Balancing Taskforce n°3

01/03/2013

Elia ENMAN

Agenda

1. Welcome

13h30

2. Validation of Meeting minutes dd 11-01-2012 (10')

13h40

3. Various information and feedbacks (20')
   - Internet publication of Taskforce documents
   - Balancing training concept – "Status"
   - Feedback stakeholder workshop XB Tennet-Elia

14h00

4. Balancing Publications (45')
   - Infeed Publication
   - Solar Forecast / Wind Forecast
   - Evolutions

14h45 => Pauze => 15h00

5. Contractual models – continued (45')
   - Contractual Model for diversification of balancing services
   - R&D Pilot Project R3 from decentralized Load

15h45

6. Portfolio and/or Unit bidding ↔ link with congestions management (1h)
   - Introduction
   - Current process for congestion management
   - Proposition for congestion management with the future bid ladder

16h45

7. Questions – Remarks - Next steps - next meeting date

Validation of Meeting minutes
⇒ Balancing Taskforce 11/01/2013

Minutes of meeting
Balancing Taskforce 11/01/2013

Remarks on these minutes could be sent to bob.hebb@elia.be

- **Final minutes will be validated on each next taskforce.**
- **Comments received from Mehdi Hajjam (Actility):**

... also suggested ways for handling the technical issues ELIA is facing, mostly related to the impact on the perimeters of the ARP:

- Regarding the definition of a reference curve, I suggested that the methods implemented in the US by ISO such as New England's deserved attention, and that they could also be implemented in Belgium. These methods would be validated by ELIA depending on each customer's load profile:
  - if the profile is flat, a flat reference at the correct level of power can be used
  - if the profile can be defined precisely for the next one or two hours, a free forecast, if reliable enough, can be used (France will also implement this shortly in the NEBEF framework) and refreshed regularly,
  - if the profile displays seasonalities, a cyclical reference can be used based on a statistical analysis of the historical profiles

- Regarding the "report effect", that is to say a site consuming the electricity later on after an upward offer or not consuming it as it should have after a downward offer, I clearly stated that it is possible to statistically quantify the economic impacts on the ARP's perimeters (we are open to discussions on these points since we already have some results available on this. As a matter of fact, depending on some parameters, either the BSP or the BRP is positively impacted in a way we can quantify)

- Regarding the "vol d'energie" you might be afraid of when looking at the Voltalis case in France, the common ground on which the different aggregators stood together during the meeting clearly displays a positive attitude. We want to avoid it at all cost, as it proves a hindrance to the demand side management business as a whole. It can be avoided very easily, by having the energy paid to the supplier.

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Various information and feedbacks
⇒ Internet publication of Taskforce documents

In order to increase transparency, all Balancing Taskforce documents will be published on the internet:

- **Scope**
- **Members**
- **Agenda**
- **Meeting minutes**

Training Day Balancing "Introduction"
⇒ Confirmation for 27/03/2013

Content

- **Introduction to the current market mechanisms principles**
- **Know why a balancing mechanism is necessary and be familiar with the basic principles underlying it**
- **Be familiar with the role of the different market parties (producers, traders, suppliers, consumers, ARPs, …)**

Agenda

- **Morning session:**
  - **Elia introduction**
  - **Electricity market actors**
  - **Regulated perimeter**
  - **ARP – roles and responsibilities**
  - **Nominations**
  - **Imbalance pricing**
  - **IT - tools**
- **Afternoon session:**
  - **Reserve power (R1, R2, R3)**
  - **Free bids**
  - **Entso-e rules**
  - **Workgroup session/ Q&A**

Practical details

- **Emperor meeting room 0.20**
- **Timing:**
  - **09.00: welcome coffee**
  - **09.30 – 12.00: morning session**
  - **12.00 – 13.00: lunch**
  - **13.00 – 16.30: afternoon session**
- **Already 41 registrations on 27/2**
- **Price: 200€**
- This session will be limited to 25 participants.
- Confirmation sent today.
- A second session is planned on **12/06/2013**

Training Day Balancing "Expert"

⇒ To work out with the input of the Taskforce members!

Possible Content

- In depth knowledge of the balancing and understand the reactions of the market
- Be familiar with all relevant procedures (nominations, hub exhanges,…)
- Understand the interaction between different products (imbalance tariffs, reserves) and market reactions

Questions

- What are your needs & priorities towards this Training ?
- What kind of questions & items must be considered?
- Interaction: one Business case or different cases or problems to analyse?
- … Please send your questions / items before 31/3 in order to suit your needs

Next steps

- Gather and analyse the input for the training from the Taskforce
- Prepare the training session & trainers
- Set date and place: possible Q2-Q3 2013

Various information and feedbacks
⇒ Feedback stakeholder workshop XB Tennet-Elia 1st Feb.

Key messages from the workshop

- Elia, Tennet and KEMA presented the results of the first phase of the study
- An in-depth comparison between the respective balancing market design and products in BE and NL was performed
- Key preliminary findings:
  - BE and NL share a similar market design in terms of general principles (reactive balancing, no replacement reserves)
  - However a closer analysis reveals important differences (e.g. product specifications, remuneration, use of products)
  - Further synergies require some substantial changes, e.g. to products, processes and principles for activation and remuneration, rules and regulation.
  - The biggest potential benefits regarding cross-border collaboration in balancing are in the frequency restoration and frequency containment processes
  - A gross assessment of the potential benefits, taking into account the size of balancing markets and cross-border constraints, needs to be performed.
- Stakeholders expressed very positive feedback on the work done

Next steps

- Workshop slides will be available on Elia website (TF Balancing section)
- Stakeholders were invited to send written contributions before 22nd February 2013 (limited reaction)
- Consolidated feedback will be published in the coming weeks.
- Full report of the first phase currently being completed

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Balancing Publications
⇒ Agenda

- **Infeed publication**
- Solar forecast
- Wind forecast
- Evolutions
- Questions?

Balancing Publications
⇒ Context

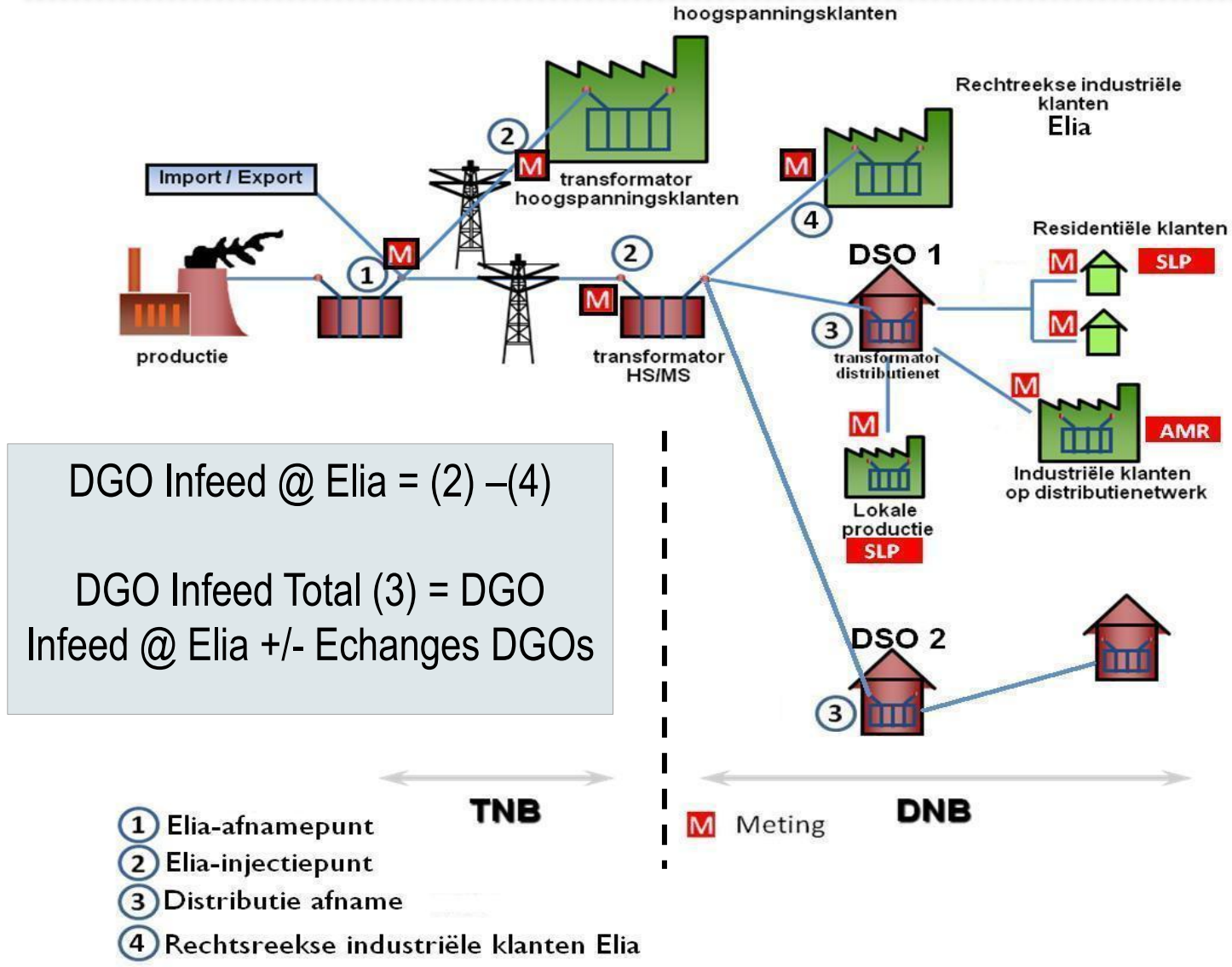
FEBEG
Federation of Belgian Electricity and Gas Companies

2. TO BE situation for electricity (Power)

- as ELIA can see very 'quickly' the demand and supply of all Belgium per High Voltage transformation station, and so per distribution grid operated by a DGO, ELIA could transparently communicate to the market on which distribution grid (DGO) the market – this is all suppliers – is short in supply or long in supply in comparison with the actual demand. This in addition to the already existing global publications (http://www.elia.be/repository/pages/c8f411a7f680489c91c0888a2cb0821b.aspx)
- a possible first solution could be that ELIA publicly publishes in an **online** application in near real time (8' after the real time) the **infeed per distribution grid (DGO)** based on the metering information in the high voltage transformation stations.

- **Major issues of imbalance come from load in distribution**
- **Request to Elia to publish DGO Infeed on real time**

Balancing Publications
⇒ Infeed Publication



DGO Infeed @ Elia = (2) –(4)

DGO Infeed Total (3) = DGO Infeed @ Elia +/- Echanges DGOs

Balancing Publications
⇒ Infeed Publication

UG 06/12/12: Publication telemesures of Elia infeed of 406 posts on quasi real time (not telemesures per DGO)

Available information on real time:

- **406 injection posts to DGOs**
- **88 injection posts where more than one DGO is connected.**
- **12 direct clients connected to DGOs transformators**
- **Only infeed from Elia 70/36kV to Interenerga, WVEM and Tecteo**

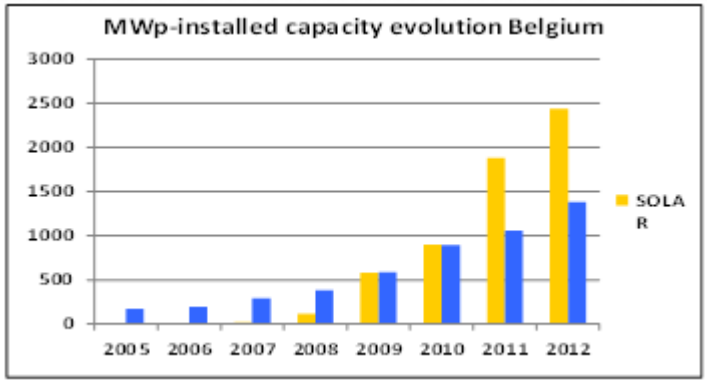
Balancing Publications
⇒ Timeline

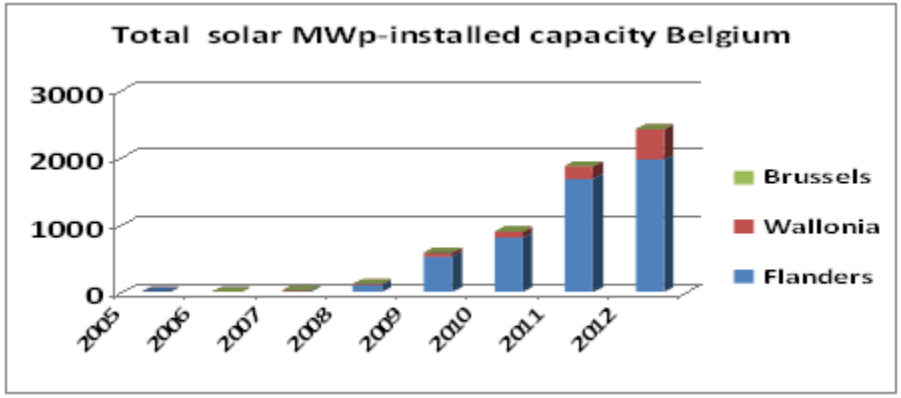
Oct-Nov/2012	Feasibility study
Dec/2012	External validation of publication
Feb/2013	Business Needs
Mar-Apr/2013	Data management
Apr/2013	Business requirements
May/2013	Functional Analysis
Jun-Sep/2013	IT-development
Sep/2013	Testing
mid-oct/ 2013	Go-live of the publication

Balancing Publications
⇒ Agenda

- Infeed publication
- **Solar forecast**
- Wind forecast
- Evolutions
- Questions?

Balancing Publications
⇒ Context & drivers





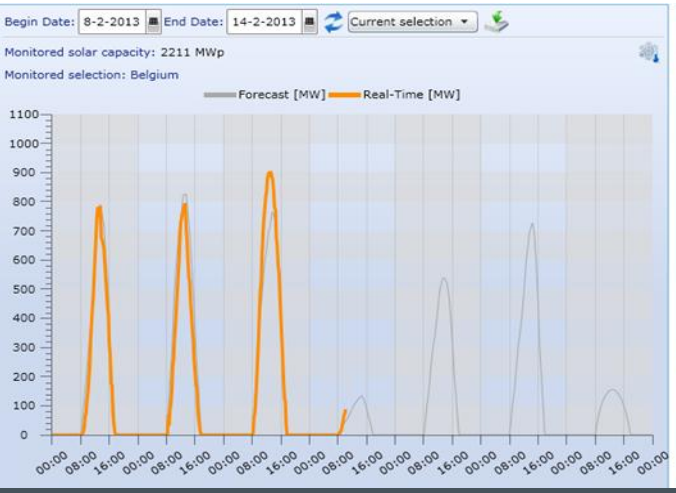
- **Long term: *expected evolution of installed solar capacity* [months,years]**
  - Drivers:
    - Grid investment decisions
    - Operational reserve dimensioning –contract sourcing

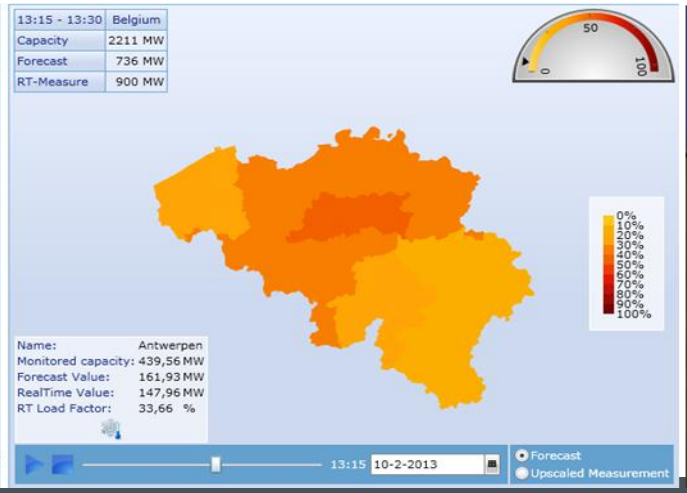
- **Short term: *forecasted solar power production* [D,D+3]**
  - Drivers:
    - Operational security & economical grid management
      - reserve-activations & reservations (balancing – NCC)
      - security calculations & loadflow analysis D-1 & RT (congestion & maintenance mgmt – NCC&RCC)
    - Transparancy requirements ERGEG (2014)
      - aggregated publication of forecasted & RT-measured renewable production
    - Stimulation of correct system functionality
      - Improvement of load estimation for market players & ELIA

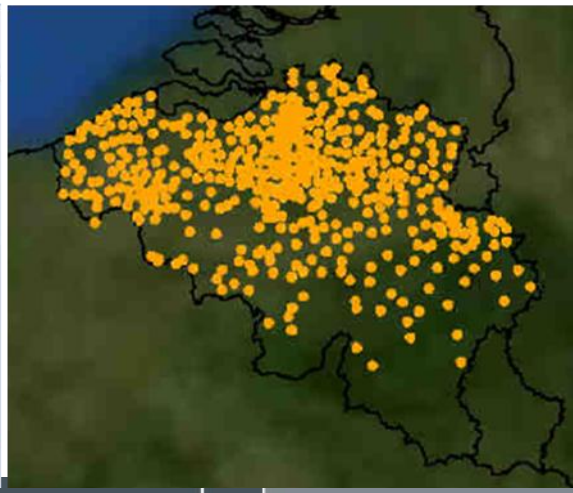
Project Belgian Solar Forecasting 2012-2013

Balancing Publications
⇒ Forecasting & Timings : Summary

- Feb 2012: simple aggregate 1 DA-solar forecast available [1600MWp]
- July 2012: online publication of simple DA-solar forecast solution [1600MWp]
- March 2013: online publication expected of final solution [2400MWp]
  - Day-ahead aggregate (Belgium, provinces) forecasts [D+1,D+2,D+3] @ 11A.M.
  - Intraday aggregate (Belgium, provinces) forecast [D] @ 11A.M.
  - Real-time measurement estimation (Belgium, provinces) @ each quarter hour
  - Graphs & Belgian visualisation map
  - Exports possible for statistical analysis



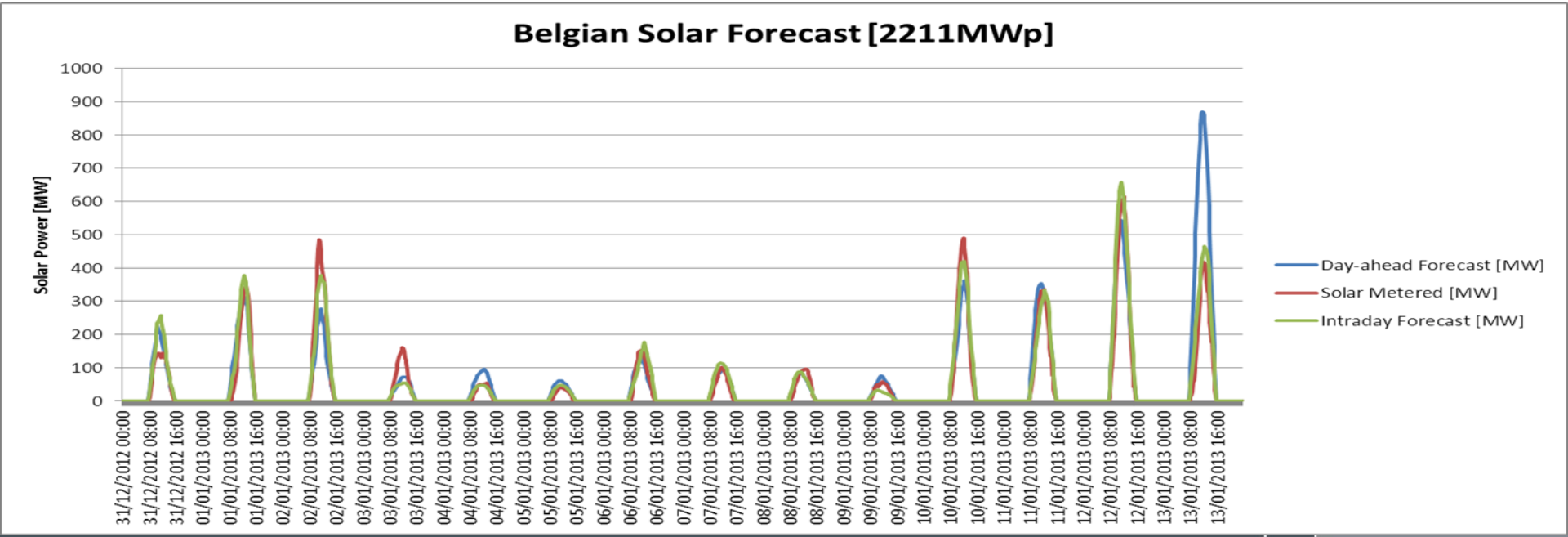




Balancing Publications
⇒ Solar Forecasting Quality

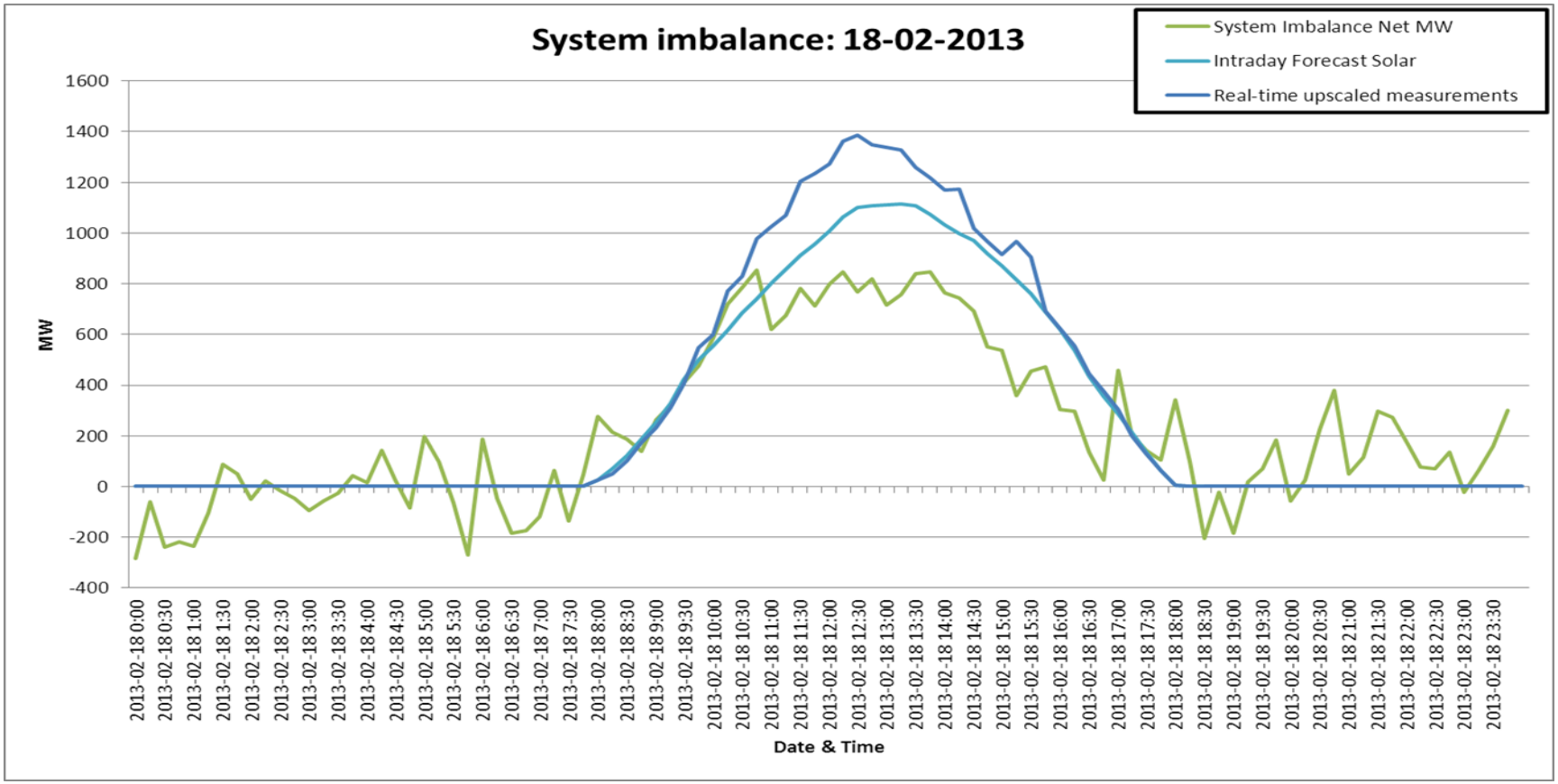
- Hybrid model (physical 3 weather models + statistical model)
- Snow & melting model incorporated (large improvement on snowy days)
- Best industry practice results in good quality on aggregate & regional level

	Belgium [2,4GWp]	Germany [32,1GWp]
Day-ahead RMSE	7,5%	4,5%
Intraday RMSE	4,2%	3,6%



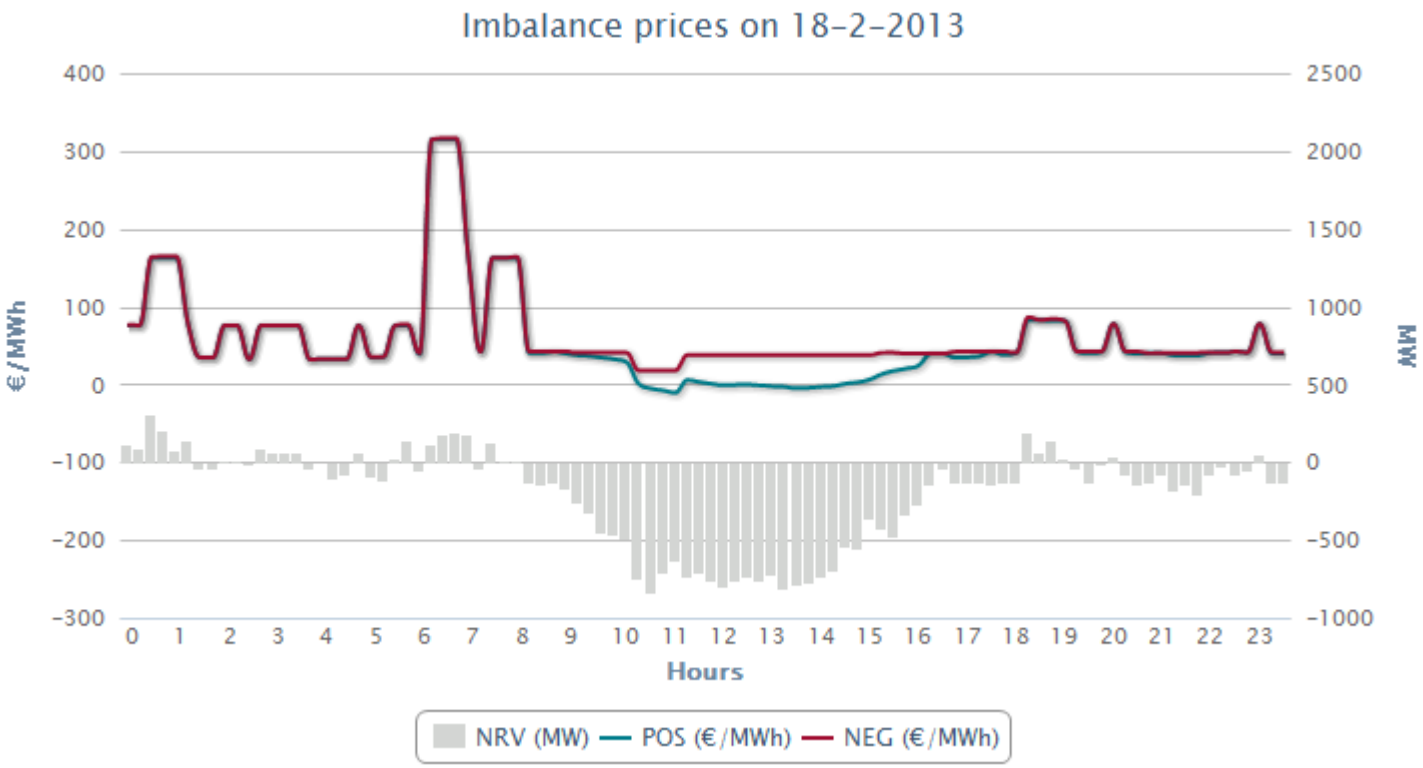
Balancing Publications
⇒ Challenges – impact on SI

Publishing DA, ID & RT- estimations of PV production should improve system energy balance



Important impact of solar in system imbalance

Balancing Publications
⇒ Challenges – impact on SI



Activations de l'ordre de 800 MW !

Balancing Publications
⇒ Challenges – impact on SI

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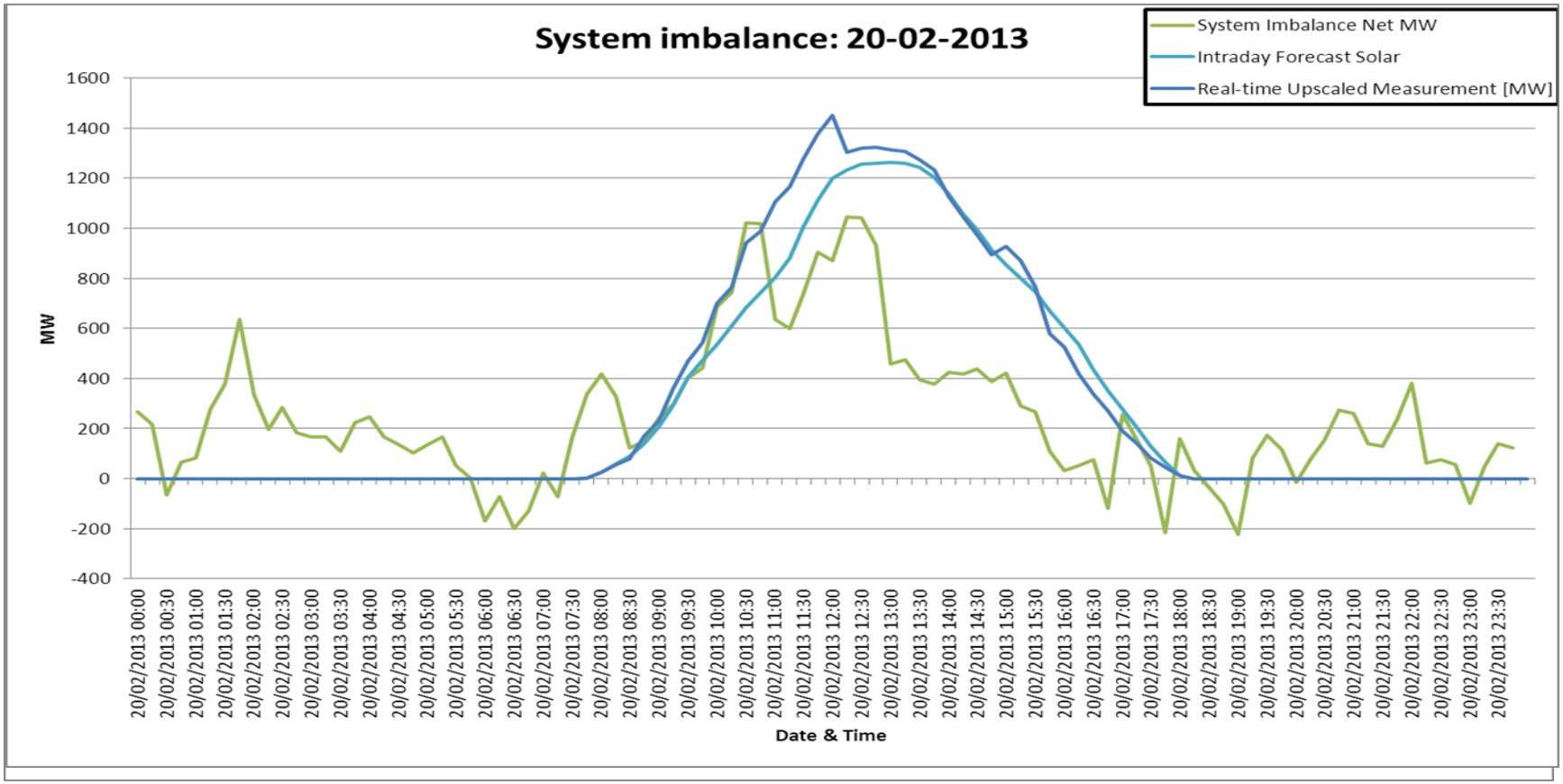

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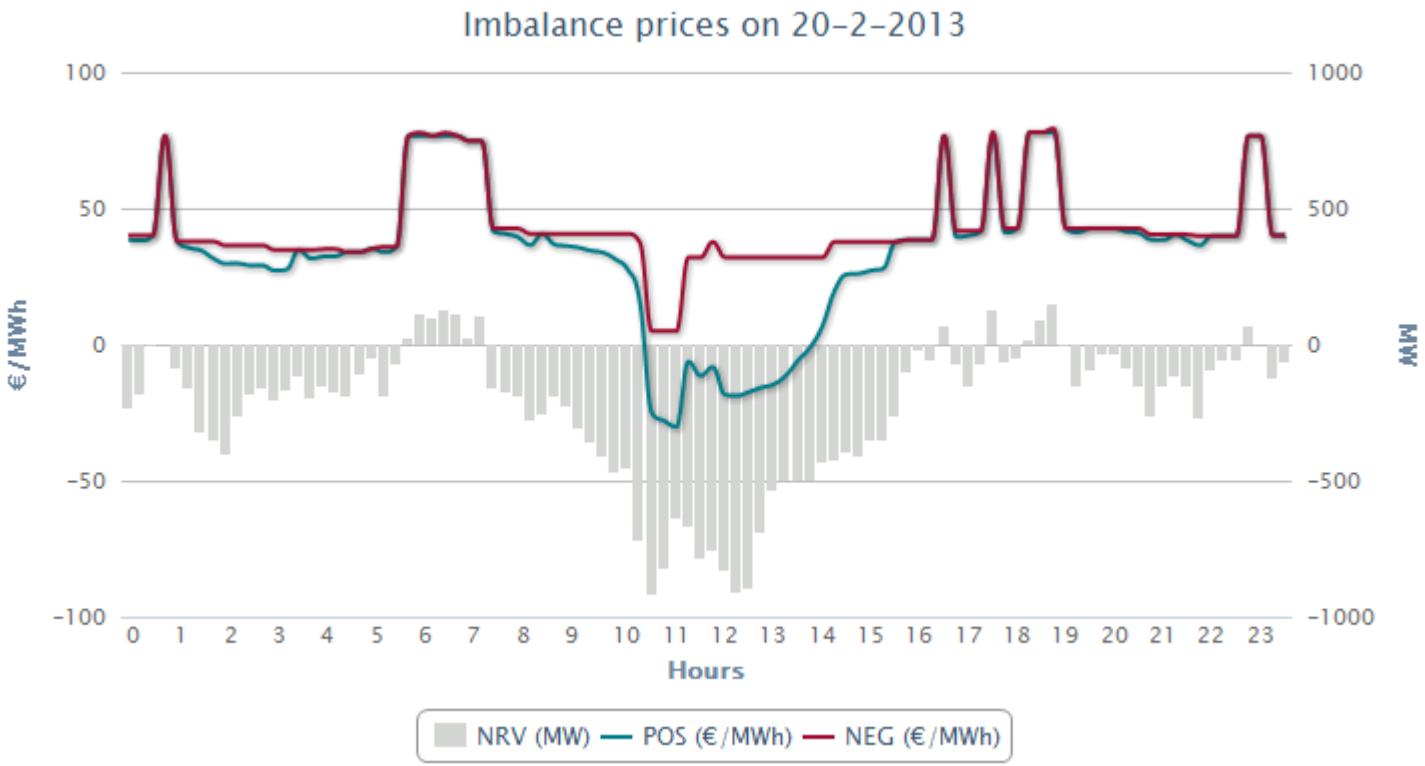
Balancing Publications
⇒ Challenges – impact on SI

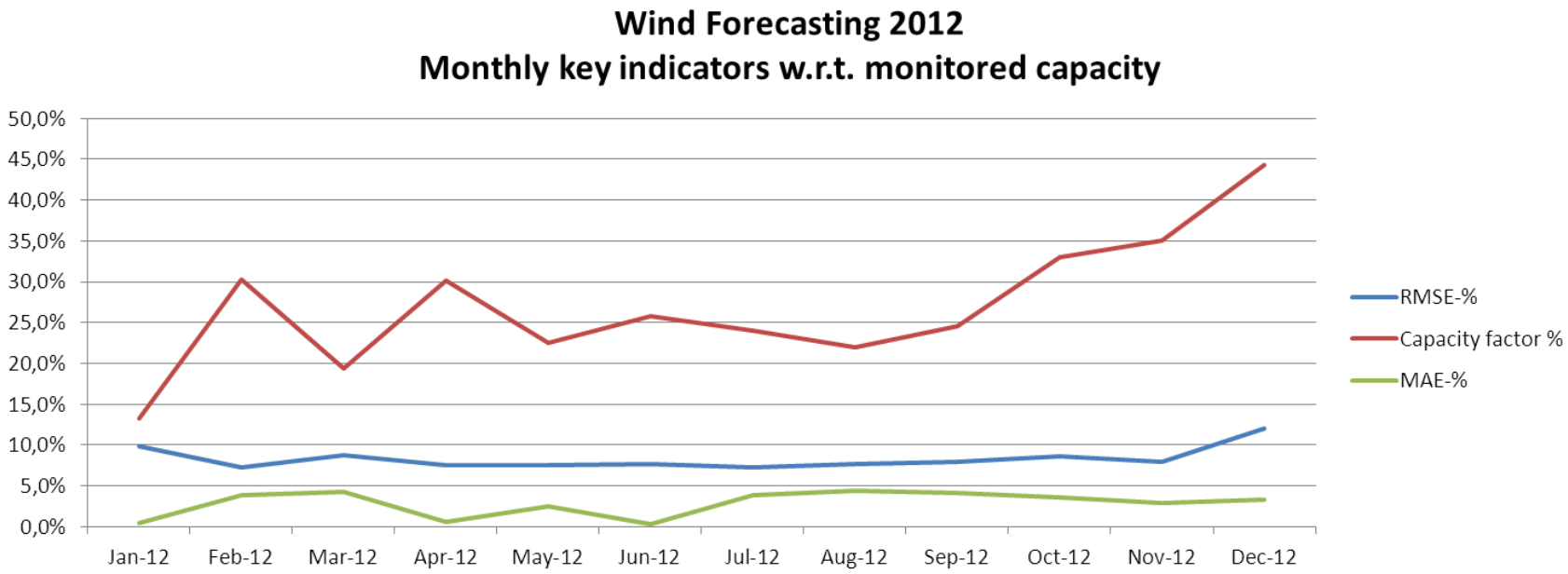


Activations de l'ordre de 900 MW !

Balancing Publications
⇒ Agenda

- Infeed publication
- Solar forecast
- **Wind forecast**
- Evolutions
- Questions?

Balancing Publications
⇒ Wind Forecasting – recap



- **Good monthly day-ahead forecasting quality on aggregate & individual level**
  - Relatively constant quality and no seasonal dependence
  - Monthly bias should improve mainly through inventory quality assesment => decrease in MAE-% & RMSE-% expected
- **Monitored capacity upgrade under development**
  - Current monitored capacity = 930MW versus installed capacity = +/- 1380MW, but still representative subset
- **2013 evolutions: improvement of forecasting quality**
  - Statistical learning
  - Maintenance information integration
  - Additional aggregation effect
  - Investigate intraday forecasting (~ solar forecasting)

Balancing Publications
⇒ Agenda

- Infeed publication
- Solar forecast
- Wind forecast
- **Evolutions**
- Questions?

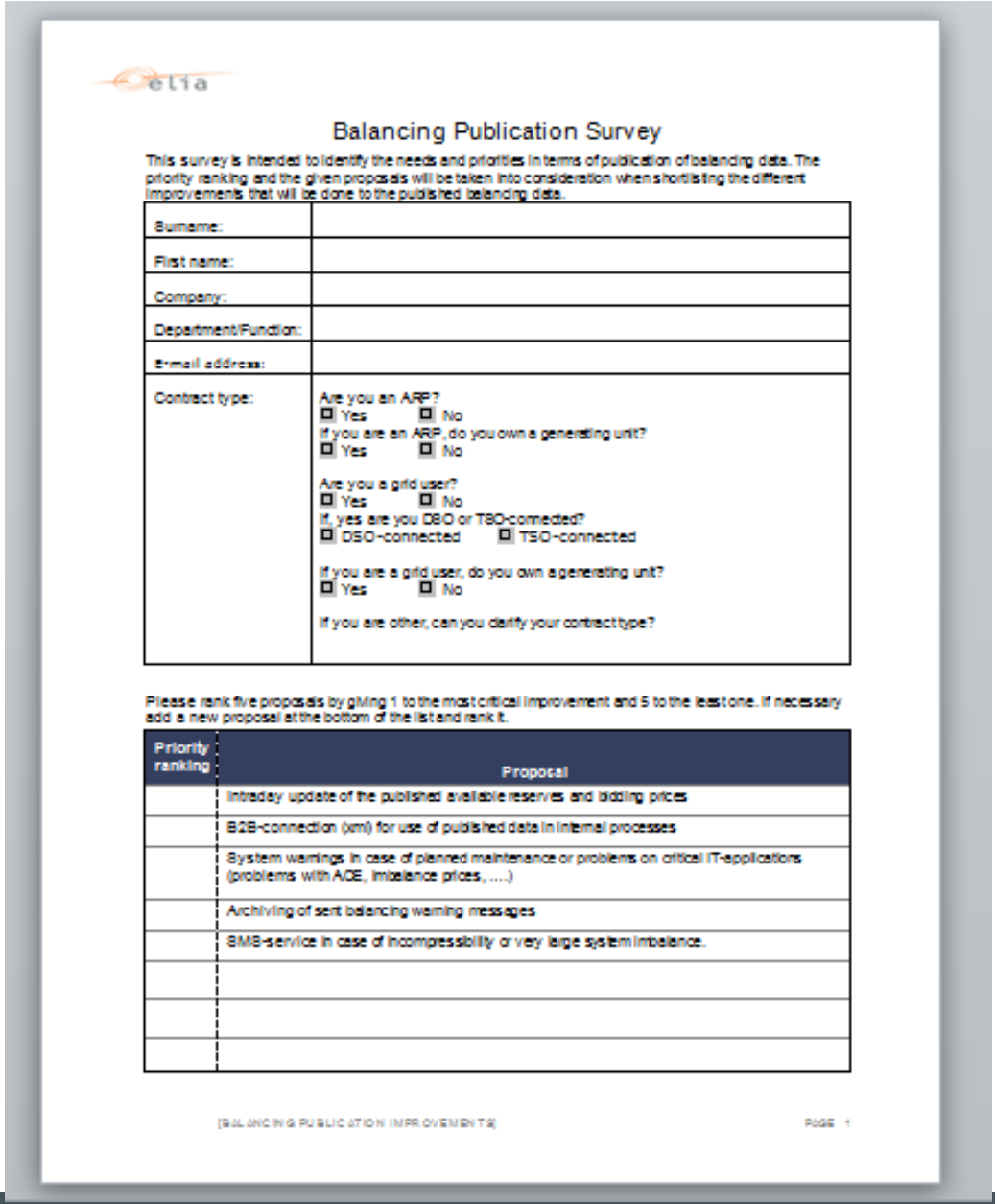
Balancing Publications
⇒ Balancing publications evolutions

Need to scope and define priorities for 2013:

- Intraday update of the published available reserves and bidding prices
- B2B-connection for use of published data in internal processes
- System warnings in case of planned maintenance or problems on critical IT-applications (problems with ACE, imbalance prices, ….)
- Archiving of sent balancing warning messages
- SMS-service in case of incompressibility or very large system imbalance.
- Others?

Balancing Publications

⇒ Survey



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Balancing Publication Survey

This survey is intended to identify the needs and priorities in terms of publication of balancing data. The priority ranking and the given proposals will be taken into consideration when shortlisting the different improvements that will be done to the published balancing data.

Surname:	
First name:	
Company:	
Department/Function:	
E-mail address:	
Contract type:	Are you an ARP? ☐ Yes ☐ No If you are an ARP, do you own a generating unit? ☐ Yes ☐ No Are you a grid user? ☐ Yes ☐ No If, yes are you DSO or TSO-connected? ☐ DSO-connected ☐ TSO-connected If you are a grid user, do you own a generating unit? ☐ Yes ☐ No If you are other, can you clarify your contract type?

Please rank five proposals by giving 1 to the most critical improvement and 5 to the least one. If necessary add a new proposal at the bottom of the list and rank it.

Priority ranking	Proposal
	Intraday update of the published available reserves and bidding prices
	B2B-connection (xml) for use of published data in internal processes
	System warnings in case of planned maintenance or problems on critical IT-applications (problems with ACE, imbalance prices, ...)
	Archiving of sent balancing warning messages
	SMS-service in case of incompressibility or very large system imbalance.

[BALANCING PUBLICATION IMPROVEMENTS] PAGE 1

Balancing Publications
⇒ Agenda

- Infeed publication
- Solar forecast
- Wind forecast
- Evolutions
- **Questions?**

Thank you for your attention

For more information, contact Elia:

Name	Manuel Aparicio
Company	Elia
Email	manuel.aparicio@elia.be

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Contractual models – continued

⇒ Key elements presented during TF 11/1/2013

- **Central role of BRP in balancing energy markets** (LT forward ⇨ DA ⇨ ID ⇨ RT)
  - Key responsibility of ARPs in bringing demand-side flexibility to those markets
- **In real time, the residual imbalance of the zone is solved by the TSO**
  - Activation of Pre-contracted reserves and Free bids (~residual flexibility of the forward→ ID energy market)
- **Correcting the perimeter of the BRP during a bid activation is a powerful element as it incentivizes the BRP to effectively deploy the requested energy:**
  - Especially indicated for a Portfolio based Energy Only product like the Free Bids (no control necessary)
- **Adjustment of the imbalance volume of the corresponding BRP is required in order to recover all activation costs for balancing purposes by the imbalance settlement**
- **Opening a portfolio based balancing energy products to market players non BRP generates fundamental issues**
  1. The BRP is not remunerated for the activated energy he produced and he did not sell to its GU
  2. The BRP is penalized for the discrepancy between the requested energy and the deployed energy

⇨ **Proposition:**

- As first step for the bidladder project energy is bidded by the BRP who has the opportunity and responsibility to capture new flexibility and bring it to the balancing market
- Besides the bidladder project, Elia will continue developing a framework and contractual model for the opening of pre-contracted reserves directly offered by non-BRP players

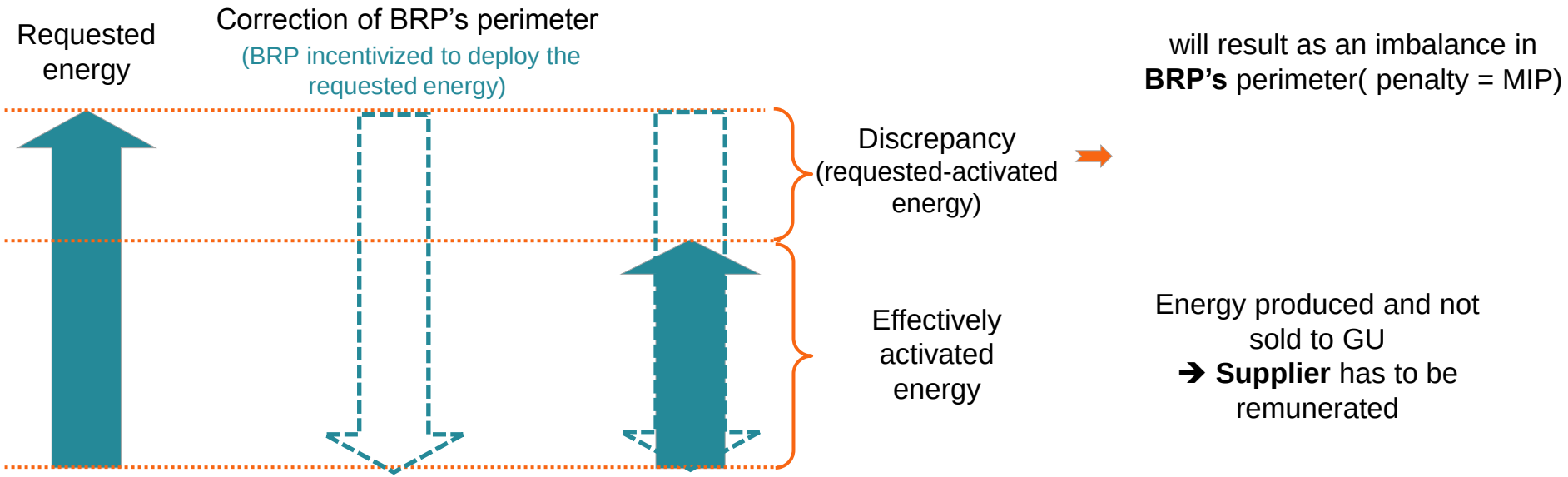
Contractual models – continued
⇒ Stakeholders reactions

- **Febeliec:** BRPs could not be willing to capture flexibility provided by load and offer it into the balancing market
- **FEBEG:** Role of BRPs should not be affected when other parties directly offer services on the bid ladder
- **Aggregators:** Pragmatic solutions could be developed in order to avoid those issues and limit the financial impact for BRPs
- **Gabe:** The model used for the interruptible contracts (R3 load) is an existing and well functioning model or the offering of flexibility by Grid Users directly to Elia

⇨ **Elia notes the reactions but notes difficult unsolved issues and also wants to move forward with the bid ladder development**

- Elia will keep on working on the contractual model for integration of
- This will be done in parallel with the development of the platform in order to allow all BRPs to offer energy outside the strict CIPU framework of today

Contractual models – continued
⇒ Issues met when BSP is not BRP



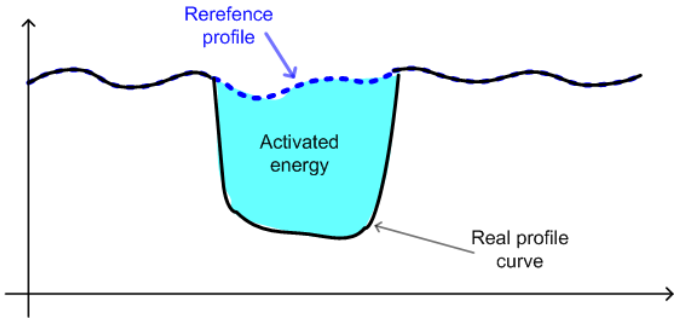
- When the BSP is also BRP there is no need to control and penalize discrepancy as this is automatically done trough the tariffs

- With a BSP not BRP, in principle:
  - the volume of the effectively activated energy would need to be calculated in order to:
    - Remunerate the supplier for the energy produced and not sold to the BSP
    - Remunerate the BSP for the service provided
  - the volume of discrepancy would need to be calculated in order to:
    - Compensate the BRP for the penalty he bears through the imbalance tariffs
    - Apply a specific penalty the BSP for the not provided service
- Solutions preserving the "portfolio-based" principle and "correction incitative" principle need to be found

Contractual models – continued

⇒ Issues are emphasized when flex. is located in DSO grid

- The effectively activated energy is defined as the difference between the real profile and what would have been that profile if there was no activation➔ use of a reference



- For resources connected to the transmission grid the effectively activated energy can be identified using per access point the nomination as reference and the metering curve which is validated by Elia

- For resources connected to the distribution grid this becomes not feasible as:
  - There is no nomination ⇨ how to identify the effectively activated energy ?
  - Elia has no access on validated metering and no information about which is the BRP concerned by the activated volumes ⇨ where, when and how to collect and use such validated data ?
  - There is larger amount of access points necessary for a same quantity of energy activated ⇨ who will aggregate and provide such validated data to Elia and how ?

- Moreover, activations of resources connected to the distribution grid may not affect its security ⇨ need to involve DSOs

Proposed way forward on the contractual framework for participation in balancing and AS services

- A different approach has to be taken for flexibility provided from resources located in transmission grid and in distribution grid:

  ⇨ For flexibility provided by resources located in transmission grid, Elia will work on a solution taking into account the suggestions made by the stakeholders and propose it during the next task Force

  ⇨ For flexibility provided by resources located in distribution grid the related issues have to be analyzed in depth and specific solutions have to be developed in collaboration with the impacted stakeholders. Therefore, will set up a specific working group of experts composed by a limited number of representatives of BRPs, Aggregators, Distribution Grid Users and Distribution Grid Operators

Terms of reference Experts Working group for Ancillary Services provided by distributed resources

- **Mission:**
  - Identify and examine overall contractual and implementation issues related to the diversification of A.S. for resources located in DSO grid
    - Results and lessons learned of the experimentation “R3 from decentralized load” launched in 2013 will be presented in order to illustrate some of those issues
  - Debate, clarify, comment and make recommendations in order to work towards:
    - feasible solutions on those issues for the short-term
    - directions of solutions to be examined for the long term

- **Deliverables:**
  - Conclusions of this working group will directly be reported to the Task Force Balancing
  - Concrete design adaptations proposals by Elia for the short-term (2014-2015) and recommendations for the longer-term.

- **Meeting frequency:**
  - from mid of March 2013 till December 2014
  - Meetings will be planned as much possible next to the meeting of the TF Balancing

- **Limited number of Participants:**
  - 2-3 representatives of each group of stakeholders (BRPs (Febeg members and not producers), Aggregators, DGOs, DGUs)
  - Stakeholders are invited to confirm the name of their representatives by email before the 8th of march

Contractual models – continued
=> R&D Pilot Project R3 from decentralized Load

- **At the margin of the ICH 2013 tendering, the aggregator REstore made a proposal based on a pool of contracted Access Points located in DSO grid (5-10MW/> 10 APs)**
  - ⇨ Proposal did not comply to the existing ICH specifications → wasn't considered in this framework
  - ⇨ Nevertheless it was interesting on several aspects:
    - Concrete offer based on a portfolio of contracted GUs
    - Solutions proposed in order to "match" the offer to the particularities of the ICH contract (nominations, metering)
    - Offering more activations than the ICH product (25 instead of 4/12)
    - "Small enough" volumes so that the impact on parties can be considered negligible
    - Innovative

- **Decision to build and launch an experiment for the year 2013**
  - Project presented to and supported by CREG
  - Involved parties have been contacted (+ agreement asked to involved ARPs)

- **Goal of project:**
  - test technical performance of interruptible load located in DSO grid
  - gain experience in control modalities and contractual prerequisites
  - feed reflexions about the building of a framework for A.S. provided by resources located in DSO grid
  - ⇨ **Results and lessons learned will be presented and shared in Experts Working Group which will report to the Balancing Task Force**

- **Ad hoc design that won't automatically be continued beyond the experimentation**
  - Metering: provided by aggregator in first instance and compared ex post with official DSO metering*
  - No compensation of the ARP's perimeter as very limited impact and as ARP isn't penalized by tariffs
  - Control of activation based on last quarter-hourly metering before activation
  - Out of "balancing": Activations will **not** have impact on NRV, tariffs

Agenda

1. Welcome

13h30

2. Validation of Meeting minutes dd 11-01-2012 (10')

13h40

3. Various information and feedbacks (20')
   - Internet publication of Taskforce documents
   - Balancing training concept – "Status"
   - Feedback stakeholder workshop XB Tennet-Elia

14h00

4. Balancing Publications (45')
   - Infeed Publication
   - Solar Forecast / Wind Forecast
   - Evolutions

14h45 => Pauze => 15h00

5. Contractual models – continued (45')
   - Contractual Model for diversification of balancing services
   - R&D Pilot Project R3 from decentralized Load

15h45

6. Portfolio and/or Unit bidding ↔ link with congestions management (1h)
   - Introduction
   - Current process for congestion management
   - Proposition for congestion management with the future bid ladder

16h45

7. Questions – Remarks - Next steps - next meeting date

Bid ladder ↔ Congestions management
=> Goal of the bidladder project

- The goal of the bid ladder project is to set up a platform where market players can bid in all available flexibility.

- In contrast to the current CIPU-process the new platform should:
  - Allow bids from flexibility not covered by a CIPU-contract
  - Allow bids from load and RES flexibility
  - Allow bids from flexibility situated on the distribution grid

- Therefore the new process should:
  - Be a simple process with low entry barriers
  - Break the link between the offered bids and schedules send by producers

Bid ladder ↔ Congestions management
=> Congestions vs. Portfolio bidding

- Context; Recently the Framework Guidelines on balancing were published with as objective to establish an integrated European cross-border balancing market where TSOs balance the system in a coordinated way in order to use the most efficient balancing resources taking into account transmission capacities.

- Quote FG Balancing: "*The Network Code on Electricity Balancing shall require that locational information of balancing resources is used to further optimize the balancing of the system and perform security analysis to avoid internal and cross-border congestions*".

- The activation of balancing energy by a TSO shouldn't lead to new internal resdispatching.

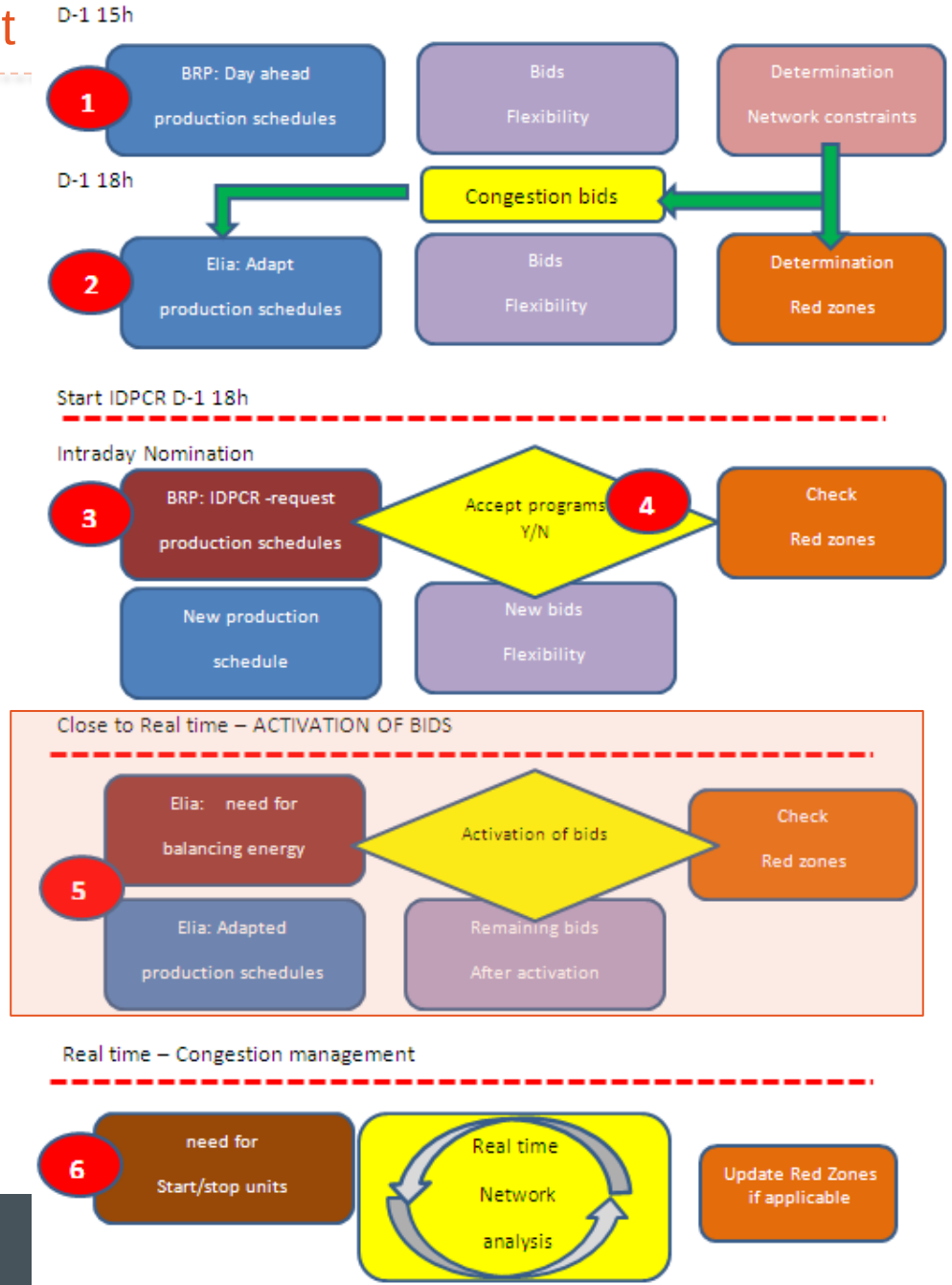
- Within a couple of years balancing energy bids will be shared with other TSOs on CMO. In this context is not logic to increase locally the congestions costs in order to decrease the balancing cost of other TSOs

Bid ladder ↔ Congestions management

=> Current congestion management

1. Day nomination process
2. Day ahead congestion management process
3. Intradaday production change requests
4. Neutralisation time to asses intraday requests
5. Activation of balancing energy
6. Assessment start/stop units on demand of BRPs

Scope of bidladder project



Bid ladder ↔ Congestions management
=> Proposal Bid ladder platform

- The objectives of capturing all available flexibility and avoiding local congestions might be both achieved by one single process;

  Explicit portfolio bidding with locational information

What does this mean?

1. Explicit: Bids will consist of a price and a volume.
   - » Vs. today the volumes are derived from schedules send by BRP
2. Portfolio: Bids may aggregate flexibility
   - » Vs. today the bidding is only allowed per power units or aggregated power plant
3. Locational information: Bids should have locational information about the flexibility of which the bid is composed (level of detail to be decided)
   - » Vs. Today implicit required as volumes are derived from production schedules

Process

Bid ladder platform shall consider information regarding network constraints when activating bids in order to avoid new additional congestions.

Network constraints which are affecting bids shall be published in a transparent way

Bid ladder ↔ Congestions management
=> Example

Received incremental bids

- Bid A1 100MW @80 €/MWh
  - Location A, B, C

- Bid B1 100MW @70 €/MWh & Bid B2 100MW @60 €/MWh
  - Location A & Location D

Network constraints

- Network constraint on location B & D

Result

- Bid A1 100MW @80 €/MWh
  - Location A, B, C

Unavailable

New Bid 80 MW @ 80 €/MWh
Location A,C

- Bid B1 100MW @70 €/MWh & Bid B2 100MW @60 €/MWh
  - Location A & Location D

Unavailable

Bid ladder ↔ Congestions management
=> Criteria for new bidding process

- develop a platform with ***low entry barriers*** *where market players can bid in* ***all available flexibility***

- Although we want to capture more bids by creating a process with less restrictions and more flexibility, ***grid security*** may not be affected

- **Operational feasibility:** Tools and human resources should be capable to perform the processes in real time

- The future process should by ideally **apply the same restrictions for congestions reasons between**:
  - Load & Production
  - Flexibility on distribution and transmission grid

- ***Additional local congestions due to the activation of balancing energy should be avoided***

Bid ladder ↔ Congestions management
=> Link to schedules/ congestion management

Context:

- Currently limited amount of internal redispatching done in the Belgian control area
- If possible local congestions are resolved by the day ahead congestion management process

Link to schedule process

- BRPs will still have the responsibility to send correct programs which remain the reference

In practice

- Activations of bids by Elia shouldn't cause congestions
- If in exploitation a congestion bid occurs through the CIPU-process on a specific location there should be the possibility to actualize the corresponding bids on the bid ladder platform. The corresponding bids will not be activated for limited time period

Due to the implementation of the bid ladder platform no activation prices per power unit will be available anymore for congestion bids in exploitation. Therefore the regulated prices of the day ahead congestion management process will be used for the congestion management process in exploitation.

Bid ladder ↔ Congestions management
=> Miscellaneous

Prequalification process

- Ex ante information will be requested
- If required tests will be performed

Level of location information;

- TSO High voltage level (>=150 kV); national dispatching
- TSO Lower voltage level (<150kV); regional dispatching
- DSO level

Level of detail of locational information and level of detail of real-time network analysis will evolve in function of operational needs

Bidding amounts

- Only bids provided by flexibility located in the Belgian control area may be offered
- BRPs with legal obligation to bid in (Grid code: units >75 MW) should offer at least the minimum required amount

Liability clause will be foreseen to guarantee correct location information. In case of manifest abuse providers might be excluded (partially) for a certain period from the bid ladder platform.

Bid ladder ↔ Congestions management
=> Next steps – Product design

- Regarding the product design of the bids we are looking forward to get feedback from market parties
- The Framework Guidelines on Balancing are stipulating that ENTSO-E should propose standard balancing energy products 1 year after the Network Code on Balancing enters into force
- This feedback will be useful for the design of products on the bid ladder platform but also for the discussions going on internationally:
  - Potential cross-border collaboration with NL for manual FRR
  - Determination of harmonised balancing energy products (ENTSOe-WGAS-Subgroup 5)
- Questionnaire will be sent out dealing with different characteristics of balancing energy products:
  - Direct activated or scheduled
  - Fixed time period or floating time periods
  - Activation time
  - Start costs
  - Firmness; what do you need to guarantee this?
  - Bidding process; GCT, fixing,…..
  - Exclusive bids
  - Min amount (MW)
  - ….

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7. **Questions – Remarks - Next steps - next meeting date**

Questions and/or Remarks ?

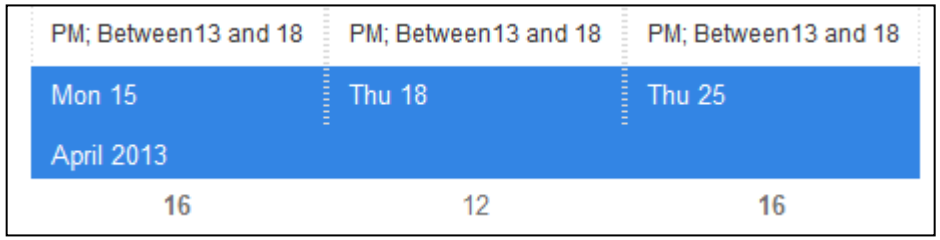
Next steps & next meeting date

1. Written comments on todays presentations are welcome!

2. Elia will send meeting minutes (incl all slides) for validation.

3. Next meetings - Reminder:

- Taskforce 4: (mid-april): Focus on standard product definitions for bid ladder (+ R3 evolutions)
  - **Next meeting on 25th of April**



  - Doodle TF5 will be included in the meeting minutes
- Taskforce 5: (mid june?): Contractual implications, IT-platform, roll-out, ...
  - … // topics or meetings not to be excluded

Thanks for your attention

01/03/2013

Elia