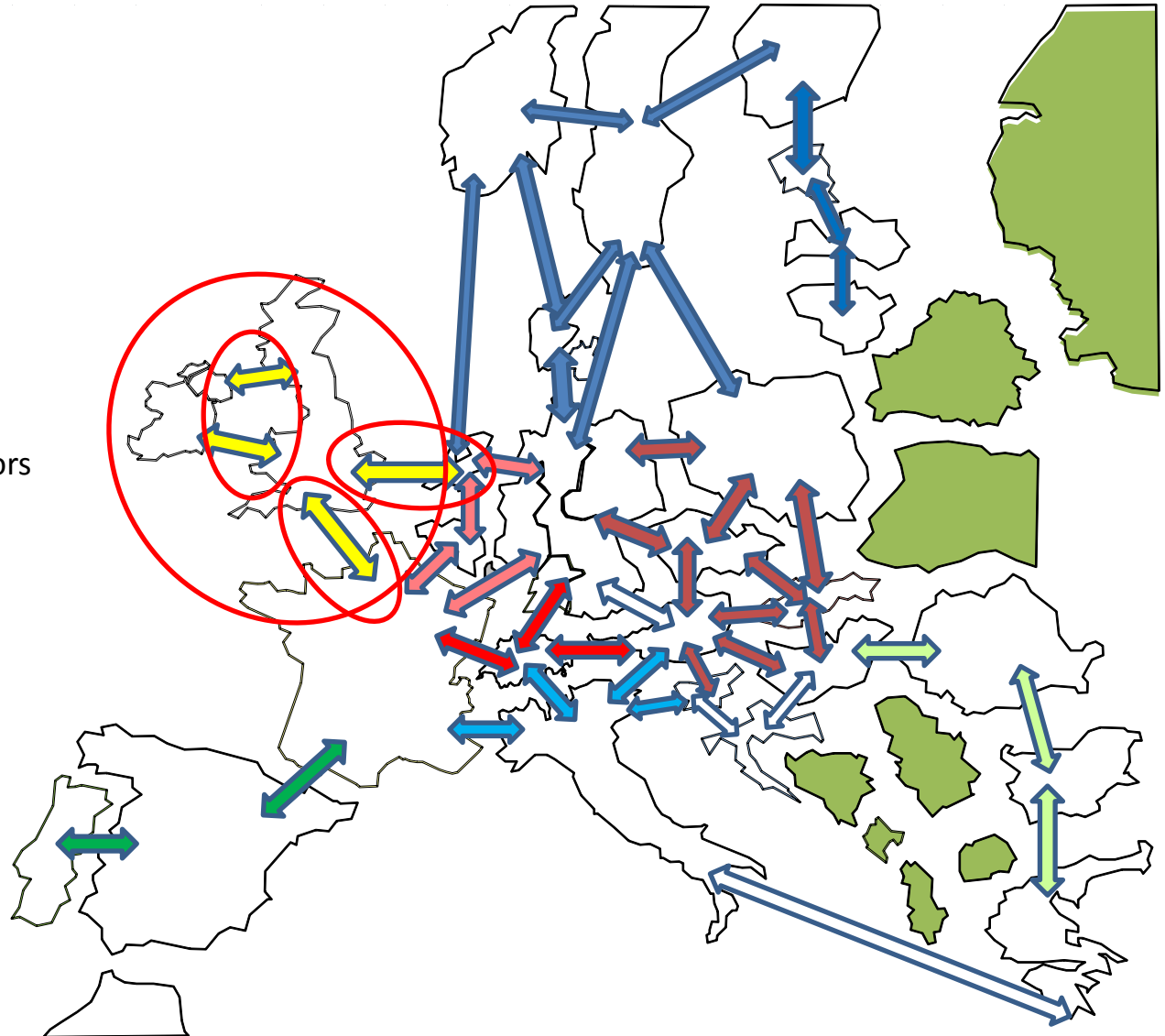
# Capacity Calculation Regions - proposal

## Regions

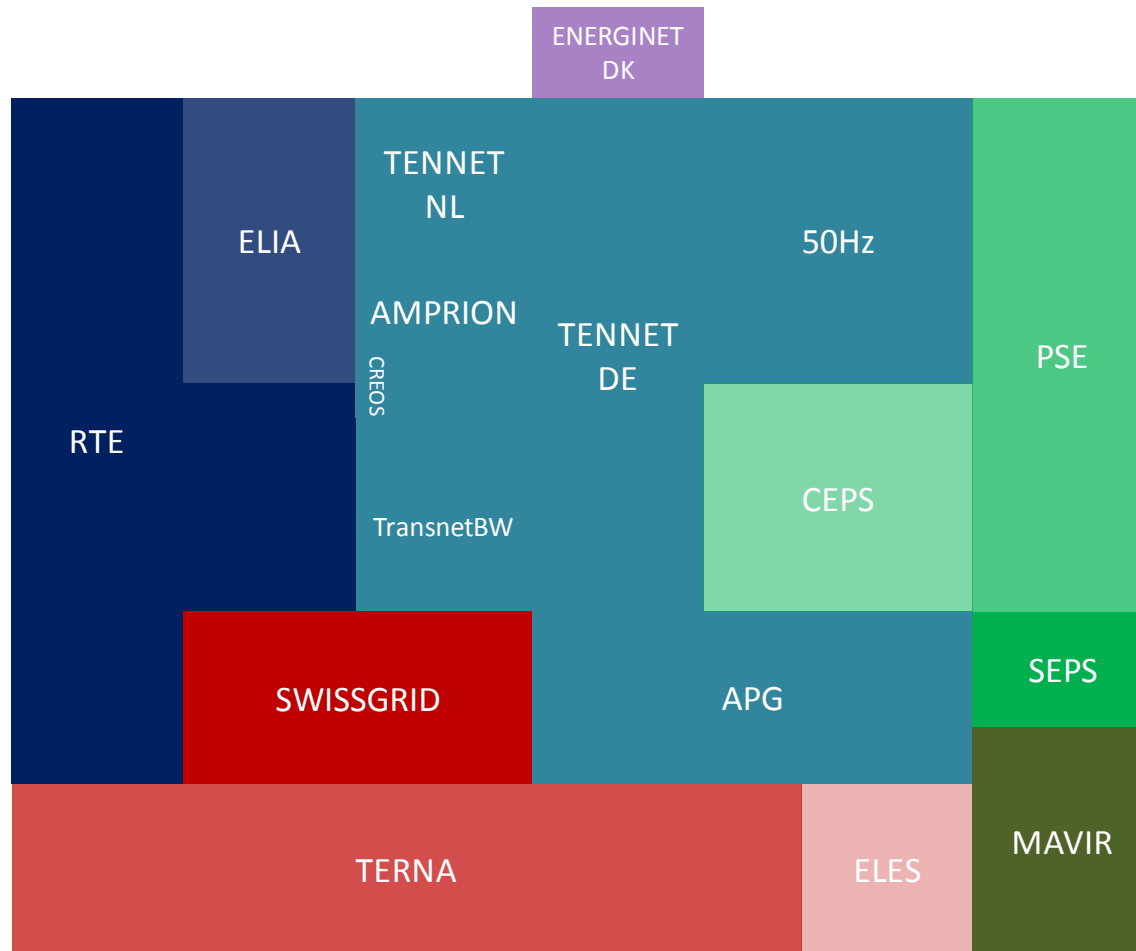
- Nordic
- CWE
- CEE
- SWE
- Italian Borders
- FUIN
- Baltic
- SEE
- Swiss North Borders



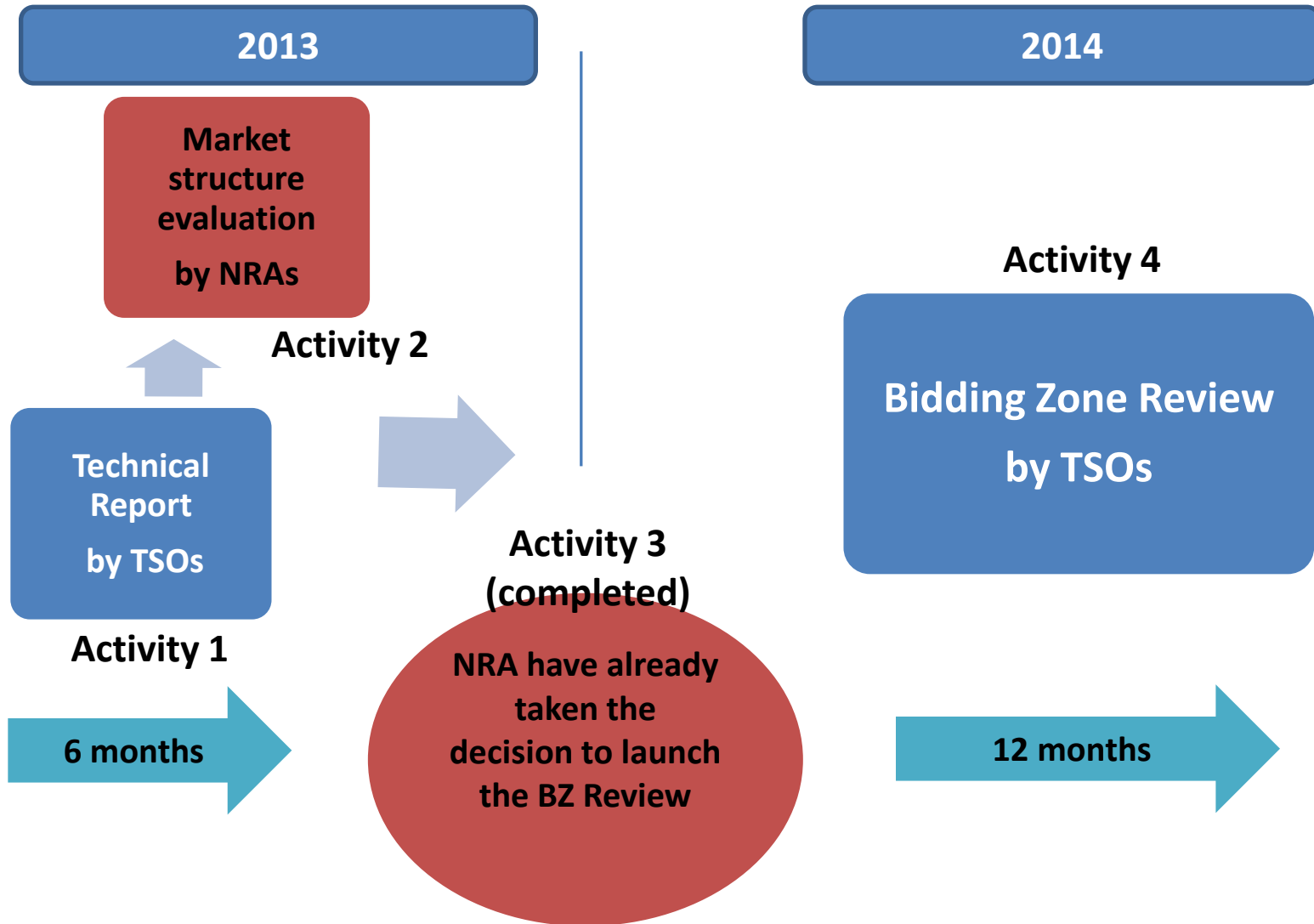
Interconnections are presented with different colors showing to which region they belong



# Bidding Zone TF



# Bidding Zones – Activities



# Bidding Zones – Configuration

*Bidding Zones shall be the same across all timeframes (i.e. the Bidding Zone for the Long Term timeframe in the FCA code shall be the same as the Bidding Zone for Day Ahead and Intraday set out in the CACM code.*

*If a Bidding Zone is reconfigured, holders of LTRs will be reimbursed*

# Thank you

