

Expert Working Group “Bid Ladder”

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Overview

- **Approval of MoM 16/4**
- **Submetering & CDSO**
- **Flexible pool management**
- **Technical prequalification & activation control**
- **Market model Transfer of energy**
 - Model B2
 - ToE & financial compensation: overview cases (updated)
 - ToE & financial compensation: feedback FEBEG
- **Imbalance adjustment**
- **Next steps**

Approval of MoM 16/4/2016

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Two comments were received from 1 Party: FEBEG & CREG

FEBEG Comments:

- *With respect to FEBEG's position on "(b) ToE settlement with supplier: several (practical) questions"*
 - Also with respect to item (b) a representative of Infrac asks why Elia is assumed as FDM and that another perspective on the FDM may solve some issues. A representative of FEBEG replied that taking Elia as FDM was considered as the most logic assumption, **because only Elia is competent to neutralize the BRP perimeter** as also stipulated in the final study from CREG.
- *With respect to "ToE with supplier: overview cases"*
 - Elia starts with repeating the general contractual framework indicating the main components of the Bidladder contractual framework: the General Framework Bidladder, the BRP-contract with the BRP of the FSP and the contract with the Supplier (applicable in case of a ToE-process for ensuring the conditions linked to the necessary data transfer from the FDM to the supplier). Also the Grid User Declaration (stating that the FSP is mandated by the Grid User to activate flexibility at his Access Point (using a delivery point) and indicating also the reference power that the FSP disposes of at a specific delivery point); the Supplier notification (relevant to Elia to identify the Supplier at a specific delivery point – the latter is known via Annex 3 of the Access Contract) and the FSP-Supplier agreement (proving the existence of a bilateral agreement between the FSP and the Supplier to ELIA) are mentioned as specific conditions for a valid GFA Bidladder. The latter proof of such a FSP-Supplier agreement is also a precondition for a Supplier contract with ELIA. **A FEBEG representative points out that Annex 3 of the Access Contract is being debated in other Elia working groups and that the role - including rights and obligations - of the supplier in relation to Elia will have to be further clarified in the contract and perhaps in other regulatory documents.**

Approval of MoM 16/4/2016

CREG Comments:

- *With respect to FEBEG's position on "(a) level playing field: principle, attention points, BRP/BSP versus FSP/BSP"*
 - Regarding item (a) a representative of CREG disagrees with how the difference BRP/BSP versus FSP/BSP is represented as it would suggest a possible discrimination which does not exist. It is argued by the representative of CREG that there are different roles like BRP and BSP. It is the free choice of each actor to take up one or more roles. In that respect, all BSPs are dealt with in an equal way. **All BRPs are also dealt with in an equal way.** The fact that some ~~BSPs~~ BRPs are also **BRP BSP** is **a their** choice and does not induce a different interpretation of the BSP role or of its consequences.
- *With respect to BDRA's position on "Mutual exclusivity R3 – BidLadder"*
 - With respect to item (b) a representative of CREG mentions that a combination of ICH and BidLadder should anyhow not be possible, **at least because they combine different "drop by" and "drop to" settlements.**

Approval of MoM 16/4/2016

CREG Comments:

- *With respect to market model B2*
 - After a remark by a representative of Febeliec on the fact that another market model **can be used** for solving ToE and preserving confidentiality between all concerned parties, a representative of CREG asks Elia to further investigate the feasibility of the so-called model B2 in the CREG study (adjusting the metering), in particular for those cases where the Grid User is also the Access Holder. **ELIA will investigate for the next session of the EG BidLadder the feasibility of the model B2 for industrial sites connected to its grid, where the Grid User is also Access Holder.** From the overall discussion that took place, it became clear that also in this context it is relevant to clarify the link with taxes and “surcharges” to be paid by all concerned parties in such B2-model. A representative of ORES remarks that in the DSO-context similar problems have been successfully solved and could serve as useful input here.
- With respect to the 4-quadrant overview of the various cases
 - **CREG representatives and other participants also advocate for keeping the actual process as simple as possible. So, they do not understand the need for a 4 quadrants analysis. The added complexity overcompensates the gain that could be obtained by defining 2 “cases”: quadrants 1+2+4 and quadrant 3, where the only first one deals with ToE.**

Submetering & CDSO

Submetering & CDSO

Continuing from the meeting of 14/6/2016 where proposals were made by Elia.

→ Any feedback from stakeholders at this stage?

Flexible pool management

Principles for mutual exclusivity for DP between Bidladder & R3

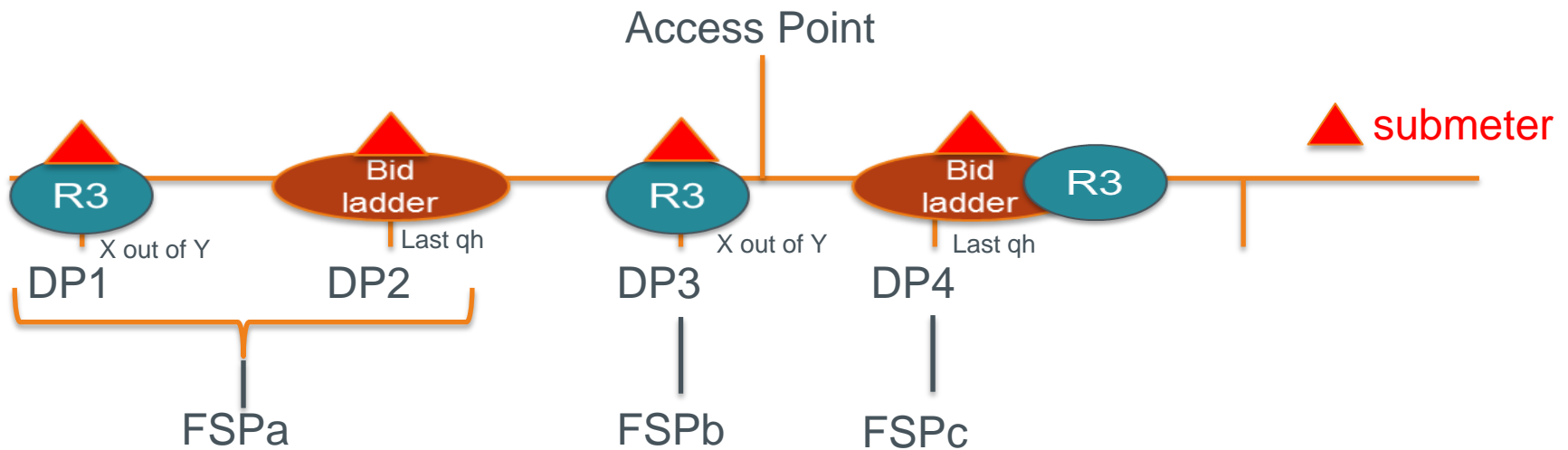
Minimum conditions for combo between Bidladder & R3

Principle 1: **1 FSP per Delivery Point (DP)**

Principle 2: **Multiple services at one DP if services have identical baselines**

Principle 3: all services applied at a DP have **same ToE-regime**

Principle 4: all services applied at an Access Point are **offered at same level** (head- or submetered)



Combinability R3 (without ToE) – Bid Ladder

Main obstacles

Principle 3: all services applied at a DP have same ToE-regime

1

Different ToE regimes

- Pilot Bid Ladder: ToE for TSO DPs as of 1/7/2017
- R3: ToE with activation price possible when ToE ready at TSO & DSO (as R3 is open to T/DSO and **no willingness to fragment R3**)

Facts

2

R3 availability control

- Elia relies on ex ante prequalification test on pool of DPs to ensure R3 capacity can be delivered.
- If volume is offered on top of prequalified R3 volume → **no guarantee on R3 availability anymore.**

Issues raised

- **Correct allocation at a DP of volume activated with ToE (BL) and without ToE (R3) in case of joint activation requires an ex post rule on how to split the activated volume over the different products per delivery point (for TSO delivery points only)**

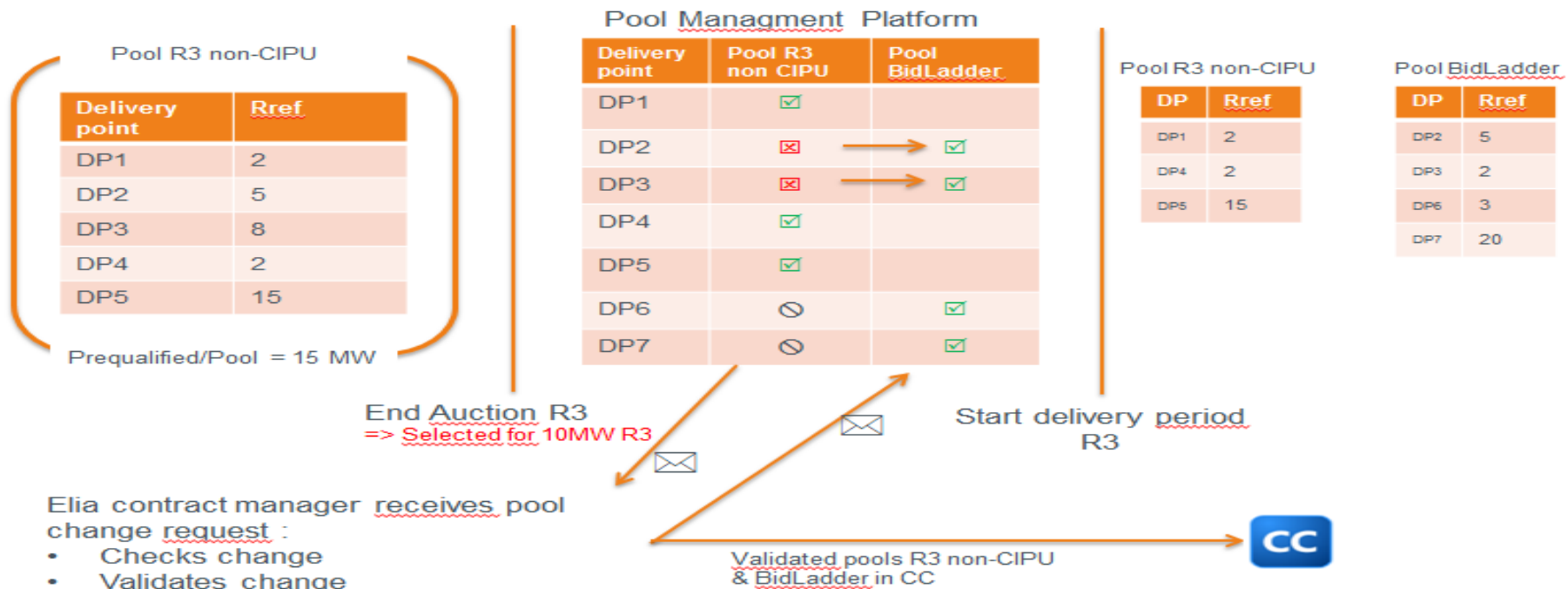
- **Deep review/ strenghtening of existing performance controls needed**

Flex Pool Mngt between R3 and Bidladder



An **interactive platform** to manage the different pools is put at disposal of the market participants allowing swift transfer of delivery points between R3 and Bidladder

- Once new pool validated:
- Adapt availability & activation controls R3 non-CIPU to new validated pool.
- Adapt list of delivery points on bidplatform



Principles Flex Pool Mngt



- FSP remains ultimate responsible for pool management between R3 and Bidladder while respecting notification delays
- Elia must confirm each transfer between pools prior to start of month
- A DP prequalified for R3 does *not* require a new/extra prequalification for BidLadder (provided all registration info is available).
- Timings/Notifications for transfers between pools based on R3-calendar. Each transfer is valid for one month. After month, DP are reset to R3 pool of DP for next auction.
- Irrespective of the R3-baseline chosen, in BidLadder always 'Last QH' is used.
- Volume available for R3 should guaranteed. The following condition should hold:

$$\begin{aligned}
 & \text{(Prequalified volume R3)} - \text{(SUM of Pref per DP transferred to BidLadder)} \\
 & \geq \text{(Contracted volume R3)}
 \end{aligned}$$

Technical prequalification & activation control

Principles for technical prequalification: Registration & simulation test

Question: Which process to foresee for BidLadder registration and simulation test for one or more delivery points?

Taking into consideration:

- **Different service level than reserve products:** BidLadder provides an energy product without availability requirement, not relied upon by Elia for meeting reserve needs
- **Explicit bids:** BidLadder allows for 'explicit' bids, i.e. bids will only be made whenever the energy is available and not permanently.

→ Proposed principles:

- a) One-stop-shop registration:** only one administrative registration per DP for all non-CIPU mFRR products, i.e. info asked should cover all BidLadder and R3 information needs
- b) Ex ante simulation test of the process:** test once whether the FSP is capable to meet all process steps (communication, making a bid, etc.)
- c) Ex post systematic control on good delivery:** besides imbalance adjustment foresee a penalty mechanism (financial/suspension) for deltas beyond 10% of wat was explicitly offered.

Principles for technical prequalification: DP Registration & FSP simulation test

Simulation test procedure for a BSP participating on BidLadder:

1. Elia defines a test window of min. 24 and max. 48 hours.
2. The FSP should make its forecast (“bid”) of available volumes in his pool (or a part thereof) for this period, which can be updated during the period until the normal gate closure time (i.e. RT – 45 mins).
3. Elia chooses when to partially or entirely activate a volume according to the “bid”
4. The FSP delivers in line with its latest update prior to gate closure time.

Test passed if: *(both conditions are to be met)*

- A. All steps done without technical problems.
- B. Delivered volumes within limits used for activation control (next slide)

At test can only be succesful if at least 1 MW was reasonable offered and could be activated by Elia.

Other test modalities:

- No activation price paid for a test, but delivered volume added to $BRP_{f_{sp}}$ -portfolio (he gets the imbalance price)
- BRP_{source} neutralized → ToE applied+ financial compensation facilitated via FDM-data exchange by ELIA
- If FSP fails during the contract 2 times on meeting process requirements, suspension until a succesfull test (at BSP expenses) could be demanded

Activation control

Following the principles concerning registration & simulation test, an **ex post activation control** is foreseen.

➤ **For activation of 1 QH or the first QH of a longer activation:**

Max delivered volume = 100% requested volume + min [max (10% requested volume ; 0,5 MW) ; 5 MW]

Min delivered volume = 50% requested volume – min [max (5% requested volume ; 0,5 MW) ; 2,5 MW]

➤ **For any other QH:**

Max delivered volume = 100% requested volume + min [max (10% requested volume ; 0,5 MW) ; 5 MW]

Min delivered volume = 100% requested volume - min [max (10% requested volume ; 0,5 MW) ; 5 MW]

Remarks:

- Only the QHs in the activation period are considered.
- The activation control is done at the level of a bid, based on the E delivered as determined per delivery point (cf. infra)
- The lower limit for Min delivered volume in a 1st QH is due to the obligation to deliver capacity within 15 mins (cf. mFRR definition). However, be aware that the imbalance adjustment ensures an incentive to nevertheless deliver the entire block.
- Penalty mechanism:
 - As from 3 violations of the limits within a 30 day period → 30 day suspension of the BSP from the BidLadder
 - 3 suspensions within a rolling year → Elia can unilaterally decide to stop the BidLadder-contract

Marketmodel Transfer of energy

- Model B2
- ToE & financial compensation: overview cases (updated)
- Feedback FEBEG

Feasibility option B2 – “split invoices”

→ CREG requested ELIA to assess feasibility of facilitating option B2 from Final Study CREG within framework of pilot project Bidladder.

→ Objective of option B2 is that grid user (GU) pays Supplier at supply price (based on corrected metering values) while preserving confidentiality for flexibility activations with ToE.

Hence, option B2 implies

1. a **correction of the metering data at the Access Point**, replacing the metering values with the baseline (last qh) for the period of activation

→ No confidentiality as easy to detect (consecutive qh - values) the activation periods + in most cases BRP/Supplier have real time metering available hence identity of flexible customer is easily known (↔ **CREG principle 9**)

→ Additional complexity of adjusting metering data at Access Point when flex is activated at submetered delivery points

2. sending to the Access Holder both **corrected and non-corrected metering values**:

- corrected to verify invoice from BRP and Supplier
- non-corrected to verify invoice from ELIA with grid related components (tariffs)

→ Grid User receives split invoice (energy vs grid components) (↔ **CREG principle 10**)

→ Cascade principle impacted

→ May lead to additional risk/costs for ELIA

Feasibility option B2

3. In order to comply with confidentiality principle, **only GU that are their own Access Holders can use this option.**

→ Very limited number of grid users at TSO-grid, excluding 100% DSO grid users.

Conclusion 1:

allowing option B2 result in no level playing field between grid users !

Allowing option B2 introduces another model to implement, with **significant impact on metering and imbalance adjustment processes and applications.**

These developments can only be used by selective number of customers, *if these opt for B2.*

This is **not in current scope** (which is aligned with Final Study CREG) of implementation in Pilot Bidladder.

Conclusion 2:

In order to respect planned deadline of 1/7/2017 for facilitating ToE with no-CIPU delivery points at TSO-level by FSP, ELIA can only deliver processes and applications facilitating models recommended/retained in Final Study CREG.

Models with Transfer of Energy

Transfer of Energy means activation of flexibility of demand at a delivery point where
BRPfsp ≠ BRPsource and/or FSP ≠ Supplier (cf. definition CREG)

→ No ToE where BRPfsp = BRPsource and FSP = Supplier → implicit flex

→ **Quid if FSP and Supplier agree bilaterally on activation of flex without ToE ?**

	FSP	BRPfsp	BRPsource	Supplier	Applicable regime
1.	Coulomb	Coulomb	Coulomb	Coulomb	No ToE → Incentive Correction, no FDM-proces
2.	Faraday	Coulomb	Coulomb	Coulomb	ToE → Asym. Imbalance Adjustment + FDM proces
3.	Coulomb	Coulomb	Coulomb	Joule	ToE → Asym. Imbalance Adjustment + FDM proces
4.	Faraday	Coulomb	Coulomb	Joule	ToE → Asym. Imbalance Adjustment + FDM proces
5.	Faraday	Coulomb	Coulomb	Faraday	No ToE → Incentive Correction, no FDM-proces
6.	Faraday	Ampere	Coulomb	Coulomb	ToE → Asym. Imbalance Adjustment + FDM proces
7.	Faraday	Ampere	Coulomb	Joule	ToE → Asym. Imbalance Adjustment + FDM proces
8.	Joule	Ampere	Coulomb	Joule	ToE → Asym. Imbalance Adjustment + FDM proces

Feedback Febeg

→ Cf. other presentation with slides from FEBEG

Imbalance adjustment

Imbalance adjustment

Asymmetric regime for under/overdelivery

→ For those cases where no classical “incentive correction” is applied...

Reminder of the principles for the asymmetric imbalance adjustment:

- The FSP is only responsible for the volume he committed to towards Elia. The BRP_{source} is the only party entitled to “reactive balancing”.
- As a consequence, any underdelivered volume is the responsibility of the FSP/ BRP_{FSP} . Any overdelivered energy never left the portfolio of the BRP_{source} and can not be attributed to the FSP/BRP_{FSP} .

Underdelivery	Overdelivery
→ BRP_{bsp} takes the imbalance in case underdelivery	→ BRP_{source} takes the imbalance in case overdelivery
<ul style="list-style-type: none"> • $BRP_{bsp} = -(Req-Del)$ • $BRP_{source} = 0$ (adjusted with delivered) 	<ul style="list-style-type: none"> • $BRP_{bsp} = 0$ • $BRP_{source} = + (Del-Req)$ (adjusted with requested)

→ How does it work in more detail, e.g. with multiple delivery points ?

Imbalance adjustment

Asymmetric regime for under/overdelivery

1. $E_{\text{requested}}$ = volume requested by Elia upon activation and confirmed by FSP
2. 2nd confirmation (max 3 mins after end of activation) by FSP to Elia of how delivered volume is split over the pool of delivery points.
3. Delivery points mentioned in step 2 with delivered volume = 0 MW are not further considered.
4. Application by Elia of baseline for calculating delivered volume per delivery point.
5. Cap the delivered volume per delivery point calculated in step 4 by the Pref per DP as mentioned in the Grid User Declaration
6. Compare $E_{\text{requested}}$ with the sum of delivered volume per DP to determine whether there is:
 - Underdelivery
 - Precise delivery
 - Overdelivery

$$E_{\text{requested}} = 10 \text{ MW (upwards)}$$

2nd FSP confirmation to Elia:

DP1 = 2 MW	DP3 = 5 MW
DP2 = 3 MW	DP4 = 0 MW

Removing delivery point for which FSP reported 0 MW delivered:

DP1 = 2 MW	DP3 = 5 MW
DP2 = 3 MW	DP4 = 0 MW

Removing delivery point for FSP reported 0 MW delivered:

DP1 = 2,1 MW	DP2 = 2,9 MW	DP3 = 5 MW
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Info from GU declaration in GFA BidLadder:

Pref DP1 = 10 MW	Pref DP2 = 10 MW	Pref DP3 = 3 MW
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Capping the delivered volume per DP to Pref:

DP1 = 2,1 MW	DP2 = 2,9 MW	DP3 = 3 MW
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$$E_{\text{requested}} = 10 \text{ MW}$$

$$\text{Sum of delivered volume per DP} = 2,1 + 2,9 + 3 = 8 \text{ MW}$$

→ Underdelivery of 2 MW

Imbalance adjustment

Asymmetric regime for under/overdelivery

3 cases are now possible:

CASE A: underdelivery

7A. Add the $E_{\text{requested}}$ in the perimeter of BRP_{FSP}

8A. Add $E_{\text{requested}} - \text{Sum (delivered volume per DP)}$ in the perimeter of the BRP_{FSP} .

9A. Add the delivered volume per DP determined in step 5 to the perimeter of the respective $\text{BRP}_{\text{source}}$ in order to correct the decrease of consumption that took place following the activation.

Add to the perimeter of BRP_{FSP} a volume of -10 MW

Add to the perimeter of BRP_{FSP} a volume of +8 MW

The position of the $\text{BRP}_{\text{FSP}} = -2 \text{ MW}$
→ The BRP_{FSP} is subject to imbalance prices for the "underdelivered" volume

Do the following perimeter adjustments:

$\text{BRP}_{\text{source, DP1}}$	+2,1 MW
$\text{BRP}_{\text{source, DP2}}$	+2,9 MW
$\text{BRP}_{\text{source, DP3}}$	+3 MW

Imbalance adjustment

Asymmetric regime for under/overdelivery

CASE B: precise delivery

(imagine in the example that Pref of DP3 was 10 MW, implying that a delivered volume of 5 MW is OK)

7B. Add the $E_{\text{requested}}$ in the perimeter of BRP_{FSP}

8B. Add $E_{\text{requested}} - \text{Sum (delivered volume per DP)}$ in the perimeter of the BRP_{FSP} .

9B. Add the delivered volume per DP determined in step 5 to the perimeter of the respective $\text{BRP}_{\text{source}}$ in order to correct the decrease of consumption that took place following the activation.

Capping the delivered volume per DP to Pref:

DP1 = 2,1 MW	DP2 = 2,9 MW	DP3 = 5MW
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$E_{\text{requested}} = \text{Sum (delivered volume per DP)}$
→ Precise delivery

Add to the perimeter of BRP_{FSP} a volume of -10 MW

Add to the perimeter of BRP_{FSP} a volume of +10 MW

The position of the $\text{BRP}_{\text{FSP}} = 0 \text{ MW}$
→ The BRP_{FSP} has no open imbalance position.

Do the following perimeter adjustments:

$\text{BRP}_{\text{source, DP1}}$	+2,1 MW
$\text{BRP}_{\text{source, DP2}}$	+2,9 MW
$\text{BRP}_{\text{source, DP3}}$	+5 MW

Imbalance adjustment

Asymmetric regime for under/overdelivery

CASE C: overdelivery

- Imagine in the example that R_{ref} of DP3 was 10 MW, implying that a delivered volume of 5 MW is OK
- Imagine in the example that on DP1 8,1 MW was delivered instead of 2,1 MW

7C. Add the $E_{requested}$ in the perimeter of BRP_{FSP}

8C. Reduce the delivered volume to the level of $E_{requested}$ by pro rata reducing the delivered volume on each delivery point

9C. Add $E_{requested} - \text{Sum (delivered volume per DP)}$ in the perimeter of the BRP_{FSP} .

10C. Add the delivered volume per DP determined in step 5 to the perimeter of the respective BRP_{source} in order to correct the decrease of consumption that took place following the activation.

Capping the delivered volume per DP to R_{ref} :

DP1 = 8,1 MW	DP2 = 2,9 MW	DP3 = 5MW
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$E_{requested} < \text{Sum (delivered volume per DP)}$
→ Overdelivery of $(8,1+2,9+5) - 10 = 6$ MW

Add to the perimeter of BRP_{FSP} a volume of -10 MW

Allocate the overdelivered volume of 6 MW over all DPs:

DP1	$8,1 - (6 * 8,1/16) = 5,06$ MW
DP2	$2,9 - (6 * 2,9/16) = 1,81$ MW
DP3	$5 - (6 * 5/16) = 3,13$ MW

→ The new sum (delivered volumes per DP) = 10 MW

Add to the perimeter of BRP_{FSP} a volume of +10 MW

The position of the $BRP_{FSP} = 0$ MW
→ The BRP_{FSP} has no open imbalance position.

Do the following perimeter adjustments:

$BRP_{source, DP1}$	+5,06 MW
$BRP_{source, DP2}$	+1,81 MW
$BRP_{source, DP3}$	+3,13 MW

Together all BRP_{source} are corrected for 10 MW. The overdelivered volume of 6 MW remains in their imbalance position

Imbalance adjustment

Asymmetric regime for under/overdelivery

Summary:

- The delivered volume per delivery point is:
 - Calculated using the baseline (i.e. last QH prior to activation).
 - *Always* limited to the Pref as defined in the Grid User Declaration.
 - *In case of overdelivery* reduced by a pro rata allocation of the overdelivered volume.
- Only delivery points for which the FSP in the '2nd confirmation' reported a value $\neq 0$ are taken into account.
- These delivered volumes are used for imbalance adjustment and for the data exchange facilitating the financial compensation.

Next steps

Design proposal & next Task Force meeting

- Elia will publish a document “**Design Proposal for the Pilot Project BidLadder**”
- **Formal consultation** on the design proposal will start end of July / early August and last until early September
 - Timing (to be confirmed): 29 July until 8 September
 - Reactions in writing/e-mail to usersgroup@elia.be
- An **extra Task Force meeting** is foreseen on **2 September 2016** (9.30h-12h00)