



9th Working Group Consumer Centric Market Design

Elia – 18th December 2023

Wifi Access:
The Hotel – Guest-Wifi

Agenda

- **DiMaX** : feedback of the public consultation
- **Real-Time Price** : design note (part 1)
- **Working Groups CCMD** : Agenda 2024

DiMaX - feedback of the public consultation

DiMaX design note – update on public consultation

- Consultation period of 1 month (25/10 – 24/11)

- 8 reactions received







Confidential party





Overall trend in the reactions

- **Welcoming the initiative** to unlock more flexibility, but **request for more clarity** (especially on implementation)
- Request to go for a **full implementation for all BRP portfolios** (TSO and DSO delivery points at one time)




Consultation report (1/5)

	Description	Proposed solutions	Parties involved
<p>Implementation faster Settlement/ voltage neutral design</p> <p>Elia design note: 2-phased approach for faster settlement 1) TSO delivery points 2) Include DSO delivery points (with SMR3) A BRP with both DPs could mix fast settlement for TSO DP and normal settlement for remaining DPs</p>	<ul style="list-style-type: none"> • Need for more clarification on the operational implications of faster settlement • Request to have a full implementation for BRP portfolios with TSO and DSO delivery points to avoid having 2 process in parallel • “Implementation starts without any guarantee on implementation for DSO connected points. If the model would not be duplicated in an identical manner, different implementations and operational effort in parallel.” 	<ul style="list-style-type: none"> • Elia aims to accelerate the imbalance settlement for all BRPs, taking into account the constraints related to DSOs. Therefore: <ul style="list-style-type: none"> • Elia is working on a CREG incentive for faster imbalance settlement. • Elia will continue the update of the design needed to allow faster settlement. This will be reflected in updated terms & conditions of the BRP contract that will become available for public consultation in 2024. • The implementation plan for faster settlement will be discussed in the working groups CCMD 2024. Feedback will be taken into consideration. 	  <p>Confidential party</p>
<p>Metering requirements</p> <p>Elia design note: TSO submetering & smart meter with regime 3 at DSO level</p>	<ul style="list-style-type: none"> • No support for the requirements that for DSO connected delivery point, a smart meter following metering regime 3 will be required as it is not clear to what extent this metering regime is essential. 	<ul style="list-style-type: none"> • For all CCMD services, 15’ data is required at the access point. Today, without regime 3, the DSO does not have the permission to read the 15’ data and supply it to the supplier. 15’ data is therefore a prerequisite. • Metering at delivery point (downstream access point): <ul style="list-style-type: none"> ▪ for DP connected to TSO level, Elia allows submetering (like in mFRR) ▪ For DP connected to DSO level, Elia has no objection, when supply split is applied, to use compliant submeters but this is up to the DSO to define the rules for submetering 	 






Consultation report (2/5)

	Description	Proposed solutions	Parties involved
<p>Risk assessment due to lower financial barriers</p> <p>Elia design note:</p> <ul style="list-style-type: none"> Reduce financial guarantee 	<ul style="list-style-type: none"> Financial collaterals can be reduced, provided there's no impact on the quality and the high standards that are expected from BRP's that have significant responsibilities. 	<ul style="list-style-type: none"> Elia wants to unlock more flexibility and decrease barriers to become a BRP. Therefore, we will reduce financial barriers, but without taking any risk on system security or without increasing our tariffs. We will even add additional services to allow better tracking of the BRP behavior (reporting, alerts, BRP dashboard). 	  <div style="background-color: #008080; color: white; padding: 5px; text-align: center;">Confidential party</div>
<p>Use of e-wallet</p> <p>Elia design note: Use of e-wallet is a choice for all BRPs. BRPs will be able to access faster settlement without the e-wallet and BRPs have the choice to keep the current settlement system.</p>	<ul style="list-style-type: none"> E-wallet should be an option for prepayment but should not be an obligation. “Sufficient flexibility in the options to meet these financial guarantees, including cash deposits, bank guarantees, or other financial instruments” 	<ul style="list-style-type: none"> The choice between cash deposit and bank guarantee to provide the BRP's financial guarantee will remain. The use of the e-wallet is a choice for all BRPs. 	 

Consultation report (3/5)

	Description	Proposed solutions	Parties involved
<p>Link to CCMD</p> <p>Elia design note: DiMaX is building upon the other evolutions of CCMD. More specifically on the multiple BRP service and real-time price evolutions.</p>	<ul style="list-style-type: none"> • Need for more clarification on the operational implications of multiple BRP in combination with DiMaX • FEBEG is wondering what “Propagating RT price for a full economical optimization” does concretely mean. Why should it be considered as the ultimate goal? FEBEG thinks that other markets should play their role and we are better off solving deviations on ‘earlier’ maturities than strictly counting on real time price. • Additionally, exchange of energy has nothing to do with the role of BRP. It seems more linked to the role of supplier. It is crucial that all players/suppliers are exposed to the same rules (grid fees, losses, social tariffs, taxes, ...). 	<ul style="list-style-type: none"> • The Lol to participate in multiple BRP is available. All technicalities are clarified there. The implementation plan of DiMaX will be discussed in the working group CCMD 2024. Feedback will be taken into consideration. • Elia would like all flexible assets to be optimized as much as possible on the energy markets (DA, ID) with respect to the expected real-time imbalance situation and ultimately if needed in real-time if BRPs have made some errors or if a major outage happens. For the DA and ID prices to best reflect the expected real-time imbalance situation, and hence to provide clear price signals to the flexible assets, an efficient back-propagation of the real-time price is therefore desirable. DiMaX will not intervene in the design of the DA/ID and real-time markets, but will facilitate the participation of flexible assets in these markets by lowering entry barriers for BRPs. • Although Elia agrees that exchange of energy is linked to the role of a supplier and raises several questions listed by FEBEG (which are more relevant in the DSO grid), Elia does not understand FEBEGs statement on the multiple BRP. DiMaX can build upon the concept of multiple BRPs which is developed by ELIA for the ELIA grid. In the Elia Grid, the issues raised by FEBEG are not so relevant as the ACH are the ones responsible for grid tariffs (on Elia grid). 	  

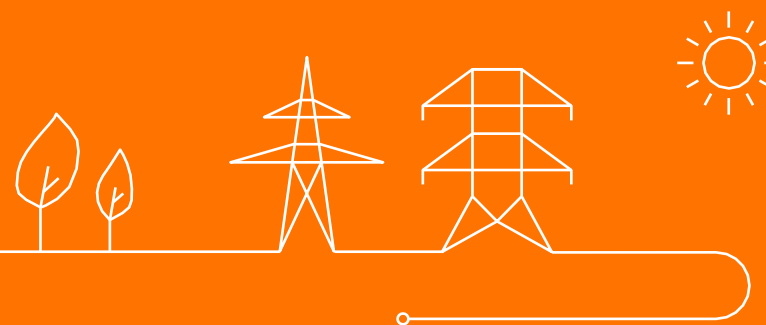
Consultation report (4/5)

	Description	Proposed solutions	Parties involved
<p>Minimum threshold of Financial guarantee</p> <p>Elia design note: Lower the minimum threshold to calculate the financial guarantee (via the formula)</p>	<ul style="list-style-type: none"> Question if there will be a minimum MW level to apply as a BRP. 	<ul style="list-style-type: none"> Review of what the minimum MW level will be and its consequences is on-going. First public consultation on new T&C BRP Q2 2024. 	
<p>24/7 operational availability</p> <p>Elia design note: No proposal made, only mentioned as a barrier</p>	<ul style="list-style-type: none"> concern is the idea to “waiver” some BRPs of the need to be available 24/7 which seems difficult to realise and would also result in a discriminatory treatment of BRPs who need to be available and those who (somehow...) don’t need to be available 24/7 	<ul style="list-style-type: none"> 24/7 operational availability will not be changed in this phase of the project. 	
<p>Combination with ancillary services</p> <p>Elia design note: Not mentioned in design note</p>	<ul style="list-style-type: none"> seek insights into how Elia intends and envisions the shorter settlement period in relation to other ancillary products 	<ul style="list-style-type: none"> At Elia, there is a project running that investigate the optimization of the BSP settlement as well. We will look for synergies between the settlement for BSP and BRPs where possible. 	
<p>Growing number of assets</p> <p>Elia design note: DiMaX has come to live to anticipate the growing number of assets</p>	<ul style="list-style-type: none"> How will DiMaX integrate the growing number of assets into the design? When it becomes very easy to take up the role of BRP, suppliers might be inclined to encourage customers with complex set-ups and/or difficult profiles to become BRP themselves. ELIA might then be faced with a significant increase of the number of (less experienced and less equipped) BRP’s 	<ul style="list-style-type: none"> Elia is in favor of to reduce barriers for BRPs and in this way increase the possibility to provide more solutions to grid users. Therefore, we welcome the increasing number of assets and DiMaX is one of the solutions we foresee to be able to handle these. Especially with the faster settlement and the facilitation tools we are preparing ourselves and the new parties for this growth. Our internal processes for settlement and invoicing will be automatised to be able to handle more assets. 	  <p>Presentation title 8</p>

Consultation report (5/5)

	Description	Proposed solutions	Parties involved
<p>Need of DiMaX</p>	<ul style="list-style-type: none"> Reading the design note, we appreciate Elia’s intentions to facilitate BRP activities by aiming for lower financial exposure and increased imbalance cost transparency. Yet, we are not fully convinced whether the market is really in need of such facilitation, if so whether the proposed implementation will indeed lead to lower exposure and higher transparency and finally whether practical implementation is feasible. 	<ul style="list-style-type: none"> Elia acknowledges and thanks the party for the feedback. Elia likes to clarify that we also received opposite reactions. In the end, Elia is convinced that DiMaX is needed to reduce barriers for all BRPs. 	<p>Confidential party</p>
<p>Discrimination</p> <p>Elia design note: All adaptation and tools in DiMaX are available for all BRPs</p>	<ul style="list-style-type: none"> None of the proposals can lead to a situation of non-level-playing field where some BRPs have lower obligations and less responsibilities than others. 	<ul style="list-style-type: none"> All tools and modifications within DIMAX will be relevant or put at disposal of all BRPS. 	<p>Febeg</p>
<p>Role of Elia</p>	<ul style="list-style-type: none"> Generally speaking, FEBEG finds that the document is lacking content and focuses on high level principles. In summary FEBEG believes that BRP facilitation falls under ELIA responsibility, while access to markets (DA & ID) falls under the responsibility of power exchanges and is it therefore not the role of ELIA to intervene in these kind of topics. 	<ul style="list-style-type: none"> Elia is collaborating with power exchanges to work on a common solution, but Elia will never take the role of the power exchanges who are responsible to provide solutions for market access that favor the energy transition and the development of required flexibility. 	<p>Febeg</p>

Next steps 2024



DiMaX – Next Steps

Wave 1 – Q1 & Q2 2024

- Close collaboration with team working on CREG incentive on faster settlement for BRPs
- Discussion with market parties to reshape the T&C BRP followed by public consultation
- Digital onboarding of BRPs in EPIC client portal
- Continue investigations with power exchanges

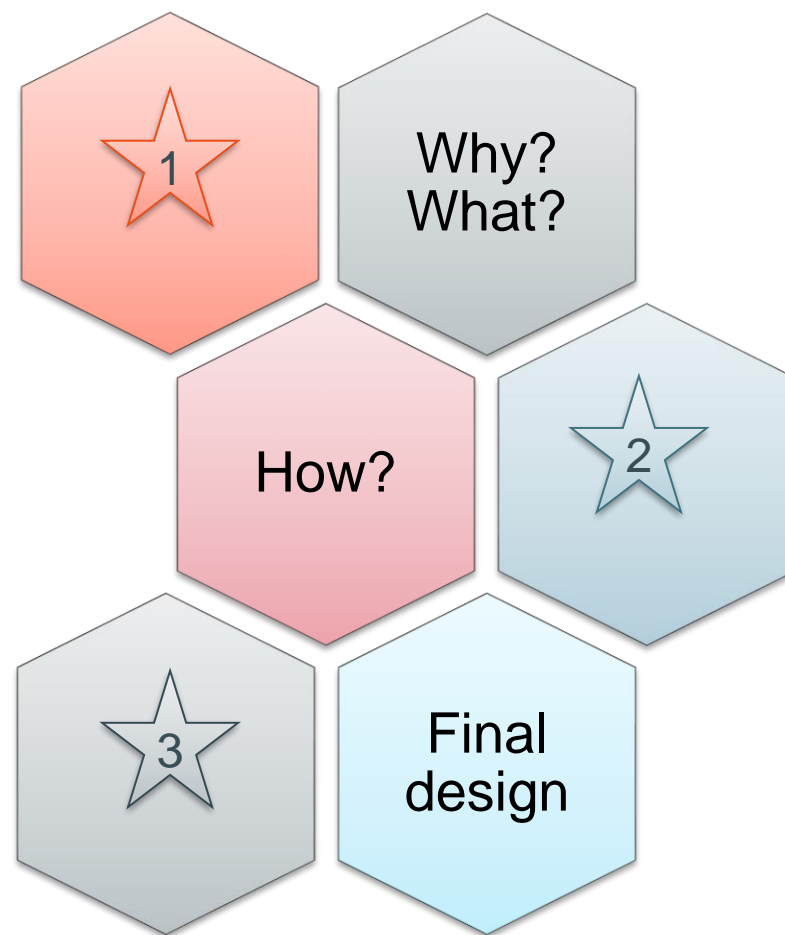
Wave 2 – Q3 & Q4 2024

- T&C BRP revision for faster imbalance settlement
- Implementation of facilitation tools for BRP services
- Continue investigations with power exchanges

Exact timings will come in 2024

Real-Time Price - design note (part 1)

An introduction to a serie of design notes



Timeline

Start public consultation 1st design note

Dec 22

End public consultation 1st design note

Jan 31

2023



2025

Public consultation 1st design note Dec 22 - Jan 31

Feedback integration Feb 1 - Feb 29

Deep-dive 'how' + open design questions Feb 2 - May 31

Public consultation 2nd design note (TBD) Jun 14 - Aug 31

Final design note Sep 1 - Dec 31



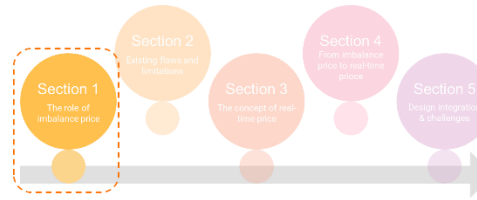
Stakeholders are invited to provide comments and suggestions on the 1st design note that will be consulted from **22nd December 2023** to **31st January 2024**.



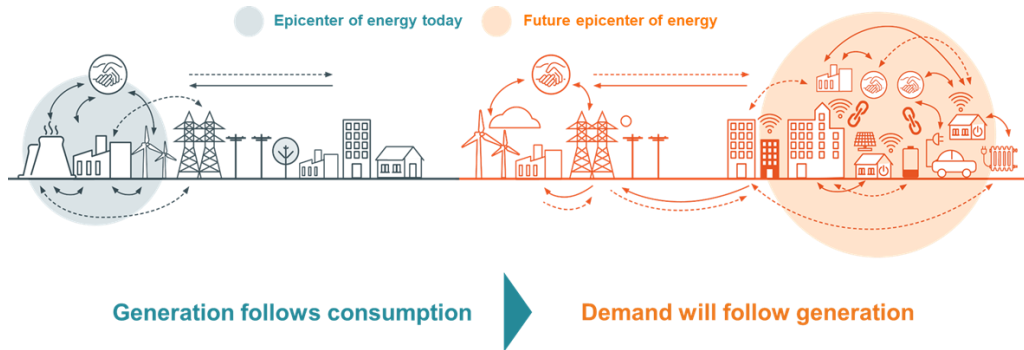
Structure of the 1st design note



The role of imbalance price



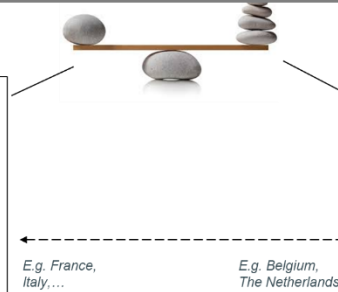
The paradigm shift and need for clear signals



The different existing balancing models

The central balancing model

- Exclusively relies on explicit activations to manage the balance of the grid in RT
- At a certain moment in time (f.i. 1 hour before delivery), the TSO takes full control/ownership on the grid balancing and BRPs are no longer allowed to balance their portfolio or the system

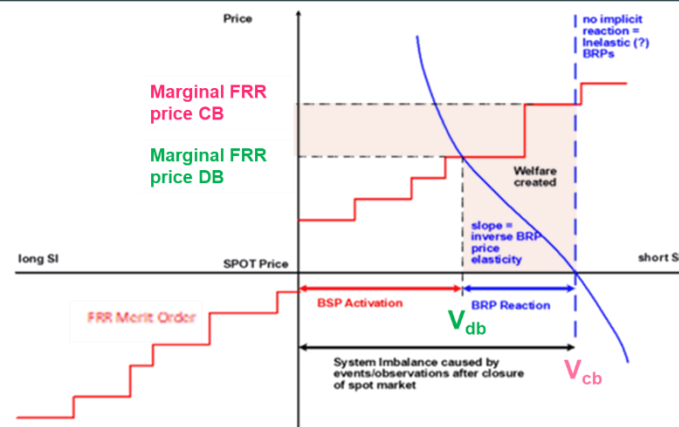


The decentral balancing model

- BRPs are allowed and incentivized (through the imbalance price) to balance their portfolio until RT, and, in some countries, even to deviate from a balanced position to help balance the system
- Today, this model relies on explicit activations by the SO mainly to solve the residual imbalances

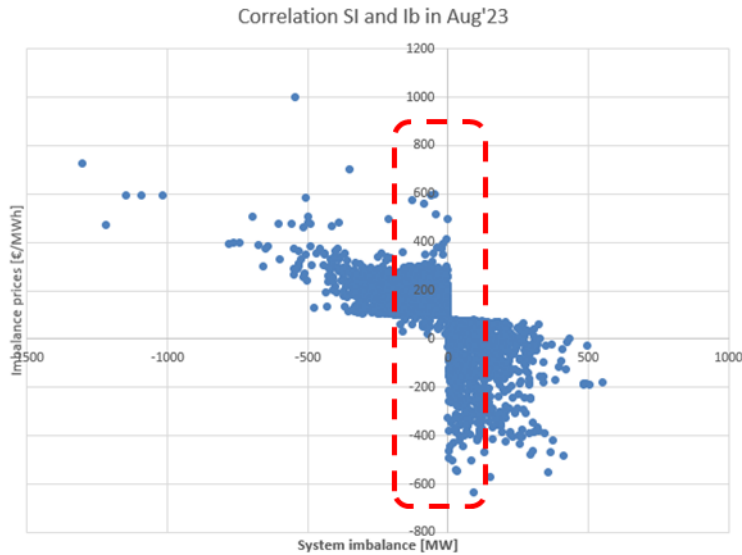


The most efficient balancing model and the role of the imbalance price in this model





Flaw and limitations of current imbalance price



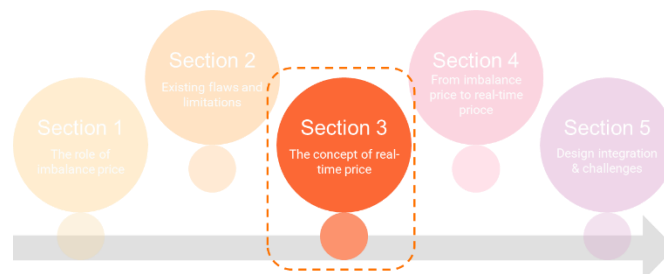
Volatility, unpredictability, not a stand-alone signal, not representative of RT imbalance situation,...

Start	NRV [MW]	SI [MW]	Alpha [EUR/MWh]	MIP [EUR/MWh]	MDP [EUR/MWh]	IP [EUR/MWh]	MIP of MDP?
14/08/2023 22:00:00	-76,973	40,869	0,000	130,000	-272,190	-272,190	MDP
14/08/2023 22:01:00	-54,211	-8,520	0,000	130,000	-257,950	130,000	MIP
14/08/2023 22:02:00	-45,274	-34,462	0,000	130,000	-231,740	130,000	MIP
14/08/2023 22:03:00	-38,250	-55,819	0,000	300,000	-207,210	300,000	MIP
14/08/2023 22:04:00	-32,586	-57,355	0,000	440,490	-190,560	440,490	MIP
14/08/2023 22:05:00	-28,089	-47,100	0,000	528,390	-182,450	528,390	MIP
14/08/2023 22:06:00	-37,377	-25,650	0,000	534,310	-177,450	534,310	MIP
14/08/2023 22:07:00	-42,597	-11,299	0,000	515,180	-175,980	515,180	MIP
14/08/2023 22:08:00	-55,049	6,857	0,000	514,820	-170,870	-170,870	MDP
14/08/2023 22:09:00	-61,194	16,655	0,000	459,790	-169,320	-169,320	MDP
14/08/2023 22:10:00	-62,819	22,574	0,000	320,910	-169,000	-169,000	MDP
14/08/2023 22:11:00	-59,239	16,113	0,000	256,310	-168,830	-168,830	MDP
14/08/2023 22:12:00	-51,984	9,560	0,000	196,120	-168,800	-168,800	MDP
14/08/2023 22:13:00	-45,141	3,540	0,000	167,060	-168,800	-168,800	MDP
14/08/2023 22:14:00	-37,046	-4,441	0,000	152,990	-168,800	152,990	MIP

GUV [MW]	IGCC+ [M]	R2+ [MW]	GDV [MW]	IGCC- [M]	R2- [MW]
0,949	0,949	0	77,922	25,775	52,147
6,795	6,795	0	61,006	12,96	48,045
4,978	4,978	0	50,252	8,64	41,612
3,805	3,801	0,004	42,055	6,48	35,575
3,201	3,108	0,093	35,787	5,285	30,503
3,137	2,605	0,533	31,227	4,969	26,258
3,054	2,233	0,821	40,431	17,456	22,975
2,743	1,954	0,79	45,341	25,115	20,226
2,44	1,736	0,703	57,489	39,119	18,37
2,301	1,563	0,738	63,495	46,852	16,643
2,58	1,421	1,16	65,399	50,249	15,15
3,445	1,838	1,607	62,684	48,786	13,898
5,88	3,047	2,833	57,863	45,033	12,831
8,612	3,918	4,694	53,753	41,839	11,914
13,124	6,062	7,062	50,169	39,05	11,12



The concept of RTP



TRUE/FALSE

The real-time price and the imbalance price are two different prices that will co-exist.



FALSE. What we call ‘real-time price’ in this document is nothing else than an evolution towards an improved, version of the imbalance price. The ‘real-time price’ will therefore be the (unique) settlement price for the imbalances of the BRPs. We use the terminology ‘real-time price’ instead of ‘imbalance price’ to emphasize the fact that this settlement price reflects in the best possible way the real-time value of energy so that it encourages, at all times, flexible assets to help balance the system in real-time (whereas the imbalance price is seen, historically, as a penalty for imbalances in the wrong direction).

Demystification of the RTP with a serie of “true or false”:

The real-time price aims at reflecting the true value of energy on a quarter -hourly



TRUE. The ‘real-time price’ strives to capture the value of energy **on a 15-minute basis** (i.e. on a time unit aligned with the current Imbalance Settlement Period) and not on an instantaneous basis. As a consequence, an important forced outage that occurs at the very end of the ISP should barely impact the real-time price of this ISP (as illustrated in section 4.2). This is consistent with the main purpose of the real-time price which is to provide correct financial incentives to BRPs to adapt their position and help balance the system on a 15-minute basis.



From imbalance price to real-time price



Evolutions of the imbalance price formula



The current imbalance tariff reflects the **cost of the (marginal) activation of FRR** in the direction that helps solving the average system imbalance observed over the ISP. This comes with lots of non-convexities and is sometimes unrepresentative of the RT value of energy.

In the future, the imbalance tariff should aim at **reflecting** in the best possible way and at any moment the **15' based RT value of energy**.



Elia is considering to stop using, or at least to use differently, the (4 seconds based) aFRR price signals in the construction of the real-time price

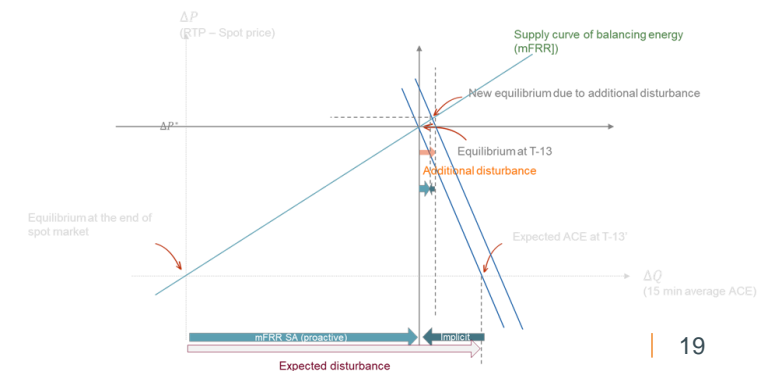
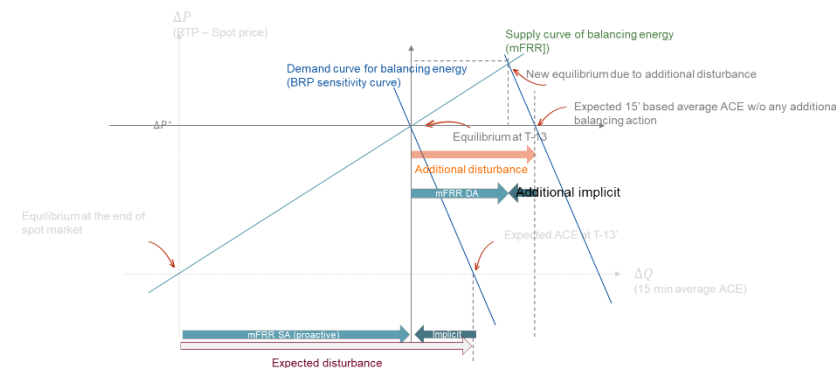
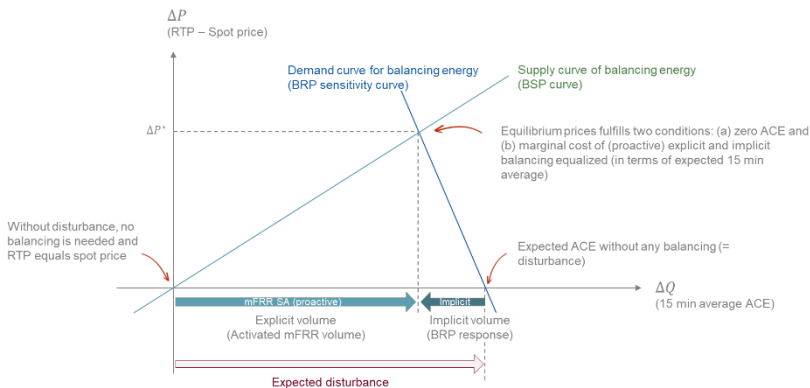
Evolutions of the imbalance price publications

The current imbalance tariff is only **known at the end of the ISP***. Real-time calculations of the imbalance tariff are published on a one minute basis **during the ISP**, but these publications **do not reflect the expected evolution of the system** until the end of the ISP or over the upcoming ISP's. In particular, these publications **do not anticipate BRPs' implicit reaction** over the ISP.

In the future, a **forecast** of the imbalance tariff should be made available **before the beginning of the ISP** and be updated **within the ISP**, so that the maximum flexibility can be engaged in the system in an efficient and safe way. To do so, this forecast needs a.o. to take BRPs' expected implicit reaction into account



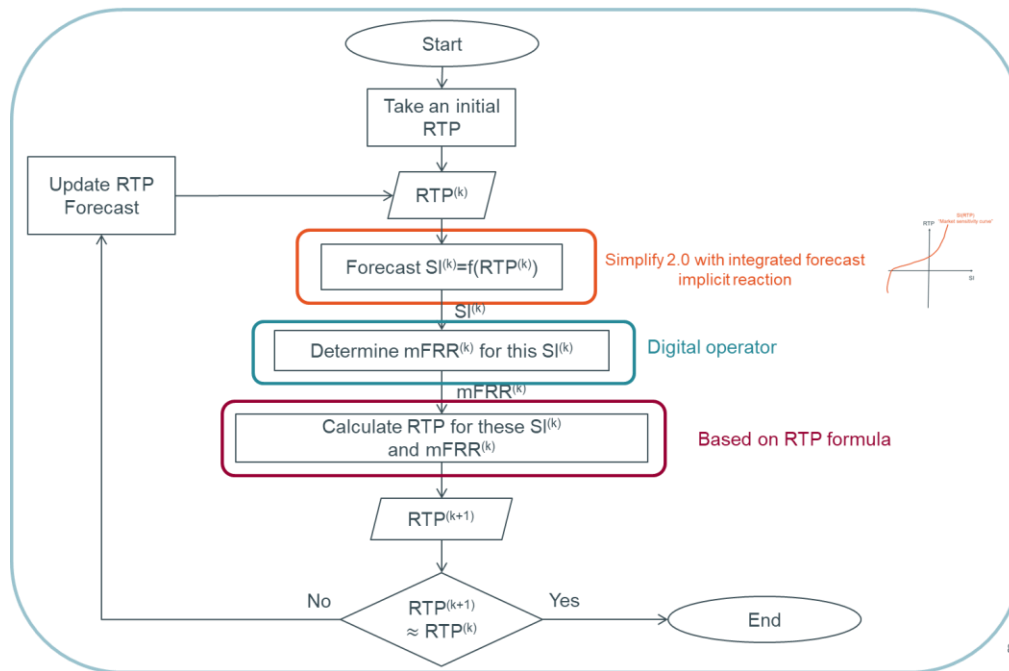
* Imbalance Settlement Period (currently equal to 15')





Design integration & challenges

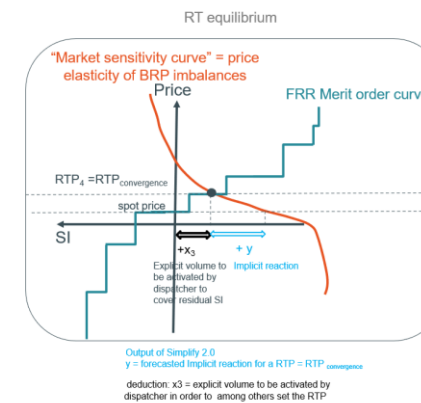
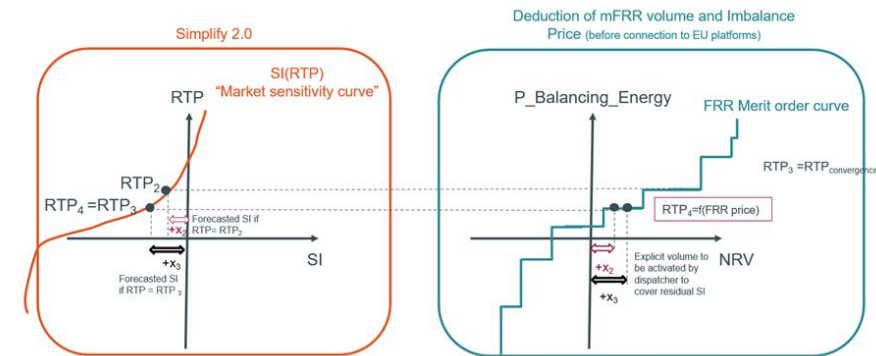
! the illustration below is just an example to fix the ideas regarding how the algorithm could look like



Integration of the different building blocks to form the smart balancing controller*

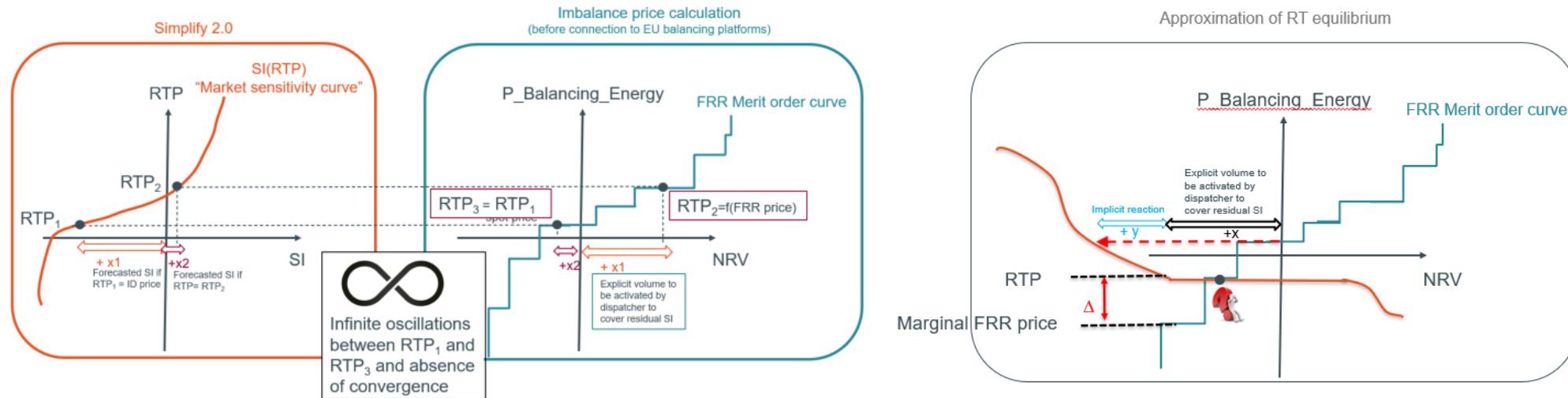
* Based on local situation (before connection to EU BAL platforms) otherwise an additional forecasting module is probably required to forecast platforms clearing prices

8th WG CCMD 14-11-2023 17





Design integration & challenges

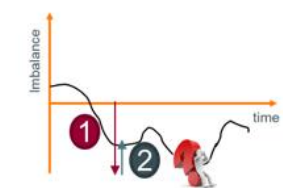


If we set the RTP to the price corresponding to the crossing of the curves, the resulting reaction from the market is uncertain (no possibility to control the exact volume of this price-based reaction)



- 1 A balancing event (in this case an important forced outage) creates a large imbalance.
- 2 The market reaction partly solves the issue by covering a part of the imbalance even before the next XBID trade possibility

In case of a forced outage, the magnitude of the problem is quite well known and it might hence be possible to distinguish the « cause » and the « solution ». But it is not the case for other balancing events (e.g. forecast errors) and it is therefore most of the time impossible to dissociate the balancing event from the market reaction.





**YOUR
FEEDBACK
MATTERS!**

The stakeholders are kindly requested to provide their comments and suggestions on the 1st design note RTP.

The reactions can be provided to Elia via the online form that will be published on Elia website on **Friday 22nd December 2023**.

The feedback is expected at the latest by **Friday 9th February 2024**.



WG CCMD - Agenda 2024

WG CCMD - Agenda 2024

Q1-Q2 2024

- ✓ Wednesday 07/02/2024 PM*
- ✓ Wednesday 27/03/2024 PM*
- ✓ Tuesday 14/05/2024 AM
- ✓ Thursday 20/06/2024 AM

Q3-Q4 2024

- ✓ Monday 30/09/2024 AM*
- ✓ Wednesday 06/11/2024 AM
- ✓ Thursday 19/12/2024 AM*

Link: [Meetings \(elia.be\)](https://www.elia.be/Meetings)

* same day as **WG Balancing**





HAPPY HOLIDAYS



**Elia would like to thank you for your participation and fruitful collaboration all over 2023
Elia already wishes you all pleasant Christmas holidays**