

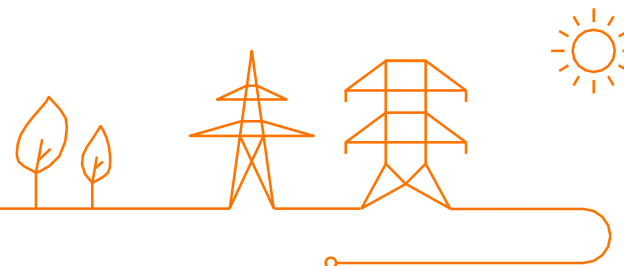
# CRM Secondary Market

Overview of the ELIA proposal in the design note

22/10/2019 | Patrik Buijs

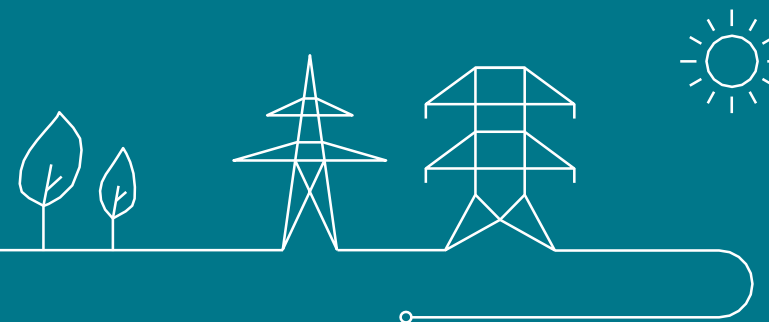
# Agenda

1. Concept of Secondary Market
2. General contours
3. Design
4. Transaction requirements
5. The eligible volumes
6. Next step



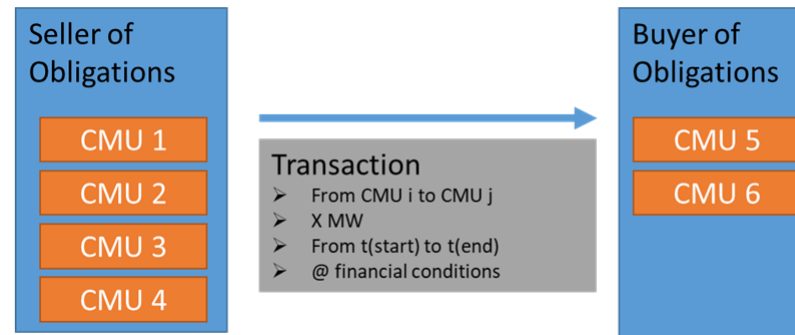
# Concept & General contours

Overview of the Secondary Market Proposal



# 1. Concept of Secondary Market:

- The Law (\*):
  - In Art. 7undecies §8: “[...] at the latest one year before the first delivery period, the organization mechanism of the Secondary Market.”
- The purpose of a Secondary Market is:
  - To give comfort to the contract capacities to be able to transfer their CMU obligations to another CMU at an agreed price in order to allow them to manage their risks better.
  - By doing so, a good functioning Secondary Market can contribute to enhance competition of all participating technologies ensuring SoS within the CRM.
  - The creation of a liquid market should decrease the risk of the Auction bidders, doing so decreasing the overall CRM cost.
  - This under a manageable complexity.
- A transaction is considered between:
  - Two Contractual parties, transferring (part of) their CMU obligations to other CMUs.
  - In case of an third party exchange, the repartition between CMUs will be performed by the third party so that a transaction remains between two CMUs.

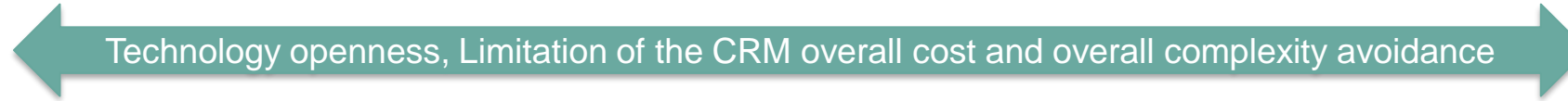


# 1. Concept of Secondary Market:

More generally, in the overall Belgian CRM Framework and under the CEP, several objectives and considerations for the Design exists:

- 1. Technology openness
  - No creation of undue barrier at Entry to the Market
  
- 2. Limitation of the CRM overall cost
  - No creation of undue barrier at Entry to the Market → enhancement of competition of technologies → liquidity → lower the bids cost
  - Increase the eligible volume sources → liquidity → lower the bids costs
  
- 3. Overall complexity avoidance
  - Limitation of complexity → avoid barrier at entry and decrease the risks within a bid price
  - Less complex → feasible, manageable and also compatible with third parties solutions

## 2. Contours of a Secondary Market: Three main types



1.

### 1<sup>st</sup> possibility: complete transfer

The Availability Obligations, penalties and payback obligation **are transferred** for (part of) the Obligated Capacity

The related Capacity Remuneration is **also fully transferred**

2.

### 2nd possibility: obligation transfer

The Availability Obligations, penalties and payback obligation **are transferred** for (part of) the Obligated Capacity

**No Capacity Remuneration is transferred** (remains on initial).  
Bilateral (or exchange) agreement for the transfer payment

3.

### 3d possibility: subcontracting

Despite the Availability Monitoring occurring on the CMU taking over (part of) the Obligated Capacity, the Availability Obligations, penalties and payback obligation **are not transferred**

**No Capacity Remuneration is transferred** (remains on initial).  
Bilateral (or exchange) agreement for the transfer payment

(presented in Design Note)



## 2. Contours of a Secondary Market: Complete transfer

1.

### 1<sup>st</sup> possibility: complete transfer

The Availability Obligations, penalties and payback obligation **are transferred** for (part of) the Obligated Capacity

The related Capacity Remuneration is **also fully transferred**

- Is similar to the presented scheme in the Design Note (2<sup>nd</sup> possibility) at the main difference that all Primary Market Capacity Remuneration is also transferred to the Buyer of an Obligation
- Although less complex than the 2<sup>nd</sup> possibility, it could create an issue regarding the Market transparency as the transfer could imply a revealing of the individual initial remuneration (which might refrain CMUs to rely on the secondary market and therefore increase risks and primary market bids)

## 2. Contours of a Secondary Market: Complete transfer

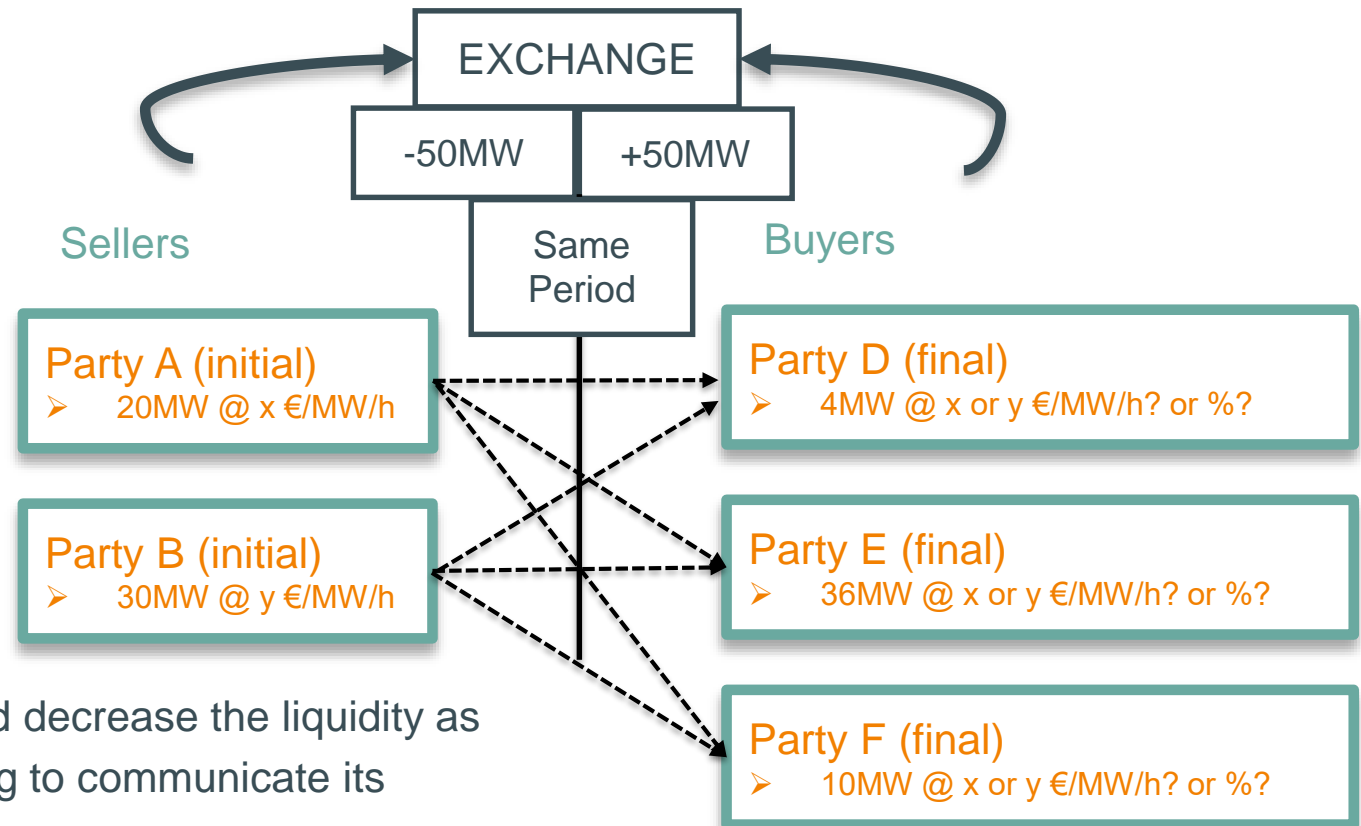
1.

### 1<sup>st</sup> possibility: complete transfer

The Availability Obligations, penalties and payback obligation **are transferred** for (part of) the Obligated Capacity

The related Capacity Remuneration is **also fully transferred**

- It also hampers the emergence of a potential anonymous exchange as both offer and demand curves will have to cope with initial remuneration data
  - Low standardization possible



- A fortiori, increase the barrier to entry and decrease the liquidity as the initial market party might not be willing to communicate its initial price for a 'small' transaction



## 2. Contours of a Secondary Market: Complete transfer

2.

### 2nd possibility: obligation transfer

The Availability Obligations, penalties and payback obligation **are transferred** for (part of) the Obligated Capacity

**No Capacity Remuneration is transferred** (remains on initial).  
Bilateral (or exchange) agreement for the transfer payment

**(presented in Design Note)**

- The presented scheme in Design Note implies that all obligations related to the Transaction Capacities are transferred to the Buyer of an Obligation
- In order to decouple the Prices from both Primary and Secondary Markets, the Capacity Remuneration is still paid to the initial market party. Bilateral or exchange agreement will manage the final market party payment.

Pros:

- Under a manageable complexity, it allows a liquid and efficient Secondary Market with avoidance of undue barrier at entry.
- It represents the current Ancillary Capacities transactions (FCR, mFRR, ...) functioning

Cons:

- Nevertheless, regarding Credit exposure, a solution has to be found to compensate the collateral decrease towards the Contractual Counterparty

## 2. Contours of a Secondary Market: Complete transfer

3.

### 3d possibility: subcontracting

Despite the Availability Monitoring occurring on the CMU taking over (part of) the Obligated Capacity, the Availability Obligations, penalties and payback obligation **are not transferred**

**No Capacity Remuneration is transferred** (remains on initial).  
Bilateral (or exchange) agreement for the transfer payment

- Is not considered as a Secondary Market, as no transfer of responsibility occurs, it imposes for the Primary Market participants to remain on the Contract duration under their contracted capacity obligations
- The barrier at Entry is evident as bilateral extra technical requirements may emerge above the Prequalification Process between Market participants
- Nevertheless, it permits for the Contractual Counterparty to keep a full initial collateral at the effective Capacity Provider

## 2. Contours of a Secondary Market: Complete transfer

3.

### 3d possibility: subcontracting

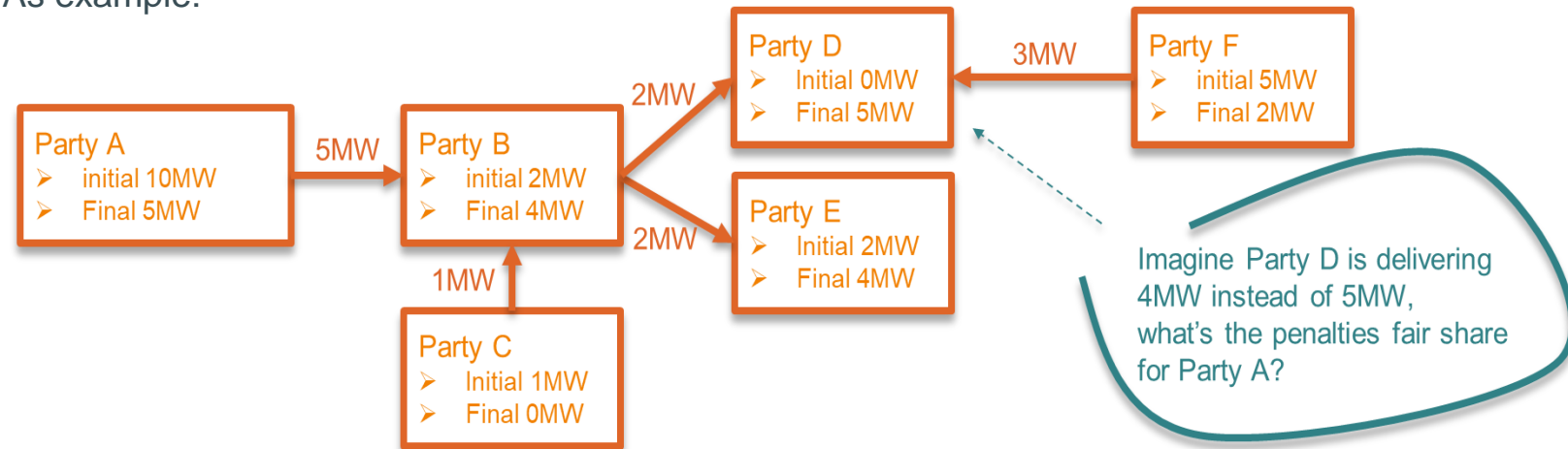
Despite the Availability Monitoring occurring on the CMU taking over (part of) the Obligated Capacity, the Availability Obligations, penalties and payback obligation **are not transferred**

**No Capacity Remuneration is transferred** (remains on initial).

Bilateral (or exchange) agreement for the transfer payment

- Regarding market functioning, it may block the possibility to re-trade the volume or impose a veto from the initial counterparty

As example:



For the Contractual Counterparty, it is unlikely to spread the Obligations on the right Counterparty.

For the Market participants, it would be fair to assume that no-retransfer is possible after the first transfer, creating an important entry barrier as also B and C could face a (sudden) unavailability requiring the need of a Secondary Market.

## 2. Contours of a Secondary Market: Complete transfer

3.

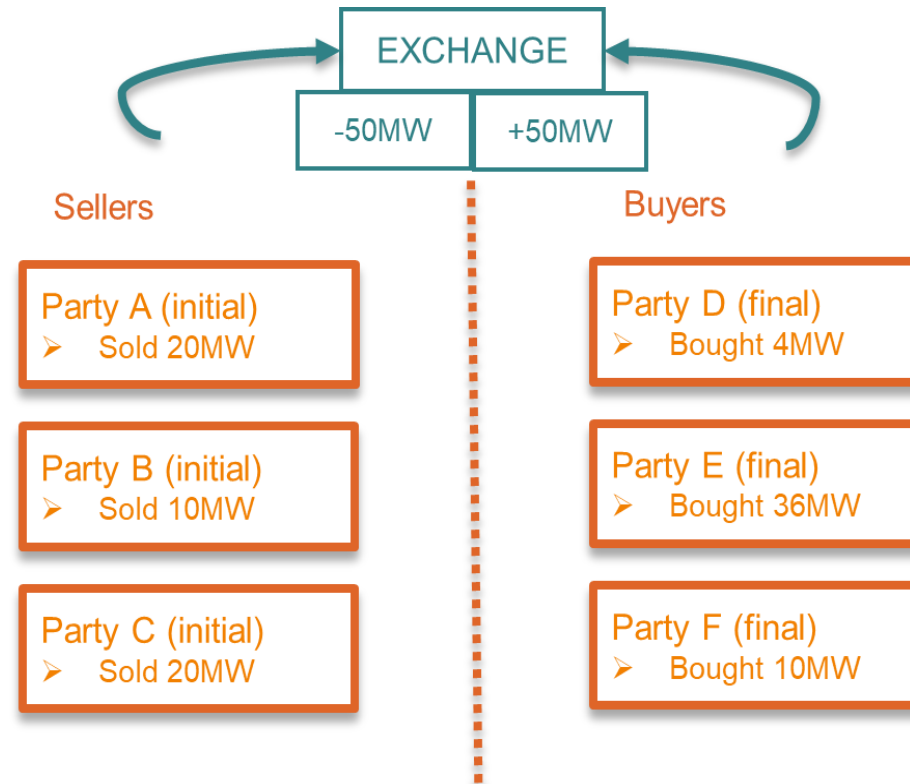
### 3d possibility: subcontracting

Despite the Availability Monitoring occurring on the CMU taking over (part of) the Obligated Capacity, the Availability Obligations, penalties and payback obligation **are not transferred**

**No Capacity Remuneration is transferred** (remains on initial).

Bilateral (or exchange) agreement for the transfer payment

- Regarding market functioning, it may impeach the emergence of an anonymous exchange (impossible responsibility conservation)
  - Sellers Parties wouldn't be exposed towards irresponsible CMUs)



## 2. Contours of a Secondary Market: Three main types

1.

### 1<sup>st</sup> possibility: complete transfer

The Availability Obligations, penalties and payback obligation are transferred

Remuneration is also fully transferred

2.

### 2<sup>nd</sup> possibility: obligation transfer

The Availability Obligations, penalties and payback obligation are transferred

No Capacity Remuneration is transferred

(presented in TF 26/09)

3.

### 3<sup>d</sup> possibility: subcontracting

The Obligated Capacity, the Availability Obligations, penalties and payback obligation are not transferred

No Capacity Remuneration is transferred

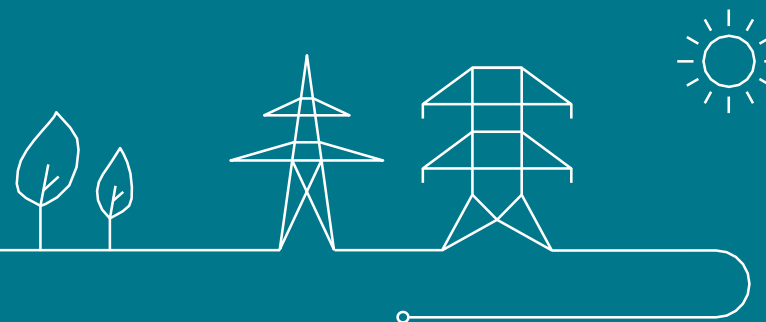
Knowing the CRM Framework and the considerations, the 3d Possibility could not be selected as Design, it appears that solely the 1st and 2<sup>nd</sup> possibilities are respecting the basic principles of a Secondary Market.

A trade-off between the Market transparency issue (cf. 1st Possibility) and the need for an extra solution for Credit exposure led to the 2<sup>nd</sup> solution.

ELIA as Facilitator presented the 2<sup>nd</sup> possibility in TF and design note that encompasses a good balance on the objectives and considerations of a Secondary Market open to bilateral trade and facilitation by third parties and to all types of technologies.

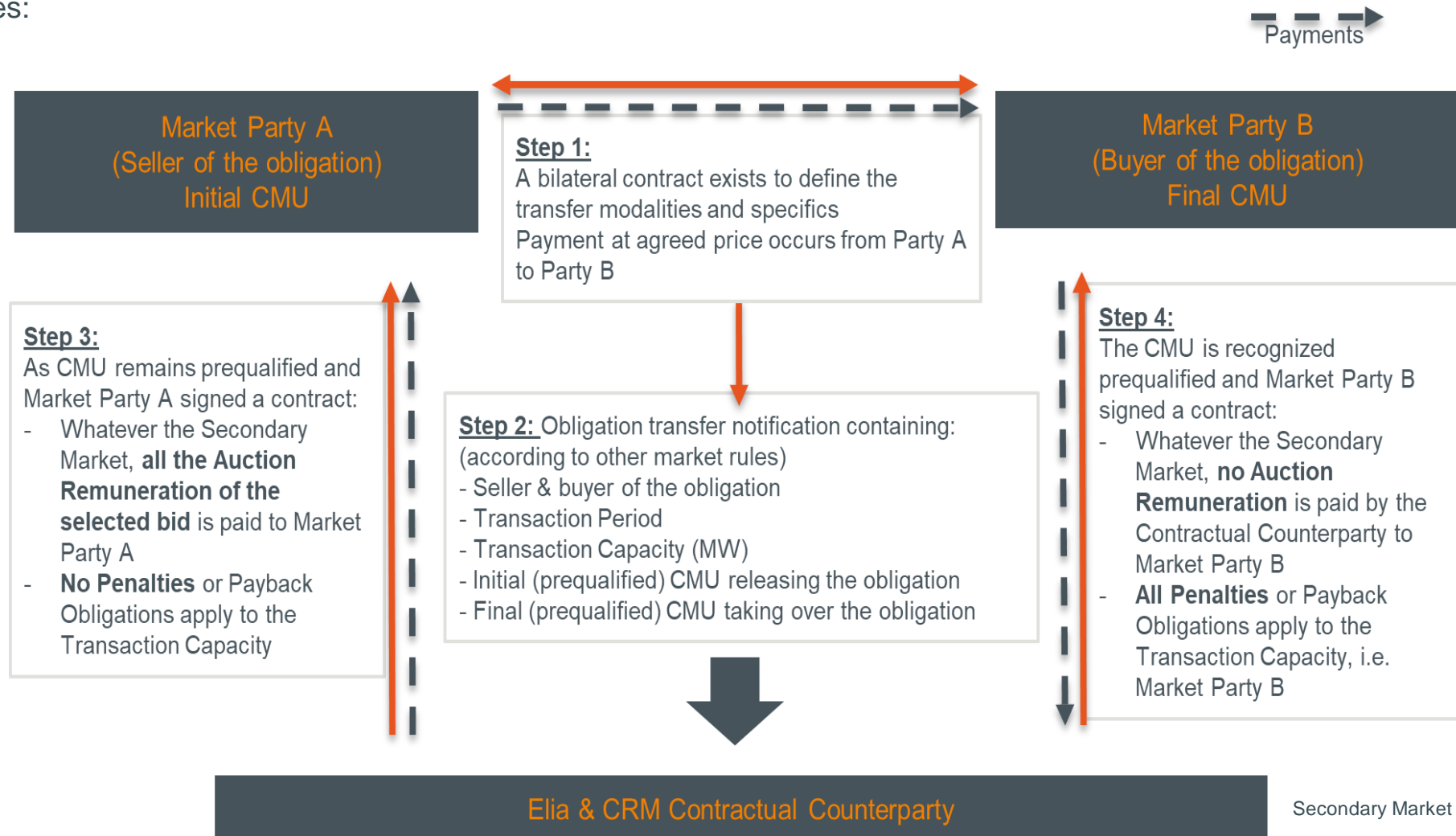
# Design & Product Requirements

Review on the Secondary Market Proposal



### 3. Design of Secondary Market:

- The title transfer facility is the solution proposed to acquire, validate and register the transactions of the Secondary Market.
  - Whatever the transaction channel (OTC, exchange, ...), it imposes to receive the same subset of information to perform the transfer
  - It gives:

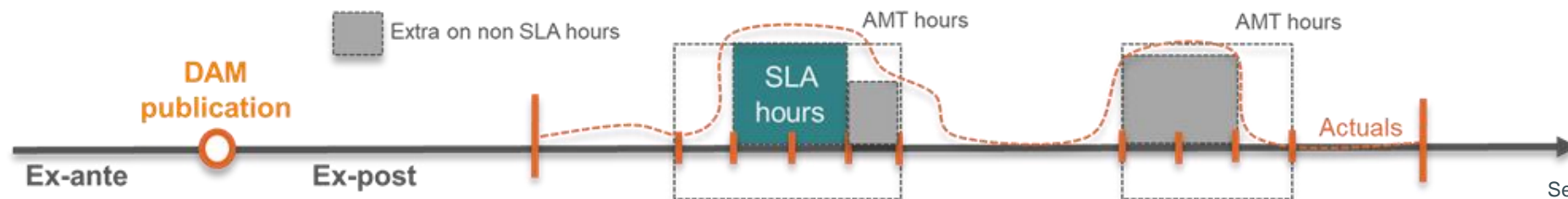




## 4. Product Requirements (1/4)

### Transaction validation (volume considered in 5. Eligible volumes)

- All potential participants have to sign a contract with Contractual counterparty and their CMUs have to be prequalified
- Notification of a transaction may be ex-ante or ex-post where the ex-post is defined as a notification after the AMT identification
  - AMT identification is considered as DAM prices publication
- Ex-post transactions are authorized up to 5 WD after the start of Transaction Period
- Transaction Period is considered as a set of consecutive days **or** a set of consecutive hours
- The notification must include both CMUs, the seller as Capacity Provider, the buyer as CRM Potential Participant, the Transaction Capacity and Transaction Period. The Transaction Date = notification time.
- The Secondary Market Transactions are not entering into consideration for the Stop Loss on Payback Obligation
- All hourly Transactions transferring obligations towards an Energy Constrained out of its SLA hours must be notified in ex-post
  - The monitoring will impose to be proven, so that ex-post implies low or no risk of penalties → liquidity → decrease the CRM overall cost



## 4. Product Requirements (2/4)

### Payback Obligation

The Strike Price is updated on a Yearly basis; therefore, a transfer of Obligation could impact the Payback Obligation, here are the 3 possibilities:



ELIA presented the 2nd The latest Calibrated Strike price published at the transaction date will be applied on the transferred Capacity

- It is considered 2. (Last published Strike Price) as more desirable than 1. (Transfer of the initial Strike price) which would have created sub-segments in the Secondary Market
  - ➔ impact on liquidity
  - ➔ impact on feasibility and hamper the Exchange development
  - ➔ impact on technology openness
  
- It is considered 2. (Last published Strike Price) as more desirable than 3. (Strike price of the CMU taking over the obligation) as not all participating CMUs have previous obligations and could have in theory multiple Primary Market obligations (with different Strike prices)
  - ➔ impact on feasibility

## 4. Product Requirements (3/4)

### Availability Penalties for the Secondary Market transaction

A CMU acquiring Secondary Market obligations and under delivering will be penalized for:

- 1) Missing Capacity up to the Contracted Capacity (Primary), as foreseen in Availability Obligations and Penalties:

$$Penalty [€] = \frac{(1 + X) * (P_{obligated} - P_{available})}{UP} * yearly\ contract\ value$$

- 2) Missing Capacity above the Contracted Capacity (Secondary) has 'no yearly contract value' so should be replaced in the formula by either:

1.

**Primary Contract value of the CMU releasing an Obligation**

2.

#### Market-Wide contracted price

2a. Maximum Contract price	2b. <b>Weighted Average</b>	2c. Last auction Clearing price
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3.

**Primary Contract value of the CMU taking over an Obligation**

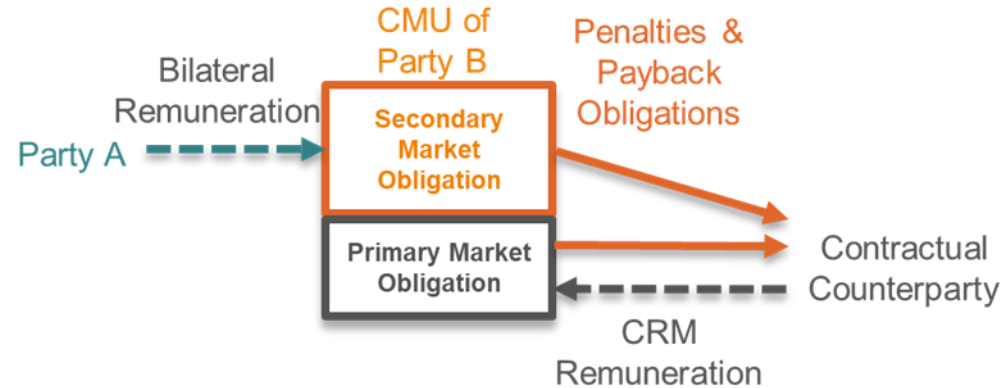
ELIA proposed in the Design Note: 2B. As Market-wide Weighted average price of all Contracted Capacity on the Delivery Year (€/MW/y)

- Considered as better than 1. as it may create an issue on the transparency and segmentation in the Secondary Market
- ➔ impact on liquidity + impact on feasibility + impact on technology openness
- Considered as better than 3. as the Penalty is not proportional to the real Contract remuneration ➔ impact on neutrality
- ➔ Within 2., a weighted average of the Contracted prices (cf. 2b) can serve as a reasonable solution

## 4. Product Requirements (4/4)

### Contract escalation

- The choice of the 2<sup>nd</sup> possibility of Secondary Market led to a Credit risk increase for the Contractual Counterparty as more obligations than collateral exist.



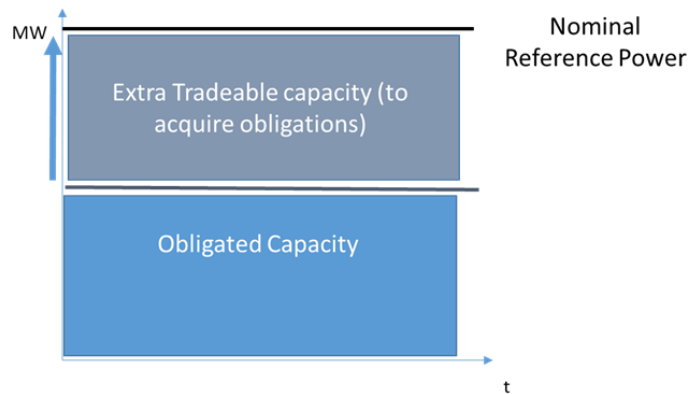
- As a bank guarantee is considered as an Entry barrier, the proposed contract escalation mechanism involving that:
  - After 3 consecutive underperformances of more than 20% of the Obligated Capacity  
Suspension of the CMU for extra acquisition and reduction of the Capacity Remuneration of the missing capacity
  - If within 20WD, no recovery of the Obligated Capacity (via transactions or intrinsic)  
Activation of the Termination clause with all obligations of the Capacity provider maintained but possibility for ELIA to suspend the Capacity Provider of new transactions for the current, next Delivery Period and the next Y-1 and Y-4 auction.  
Only after those, the Capacity provider may participate again (and after successful prequalification process of its CMUs)

## 5. Eligible Volumes of the Secondary Market

### Sources of volumes

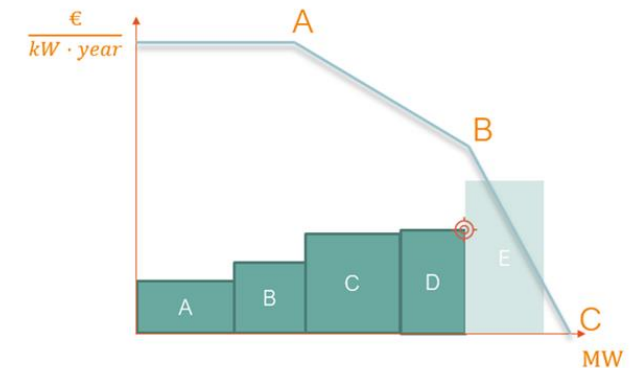
1.

Extra Available Capacity of the contracted CMUs in the Primary Market Auctions for the same Delivery Period



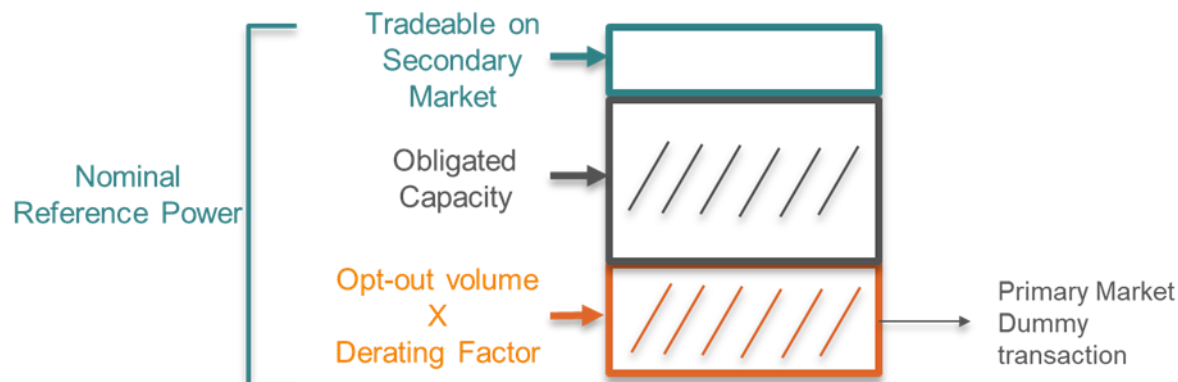
2.

Prequalified CMUs having participated in the primary market Auction, but that were not awarded a Capacity Contract



3.

Opt-out Volumes that have not yet been accounted for in the Auction volume



4.

Newly prequalified capacities that haven't participated in the Primary Market Auction

## 5. Eligible volumes of the Secondary Market

### Obligation allowed to be sold / acquired per CMU

	Non-Energy Constrained CMU	Energy Constrained CMU
To take over Obligation	$MAX(0 ; \text{Nominal Reference Power (CMU, } t)$ – $\text{Obligated Capacity (CMU, } t)$ – $\text{Opt-Out Volume (CMU, } t) * \text{Derating Factor (CMU)}$	$MAX(0 ; \text{Nominal Reference Power (CMU, } t)$ – $\text{Obligated Capacity (CMU, } t)$ – $\text{Opt-Out Volume (CMU, } t)$
To release obligation	$MAX(0 ; \text{Obligated Capacity (CMU, } t))$	$MAX(0 ; \text{Obligated Capacity (CMU, } t))$

Where the Obligated Capacity is the CMU total obligation including the previous Secondary Market transactions.

Where Opt-Out Volume is the considered volume taken into account in the process and considered as IN.

Once multiplied by the de-rating, the Opt-Out volume was inserted in the Primary Auction as *dummy bid*.

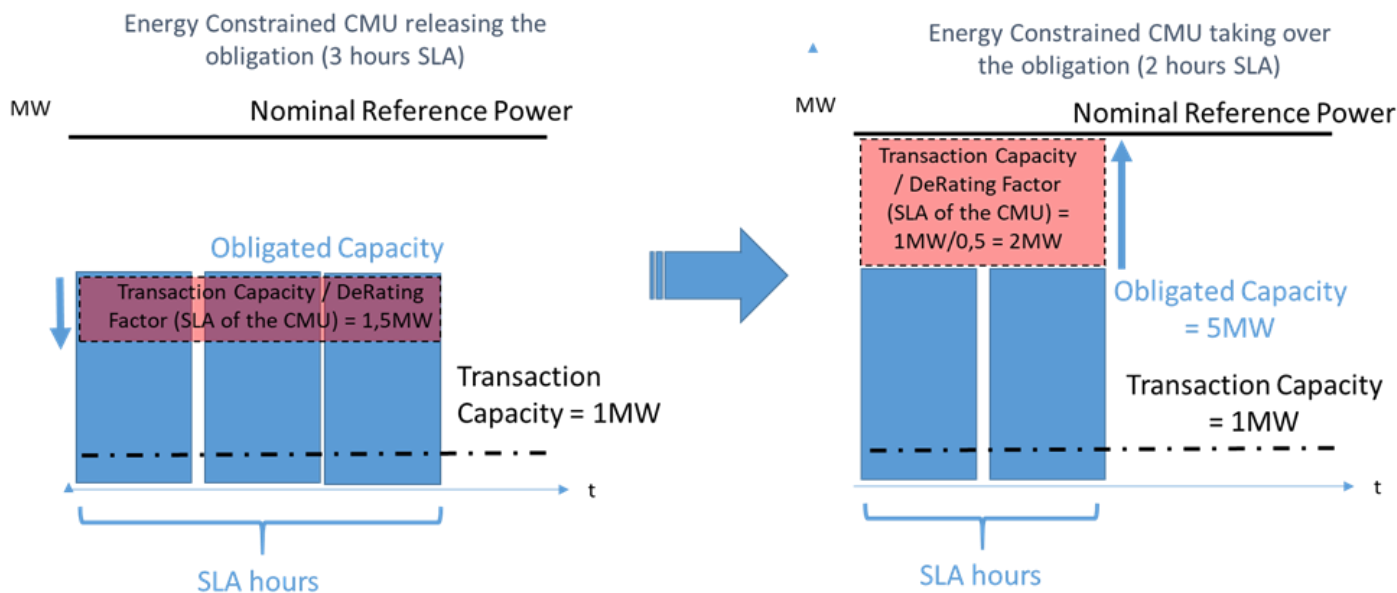
(Note: Opt-Out volume considered as OUT are eligible for Secondary Market.)

# 5. Eligible volumes of the Secondary Market

## Transaction Capacity impact on a CMU Obligation

	Non-Energy Constrained CMU	Energy Constrained CMU
As a Seller of Obligation	CMU Obligated Capacity decrease of <i>Transaction Capacity</i>	CMU Obligated Capacity decrease of <i>Transaction Capacity / DeratingFactor (CMU)</i>
As a Buyer of Obligation	CMU Obligated Capacity increase of <i>Transaction Capacity</i>	CMU Obligated Capacity increase of <i>Transaction Capacity / DeratingFactor (CMU)</i>

## Example of 1 MW Transaction Capacity between two Energy constrained CMUs:





## 5. Eligible volumes of the Secondary Market

Example of 1 MW Transaction Capacity between two Energy constrained CMUs:

