

Secondary Market Use Case 3

Unproven Capacity Project

DISCLAIMER



This document provides different fictive examples, so-called use cases, related to the Capacity Remuneration Mechanism being developed in Belgium. It has, as sole purpose, to explain the Functioning Rules and its annexes by means of examples.

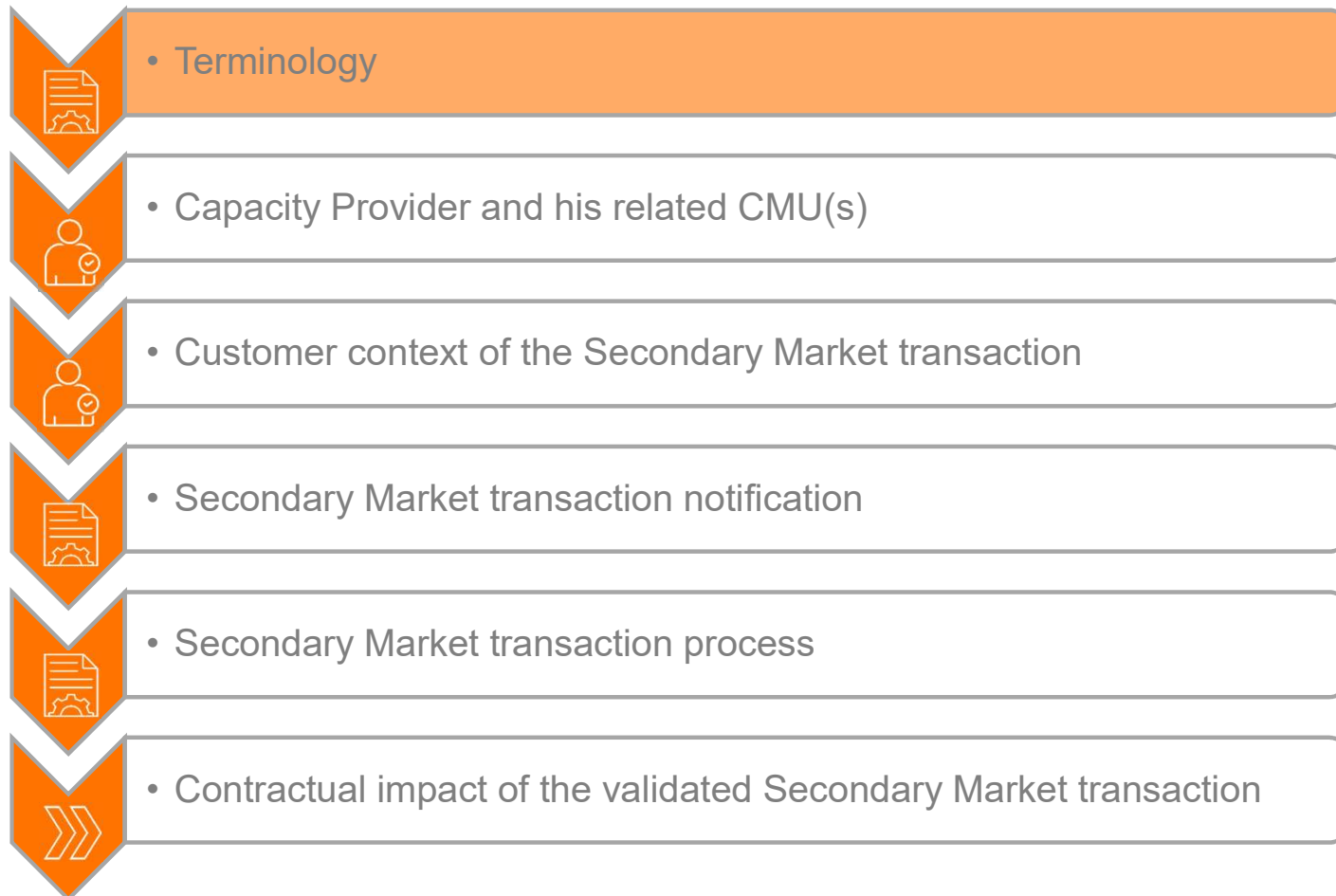
Given that the CRM process consists of several steps, and for each of these steps, several layers of information and details are relevant, it is to be understood that this document focuses on most pertinent Secondary Market aspects.

By no means, the use cases replace the rules in the relevant Laws, Royal Decrees, and regulatory approved documents.

The choices in the examples are only made for illustrative purposes and do not imply any judgement. All the figures and numbers used for these use cases are purely fictive. These numbers nor the use cases presented should be interpreted as representing a concrete case or a concrete situation of the Belgian capacity market or an implied proposal for any CRM parameter.

The use cases developed in this document are based on the chapter *Secondary Market* of the Functioning Rules as known at the moment of writing and shared with market parties on 28/08/2020. It also obviously follows the context set by the Electricity Law.

USE CASE STRUCTURE

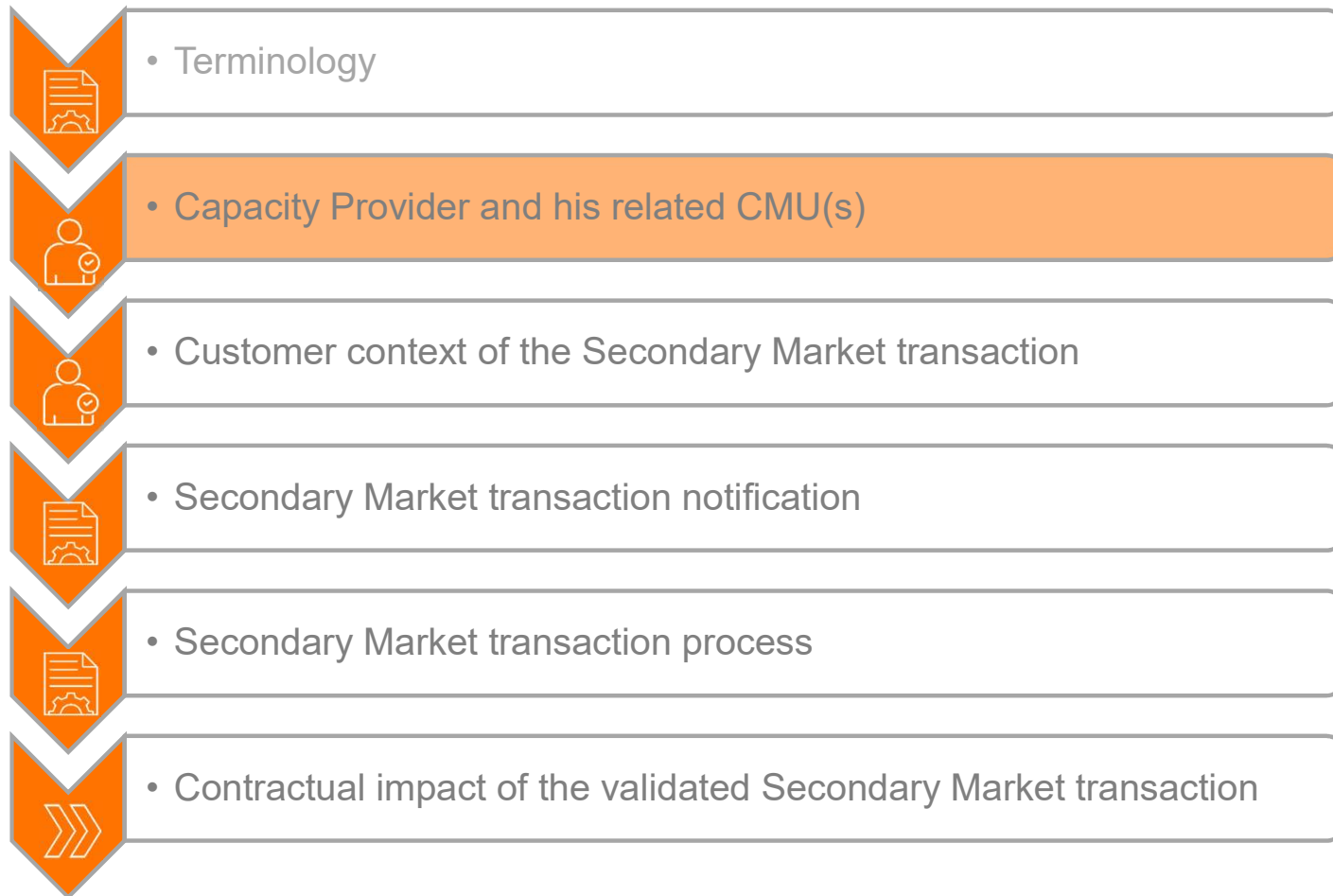




1. Terminology related to the Secondary Market

- **A Secondary Market transaction** is to be officially communicated to ELIA via a **notification** containing its relevant and mandatory parameters. The notification has to be provided to ELIA in order to ensure that, once approved, and registered with the Contractual Counterparty under the form of a Capacity Contract, the necessary Financial Security, Pre-delivery control, Availability Obligations & Penalties, Payback Obligation, Settlements and Payments are correctly handled and settled.
- **Full transfer:** Any approved Secondary Market transaction implies a full transfer of the contractual rights (e.g. the payment of the capacity remuneration) and obligations (e.g. the Availability obligation) related to the part of the Contracted Capacity yielded, the Secondary Market Capacity on the Transaction Period releasing an obligation, as from the Transaction of the **Seller of an Obligation** Capacity Contract, towards a new Transaction on the CMU in the Capacity Contract of the **Buyer of an Obligation** in the Secondary Market transaction.
- **Transaction Period:** is the time period on which the Secondary Market transaction relies and determined by its start and end dates/times.
- **Transaction Date of a Secondary Market transaction:** is determined and logged as the official acknowledgement of reception timestamp (date and time) by ELIA of the **notification**.
- **Ex-ante Secondary Market transaction:** if the Transaction Date is prior to the AMT moments determination of the day in which the start of the Transaction Period relies.
- **Ex-post Secondary Market transaction:** if the Transaction Date is after the AMT moments determination of the day in which the start of the Transaction Period relies.
- **Transaction Validation Date:** For a Transaction on the Secondary Market, the date and time at which it is validated by the Contractual Counterparty.

USE CASE STRUCTURE





2. The context of the Capacity Provider and his related CMU

- **RollingEnergy.SA/NV** was prequalified to offer **50 MW of Eligible Volume** in the 2021 Y-4 Auction
- Those 50MW have **no Delivery Points** yet but RollingEnergy.SA/NV commits making this capacity available by the start of the delivery period in 2025
- It is up to RollingEnergy.SA/NV to take the responsibility to find such capacity (should it be selected at Auction)
- RollingEnergy.SA/NV is looking for industrials who might want to get more revenues from their processes by participating via RollingEnergy.SA/NV pool into the CRM
- As these industrials are not yet identified, it's not possible to identify their Delivery Points neither, which means that RollingEnergy intends to prequalify **50 MW of Unproven Capacity, via a Virtual CMU (VCMU)**.
- As the VCMU is not associated to any DP, no investments file could be sent towards CREG so that the VCMU is by definition assigned to a one-year Capacity Category and that only a **one-year Capacity Contract** is allowed to RollingEnergy with his Virtual CMU



VCMU of 50MW

2. Prequalified CRM Candidate and his related CMU

- In the Pre-Delivery Process, the VCMU became 4 Existing Energy Constrained CMUs on which are attached New Contracted Capacities.
- For more details → UC3 of Pre-Delivery control.

	Transaction 4	Transaction 5	Transaction 6
	CMU 1	CMU 2	CMU 3
Nominal Reference Power	25 MW	4,5 MW	5,15 MW
Opt-Out volume considered as IN	0	0	0
New Contracted Capacity after Pre-Delivery Control (situation on 30/09/2024)	20 MW	4,5 MW	5,15 MW

- The CMUs are Energy Constrained and in order to assess the potential of Secondary Market, the last published Derating Factor shall be taken into account:

	Evolution in time of the Derating Factors		
	CMU 1	CMU 2	CMU 3
31/03/2021 – 30/03/2022 (at PQ and Y-4 Auction)	0,8	0,62	0,78
31/03/2022 – 30/03/2023	0,81	0,6	0,8
31/03/2023 – 30/03/2024	0,81	0,6	0,81
31/03/2024 – 30/03/2025	0,82	0,63	0,81
31/03/2025 – 30/03/2026	0,83	0,64	0,85



2. The context of the Capacity Provider and his related CMU

- End 2024, RollingEnergy had then 4 Existing CMUs with a Transaction on each of them
- Nevertheless, end 2024, to deliver the Service and make sure to avoid any penalties in the Delivery Period, he also decided to reduce his portfolio of Contracted Capacities of:

	Transaction 4	Transaction 5	Transaction 6
	CMU 1	CMU 2	CMU 3
New Contracted Capacity after Pre-Delivery Control (situation on 30/09/2024)	20,00 MW	4,5 MW	5,15 MW
Expectation of Secondary Market transaction →	- 2,88 MW	- 0,54 MW	-
Expectation of Contracted Capacity after Secondary Market transactions	17,12 MW	3,96 MW	5,15 MW

- In total, end 2024, RollingEnergy is expecting to release $2,88 + 0,54 = 3,42$ MW in the Secondary Market



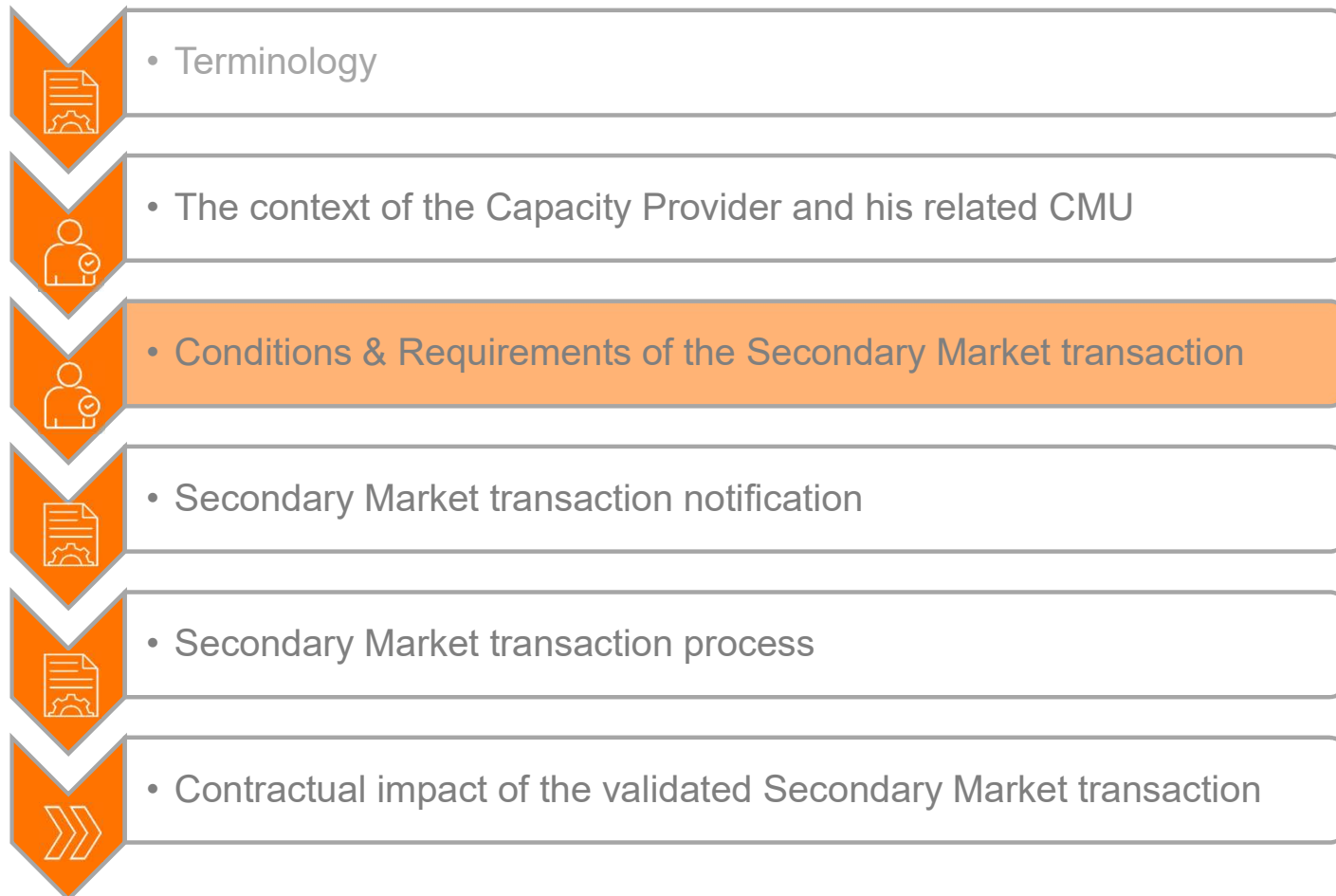
2. The context of the Capacity Provider and his related CMU

- From the other side, **CptyD**, the owner of an Existing OCGT of 385MW already participates in the CRM with a Total Contracted Capacity of 350MW for the same Delivery Period resulting from Primary and Secondary Market Transactions
- He thinks he still has a potential to take over a Secondary Market Transaction on his CMU
- He did an OptOut 'IN' of 35MW and its Remaining Maximum Capacity is at 385MW (equal to his Nominal Reference Power).
- The OCGT is a non-Energy Constrained CMU and the owner as a Buyer of an Obligation estimates its potential to:
 - As reminder in ex-ante (Transaction Date prior the Transaction Period)
 - And if the CMU is a Non-Energy Constrained CMU:

*Secondary Market Remaining Eligible Volume = Max (0 ; [[Remaining Maximum Capacity – Total Contracted Capacity] – [OptOut Volume × **Last Published Derating Factor**]])*

- The Secondary Market Remaining Eligible Volume, his potential of Secondary Market Capacity on the OCGT is estimated by the CptyD to: $385 - 350 - 35 \times 0,9 = 3,5 \text{ MW}$
- OCGT owner enters into bilateral negotiation with RollingEnergy to take over the volume of 3,42MW of the 2 CMUs, CMU1 (2,88MW) and CMU2 (0,54MW).

USE CASE STRUCTURE





3. Conditions & Requirements of the Secondary Market transaction



- Their 3,42MW bilateral agreement is built on the RollingEnergy (as a Seller of an Obligation) and CptyD (as a Buyer of an Obligation) prior checks of compliance with the Conditions & Requirements of participation in the CRM Secondary Market
- Following the Conditions:
 - The Seller of an Obligation, RollingEnergy, is a Capacity Provider
 - CptyD is a Capacity Provider (but could have been a Prequalified CRM Candidate) and not under a Contract escalation impeaching him to contract more in the Secondary Market as a Buyer of an Obligation
 - The CMU of CptyD is prequalified, considered as **Existing** and not under a Contract escalation impeaching him to contract more in the Secondary Market



3. Conditions & Requirements of the Secondary Market transaction



- Following the Requirements:
 - The Transaction Period is a full Delivery Period which fits the Transaction Period of the Transaction releasing an Obligation
 - The volumes of 2,88MW and 0,54MW are considered as the Secondary Market Capacities of two Transactions and are:
 - Far below the Transaction releasing an Obligation of the CMU of Rolling Energy Contracted Capacity (20MW & 4,5MW)
 - Below the Secondary Market Remaining Eligible Volume of the CMU of Cpty D **who thinks he can still contract 3,5MW** on entire the Delivery Period 2025
 - As we are in end 2024, in the Pre-Delivery Period of DP 2025, well before the AMT moment determination of the Start of the Delivery Period, an **ex-ante status** is expected
 - For CptyD, An increase of the **Financial Security obligation applies** to the Transactions, as the Transaction Dates take place before the start date of the Delivery Period in which the Transactions Periods- falls:
 - **Transaction(s) Date(s):** are in December 2024 (determined precisely later on)
 - **Transaction Period:** 01/11/2025 – 31/10/2026 (DP 2025)
 - **Start of the Delivery Period related to the Transaction Period:** 01/11/2025



3. Conditions & Requirements of the Secondary Market transaction

- The Financial Security amount (= Secured Amount) is calculated **at the level of the CMU** :

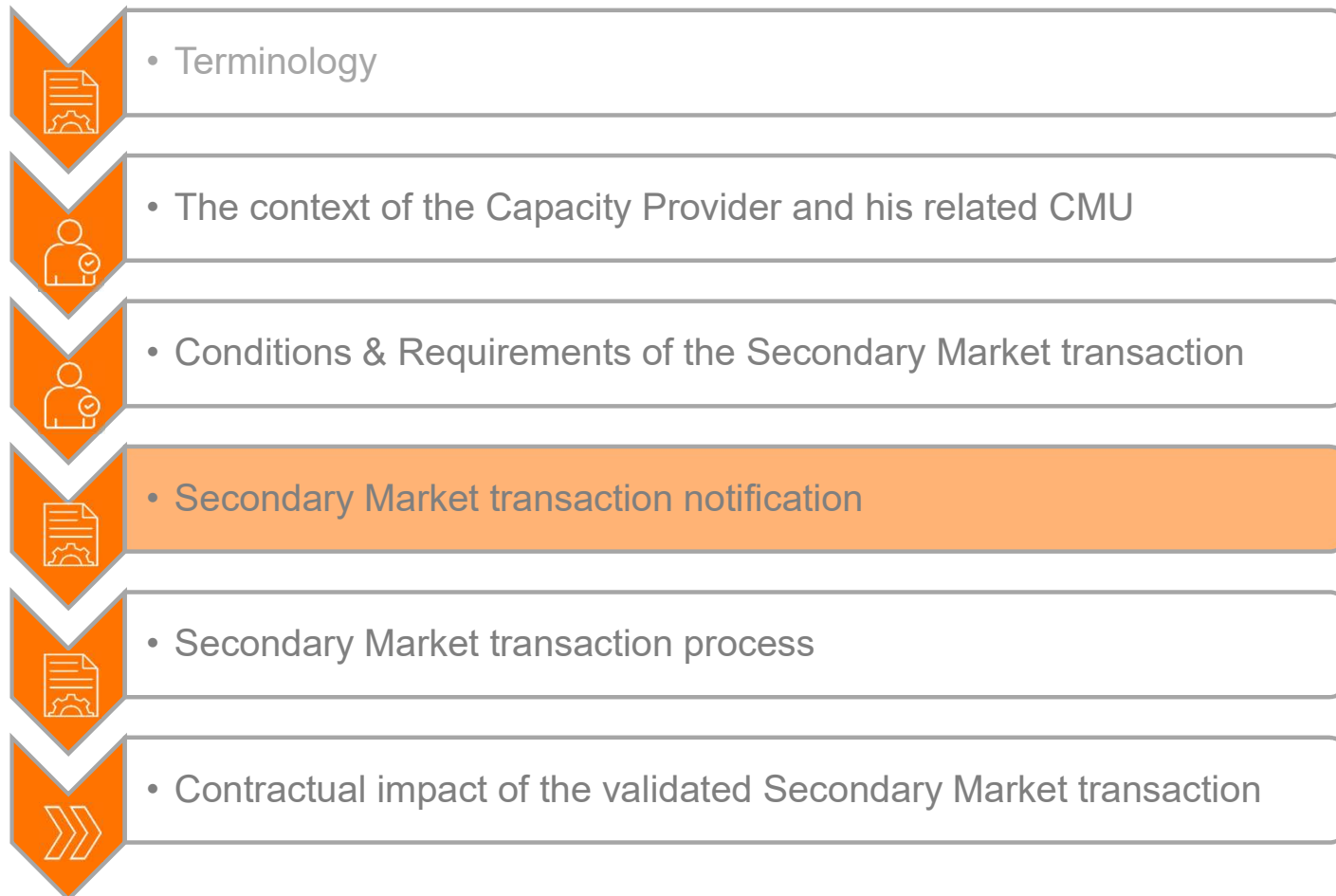
$$\text{Secured Amount} = \text{Financial Security Volume} * \text{Required Level}$$

	Calculation of additional Secured Amounts
	CMU of CptyD
Financial Security Volume <i>(in function of max. Total Contracted Capacity)</i>	350MW + 2,88MW + 0,54MW = 353,42MW
Required Level <i>(for CMUs with existing status)</i>	EUR 10 000/MW
Secured Amount <i>Financial Security Volume x Required Level</i>	EUR 3 534 200
Financial Security already provided	EUR 3 500 000
Additional Financial Security	EUR 34 200



The additional Financial Security is to be provided together with CptyD's notifications of the transactions to ELIA. Without the additional Financial Security, ELIA will not approve the transaction.

USE CASE STRUCTURE





4. Secondary Market transaction notification

As a reminder of the Functioning Rules, the purpose of the notification towards ELIA is to:

- 1) Recognize the existence Secondary Market transaction with a notification of reception
- 2) Determine the Transaction date
- 3) Determine the status ex-ante or ex-post of the Secondary Market transaction
- 4) Acquire all elements of the Secondary Market transaction for the verification of the good respect of all conditions and requirements of the Secondary Market transaction in the next phase
 - ➔ the process of it

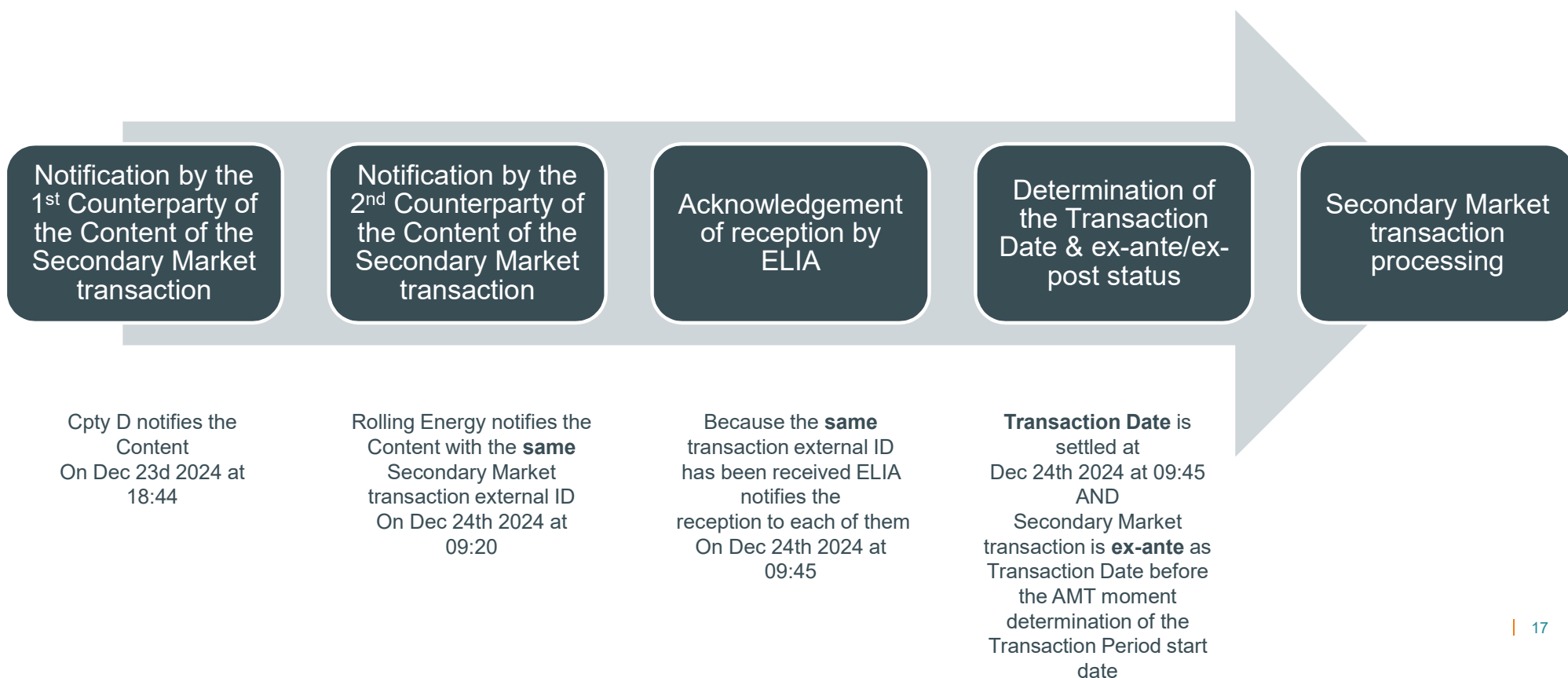
4. Secondary Market transaction notification (1st Transaction)

Both counterparties connects on the CRM IT Interface – Secondary Market title transfer facility and send the **notification content** towards ELIA

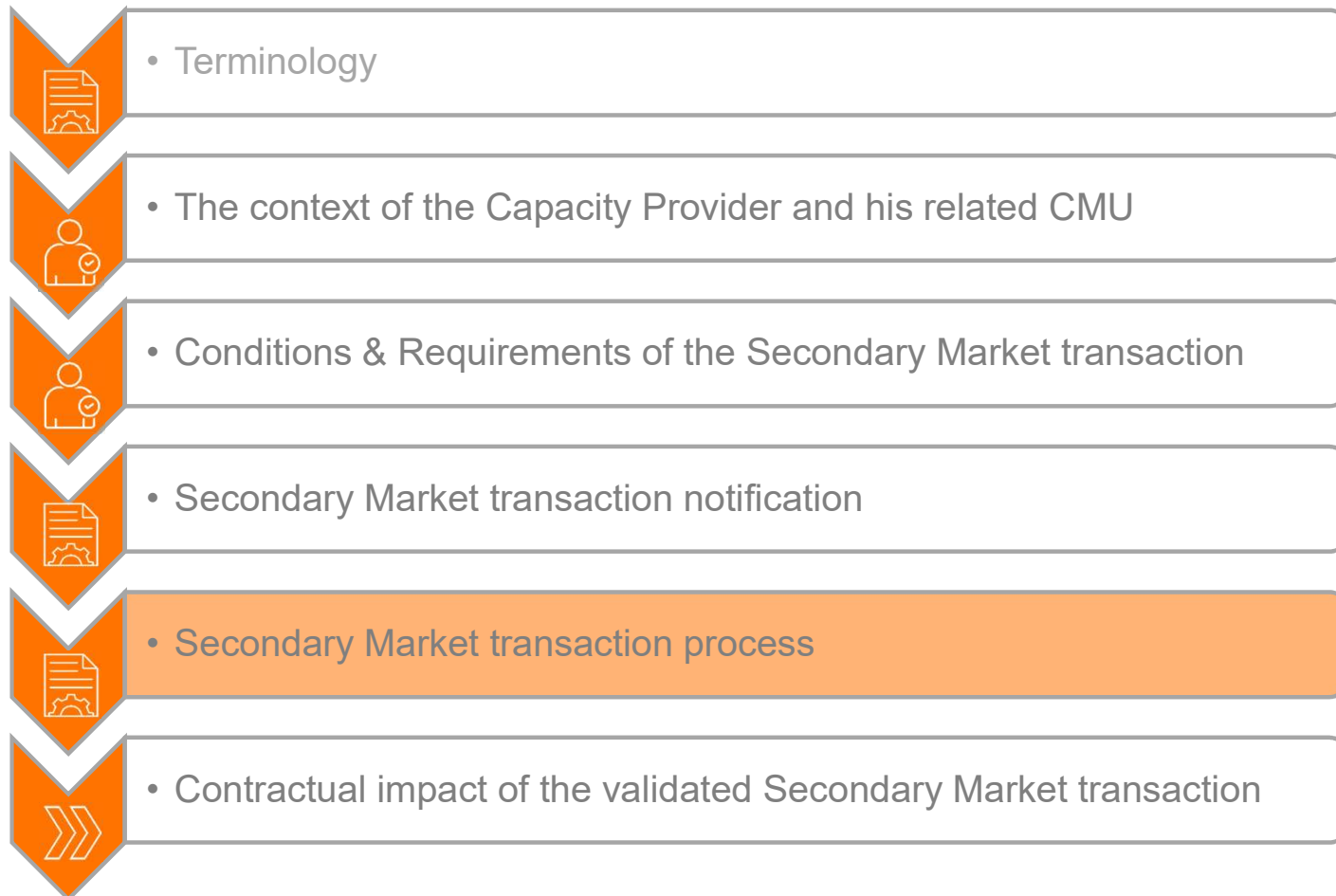
Information	Type	Unit	Unit
Secondary Market transaction external ID	Free field of 6 alphabet letters followed by 6 digits	NA	ZZZFFF123478
Seller of an Obligation ID	Capacity Provider ID	NA	=Rolling Energy ID as CRM Candidate
CMU of the Seller of an Obligation	CMU ID	NA	= CMU ID of RollingEnergy
Transaction releasing an obligation	Transaction ID	NA	= Transaction4 ID of RollingEnergy of 20MW
Buyer of an Obligation	Capacity Provider ID or Prequalified CRM Candidate ID	NA	= CptyD ID as CRM Candidate
CMU of the Buyer of an Obligation	CMU ID	NA	= CMU ID of Cpty D
Secondary Market Capacity	Floating	MW	2,88
Transaction Period	Date / Time to Date / Time	Time	01/11/2025 00:00 to 01/11/2026 00:00
Capacity Remuneration	Floating	€/MW/year	17 000
Calibrated Strike Price of the Transaction	Floating	€/MWh	500
Strike Price indexation Auction year	Integer or "NA"	Year	NA
Strike Price indexation Auction type	"Y-4", "Y-1" or "NA"		NA

4. Secondary Market transaction notification

The process to be followed by the Prequalified CRM Candidates (or Capacity Providers) when performing a notification for a Secondary Market transaction is represented in the following diagram:



USE CASE STRUCTURE





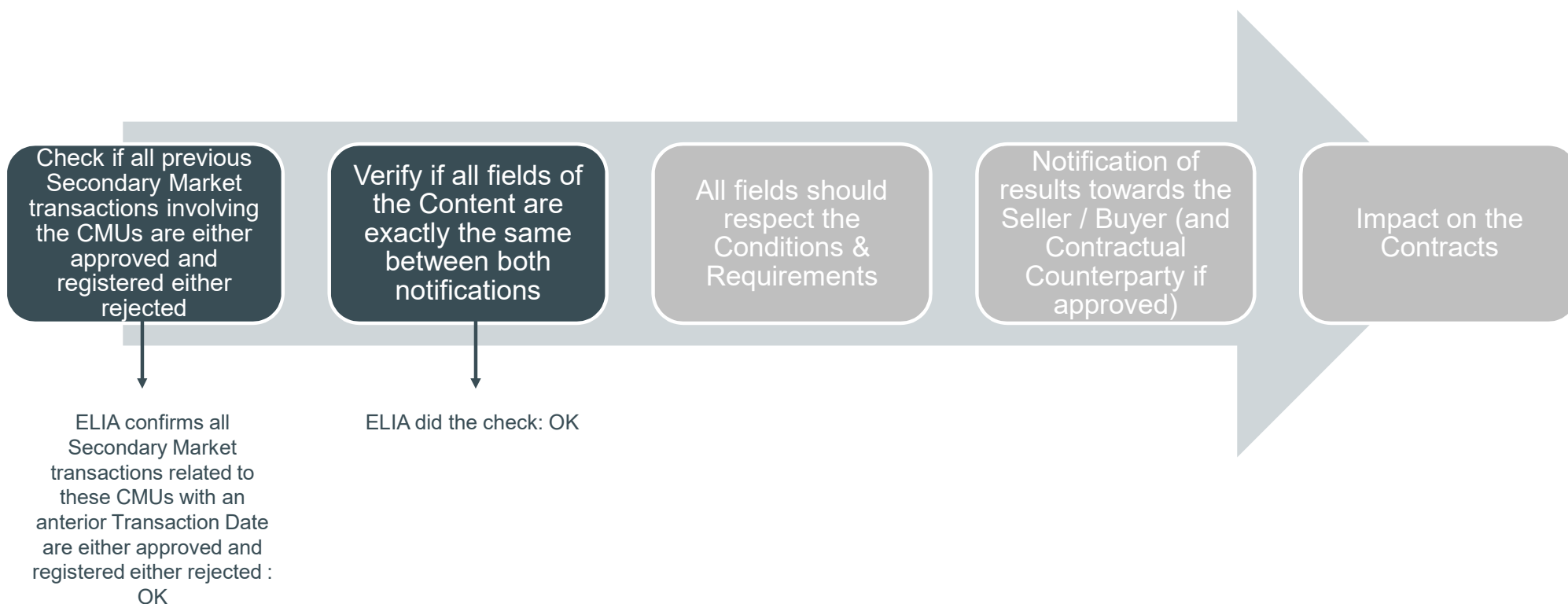
5. Secondary Market process

As a reminder of the Functioning Rules:

- The purpose of the notification towards ELIA is to verify the good respect of all conditions and requirements of the Secondary Market transaction
- ELIA processes each Secondary Market transaction:
 - By order of acknowledgment of reception date ➔ by Transaction Date
 - Once all Secondary Market transactions with earlier Transaction Dates of the involved CMUs are either approved and registered either rejected
- If approved by ELIA, the details of both impact on the Contracts is transferred towards the Contractual Counterparty and to the Seller and the Buyer individually.
- If rejected by ELIA, the fields not respecting the Conditions and Requirements of a Secondary Market transaction are communicated towards the Prequalified CRM Candidates

5. Secondary Market process (1st transaction)

The process to be followed by the Prequalified CRM Candidates (or Capacity Providers) when performing a notification for a Secondary Market transaction is represented in the following diagram:





5. Secondary Market process (1st transaction)

Check if all previous Secondary Market transactions involving the CMUs are either approved and registered either rejected

Verify if all fields of the Content are exactly the same between both notifications

All fields should respect the Conditions & Requirements

Notification of results towards the Seller / Buyer (and Contractual Counterparty if approved)

Impact on the Contracts

- ✓ The Secondary Market transaction ID is unique to the CMUs
- ✓ The notification has been issued by both the Seller and the Buyer of an Obligation in the transaction
- ✓ The Transaction releasing an obligation of the CMU of the Seller of Obligation (RollingEnergy) has a Contracted Capacity which is above or equal the 2,88MW Secondary Market Capacity on the Transaction Period which is DP 2025
- ✓ The CMU of the Buyer of an Obligation (Cpty D) has a Secondary Market Remaining Eligible Volume which is above or equal the 2,88MW Secondary Market Capacity on the Transaction Period which is DP 2025
- ✓ The CMU of Cpty D is not under any contractual escalation impeaching them to take over the 2,88MW
- ✓ CptyD has provided additional Financial Security for at least an amount of 28 800 EUR valid until the start of the Delivery Period ('Nov 2025).
- ✓ The Strike Price and the Capacity Remuneration of the Transaction releasing an Obligation are the one of its Contract



5. Secondary Market process (1st transaction)

Check if all previous Secondary Market transactions involving the CMUs are either approved and registered either rejected

Verify if all fields of the Content are exactly the same between both notifications

All fields should respect the Conditions & Requirements

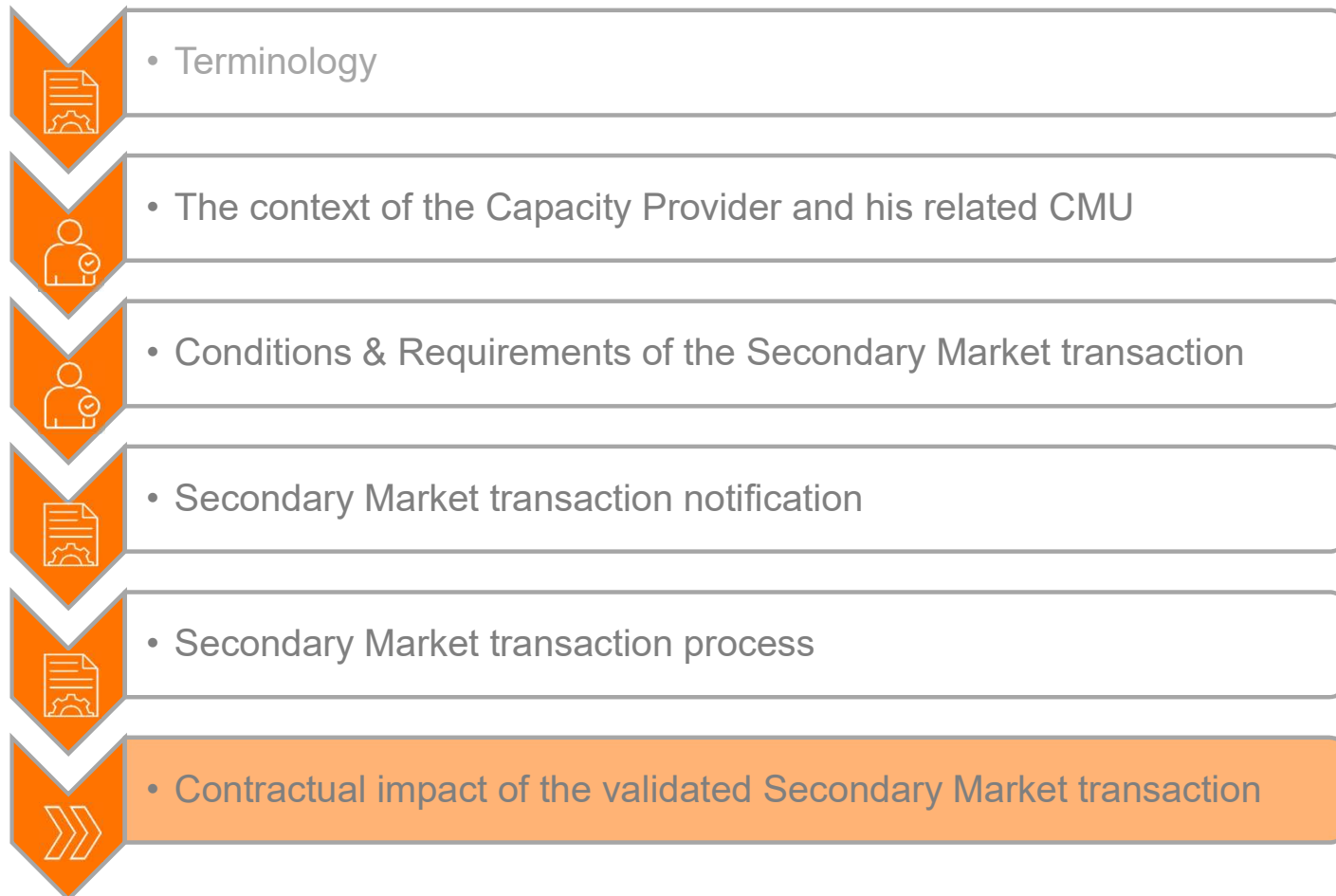
Notification of results towards the Seller / Buyer (and Contractual Counterparty if approved)

Impact on the Contracts

Information	Unit	Value
Secondary Market transaction external ID	NA	ZZZFFF123478
Seller of an Obligation ID	NA	RollingEnergy ID
CMU of the Seller of an Obligation	NA	CMU ID of RollingEnergy
Transaction releasing an obligation	NA	Transaction4 ID of the CMU
Secondary Market Capacity	MW	2,88
Transaction Period	Time	01/11/2025 00:00 to 01/11/2026 00:00
Capacity Remuneration	€/MW/year	17 000
Calibrated Strike Price of the Transaction	€/MWh	500
Strike Price indexation Auction year	Year	NA
Strike Price indexation Auction type		NA
Transaction Date	Time	24/12/2024 09:45

Information	Unit	Value
Secondary Market transaction external ID	NA	ZZZFFF123478
Buyer of an Obligation	NA	Cpty D ID
CMU of the Buyer of an Obligation	NA	CMU ID of Cpty D
Secondary Market Capacity	MW	2,88
Transaction Period	Time	01/11/2025 00:00 to 01/11/2026 00:00
Capacity Remuneration	€/MW/year	17 000
Calibrated Strike Price of the Transaction	€/MWh	500
Strike Price indexation Auction year	Year	NA
Strike Price indexation Auction type		NA
Last Published Derating Factor	No unit	0,91
Transaction Date	Time	24/12/2024 09:45

USE CASE STRUCTURE

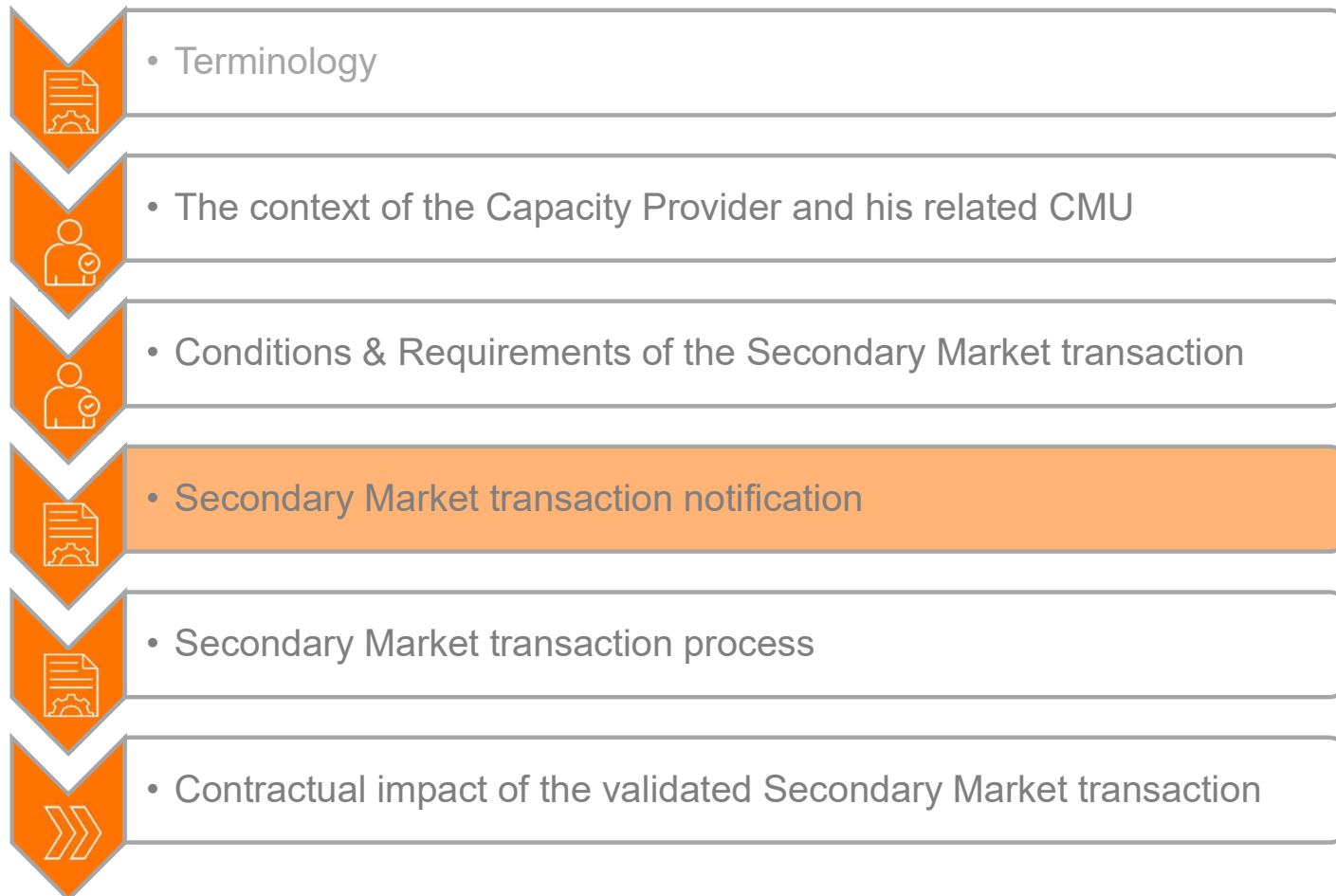




6. Contract impact (1st Transaction)

- If approved by ELIA, the details of both impacts on the Contracts are transferred towards the Contractual Counterparty and to the Seller and the Buyer individually.
- Based on the approved Secondary Market transaction notifications, the Contractual Counterparty:
 - Modifies the Contract of the Seller RollingEnergy, Transaction Contracted Capacity is diminished from 20MW to 17,12MW on the entire Delivery Period 2025
 - Add a Transaction to the Contract of the Buyer
 - A new Transaction is created on the entire Delivery Period 2025 with a Contracted Capacity of 2,88MW, a Strike Price of 500€/MWh, a Capacity Remuneration of 17k€/MW/y and a derating factor of 0,91.
 - Confirms to ELIA within the 5 working days, the good modification, otherwise deemed registered.
- The Secondary Market Remaining Eligible Volumes of both CMUs are automatically updated for new Secondary Market transactions approval checks.

USE CASE STRUCTURE



4. Secondary Market transaction notification (2nd Transaction)



CptyD received an approval by ELIA and signed with the Contractual Counterparty the new Transaction in which the Last Published Derating Factor is mentioned at **0,91**.

When CptyD estimated its capabilities to take over volumes in the Secondary Market, at start he remained at **0,9**.

The evolution from 0,9 to 0,91 implies that he isn't able to take over the $2,88 + 0,54\text{MW} = 3,42\text{MW} < 3,5\text{MW}$ as he thought, **but the 2,88 MW are already registered** properly as they are approved by ELIA and registered by the Contractual Counterparty.

Information	Unit	Value
Secondary Market transaction external ID	NA	ZZZFFF123478
Buyer of an Obligation	NA	Cpty D ID
CMU of the Buyer of an Obligation	NA	CMU ID of Cpty D
Secondary Market Capacity	MW	2,88
Transaction Period	Time	01/11/2025 00:00 to 01/11/2026 00:00
Capacity Remuneration	€/MW/year	17 000
Calibrated Strike Price of the Transaction	€/MWh	500
Strike Price indexation Auction year	Year	NA
Strike Price indexation Auction type		NA
Last Published Derating Factor	No unit	0,91
Transaction Date	Time	24/12/2024 09:45

4. Secondary Market transaction notification (2nd Transaction)

- As the first Transaction of 2,88MW is well registered and impacted the Contract, the new potential to take over for the OCGT, the Secondary Market Remaining Eligible Volume becomes:

$$\begin{aligned} & \text{Secondary Market Remaining Eligible Volume} \\ &= \text{Max} (0 ; [\text{Remaining Max Capacity} - \text{Total Contracted Capacity}] - [\text{OptOut Volume} \times \text{Last Published Derating Factor}]) \end{aligned}$$

- Potential of Secondary Market Capacity on the OCGT is estimated by the OCGT to:
 $385 - 350 - 2,88 - 35 \times 0,91 = 0,27 \text{ MW}$
- OCGT gets back to RollingEnergy regarding the bilateral negotiation
- Both agrees to adapt their ambition for the 2nd Transaction from 0,54MW to half of it, 0,27MW and to notify a Secondary Market transaction with that Secondary Market Capacity towards ELIA

As reminder 0,54MW were not been notified yet to ELIA.

If it was sent so, it would have been rejected for a Secondary Market Capacity exceeding the Secondary Market Remaining Eligible Volume of the Buyer of an Obligation

→ non-respect of the Requirements of a Secondary Market transaction

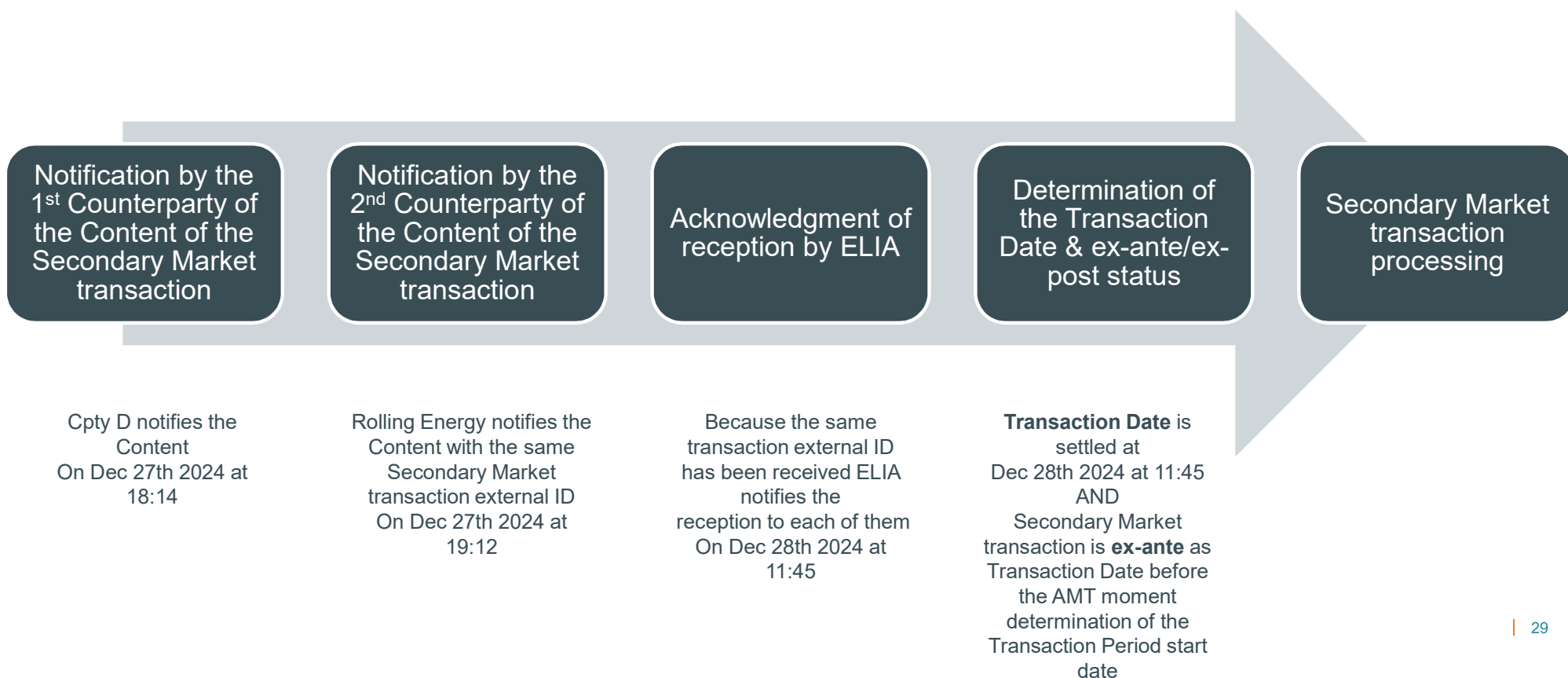
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Both counterparties connects on the CRM IT Interface – Secondary Market title transfer facility and send the **notification content** towards ELIA

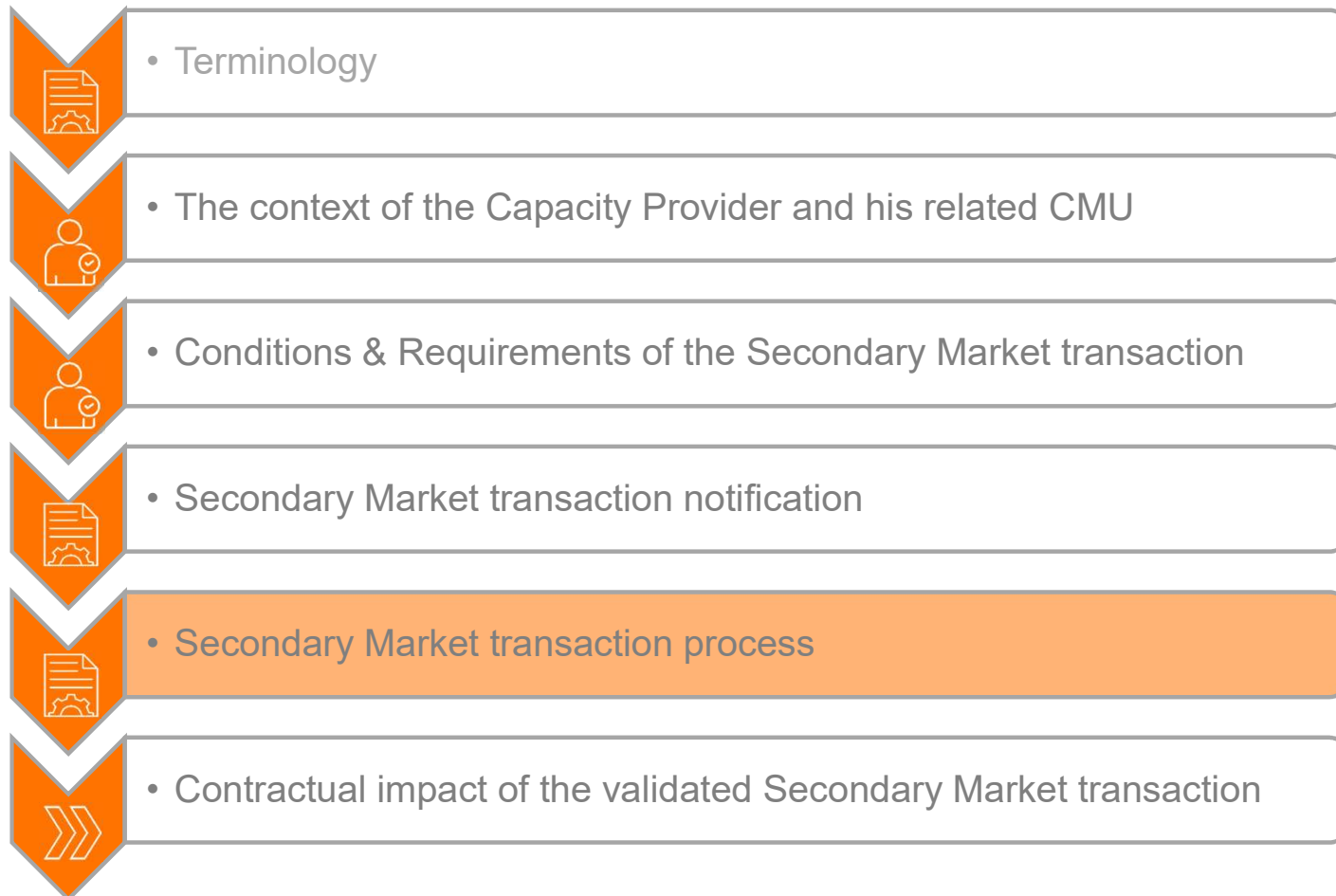
Information	Type	Unit	Unit
Secondary Market transaction external ID	Free field of 6 alphabet letters followed by 6 digits	NA	ZZZFFF123480
Seller of an Obligation ID	Capacity Provider ID	NA	=Rolling Energy ID as CRM Candidate
CMU of the Seller of an Obligation	CMU ID	NA	= CMU2 ID of RollingEnergy
Transaction releasing an obligation	Transaction ID	NA	= Transaction5 ID of RollingEnergy of 4,5MW
Buyer of an Obligation	Capacity Provider ID or Prequalified CRM Candidate ID	NA	= CptyD ID as CRM Candidate
CMU of the Buyer of an Obligation	CMU ID	NA	= CMU ID of Cpty D
Secondary Market Capacity	Floating	MW	0,27
Transaction Period	Date / Time to Date / Time	Time	01/11/2025 00:00 to 01/11/2026 00:00
Capacity Remuneration	Floating	€/MW/year	18 000
Calibrated Strike Price of the Transaction	Floating	€/MWh	500
Strike Price indexation Auction year	Integer or "NA"	Year	NA
Strike Price indexation Auction type	"Y-4", "Y-1" or "NA"		NA

4. Secondary Market transaction notification (2nd Transaction)

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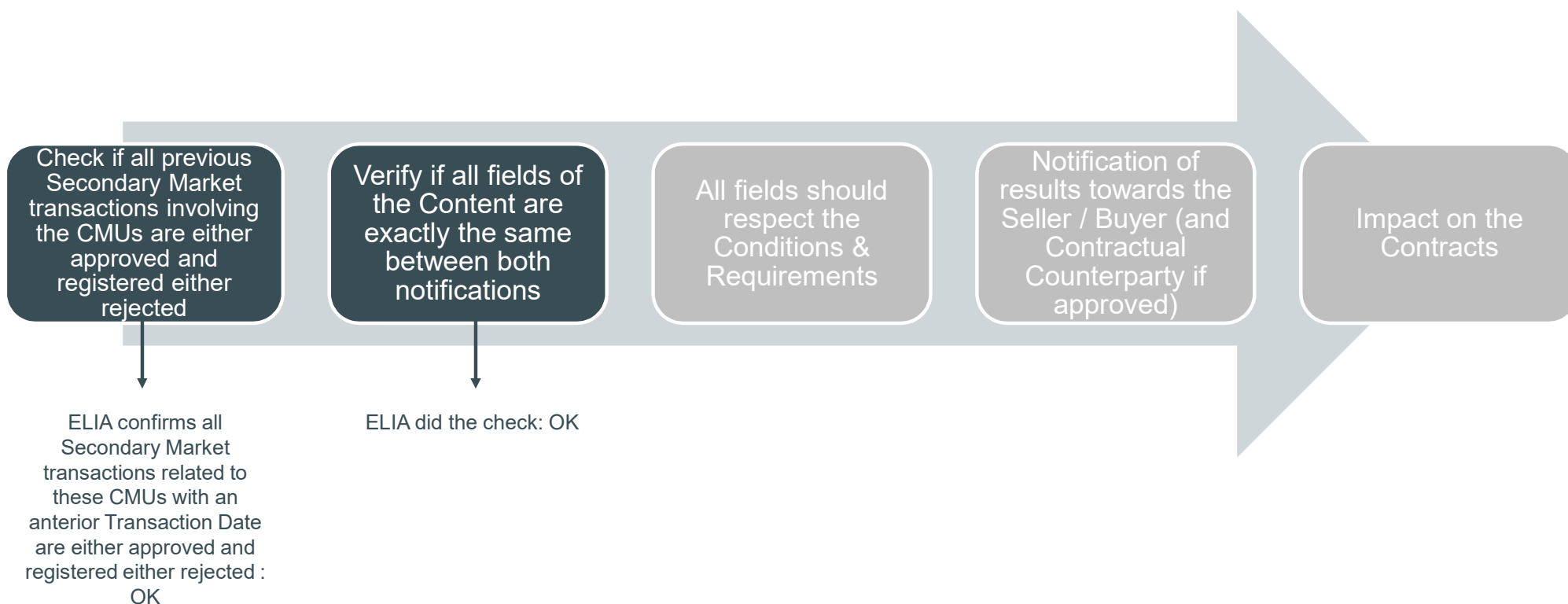


USE CASE STRUCTURE



5. Secondary Market process

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5. Secondary Market process

Check if all previous Secondary Market transactions involving the CMUs are either approved and registered either rejected

Verify if all fields of the Content are exactly the same between both notifications

All fields should respect the Conditions & Requirements

Notification of results towards the Seller / Buyer (and Contractual Counterparty if approved)

Impact on the Contracts

- ✓ The Secondary Market transaction ID is unique to the CMUs
- ✓ The notification has been issued by both the Seller and the Buyer of an Obligation in the transaction
- ✓ The Transaction releasing an obligation of the CMU of the Seller of Obligation (RollingEnergy) has a Contracted Capacity which is above or equal the 0,27MW Secondary Market Capacity on the Transaction Period which is DP 2025
- ✓ The CMU of the Buyer of an Obligation (Cpty D) has a Secondary Market Remaining Eligible Volume which is above or equal the 0,27MW Secondary Market Capacity on the Transaction Period which is DP 2025
- ✓ The CMU of Cpty D is not under any contractual escalation impeaching them to take over the 0,27MW
- ✓ CptyD has provided additional Financial Security for at least an amount of 2 700 EUR valid until the start of the Delivery Period ('Nov 2025). An extra Financial Security of 2 700 EUR remain available on top for the DP 2025.
- ✓ The Strike Price and the Capacity Remuneration of the Transaction releasing an Obligation are the one of its Contract



5. Secondary Market process

Check if all previous Secondary Market transactions involving the CMUs are either approved and registered either rejected

Verify if all fields of the Content are exactly the same between both notifications

All fields should respect the Conditions & Requirements

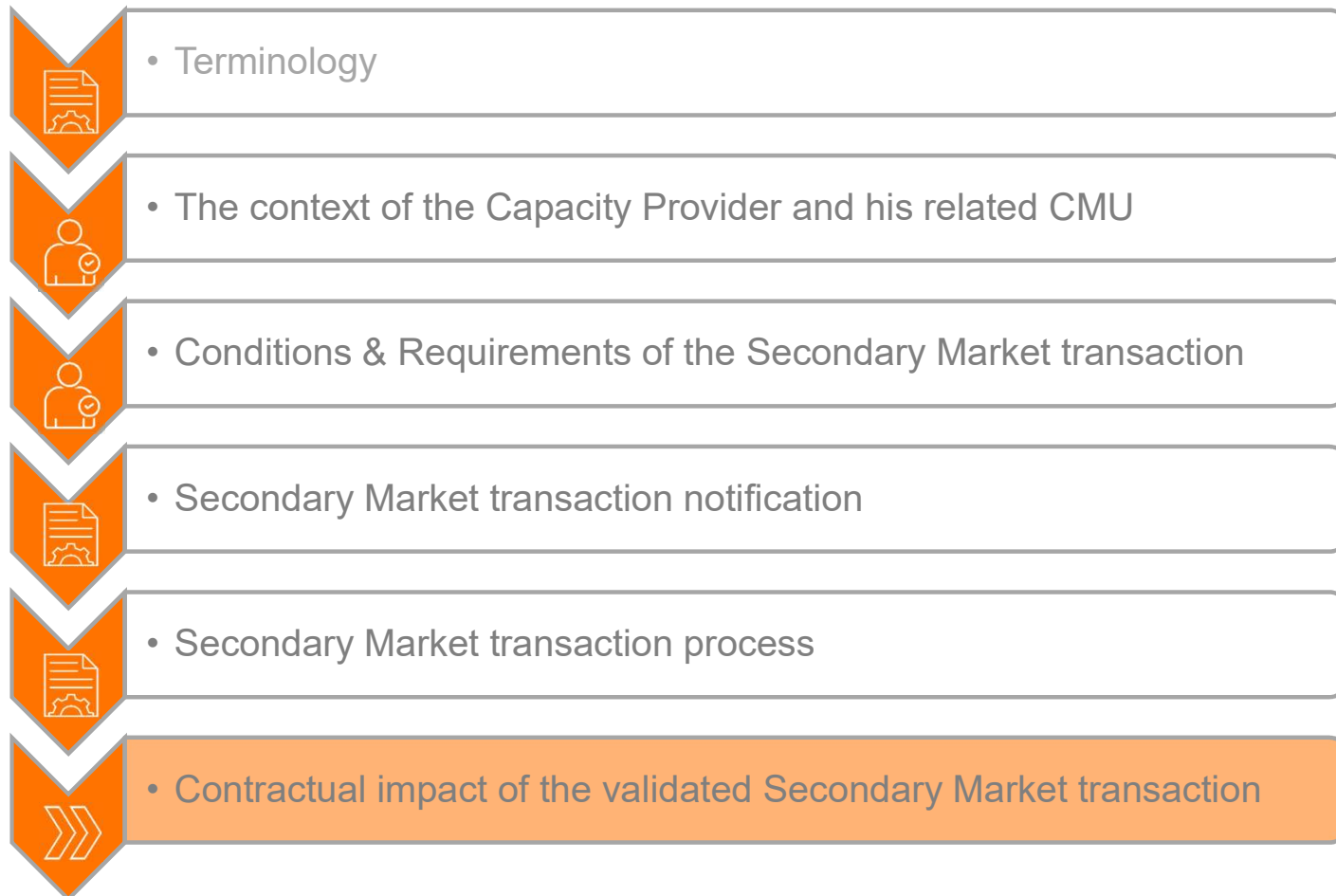
Notification of results towards the Seller / Buyer (and Contractual Counterparty if approved)

Impact on the Contracts

Information	Unit	Value
Secondary Market transaction external ID	NA	ZZZFFF123480
Seller of an Obligation ID	NA	RollingEnergy ID
CMU of the Seller of an Obligation	NA	CMU2 ID of RollingEnergy
Transaction releasing an obligation	NA	Transaction5 ID of the CMU
Secondary Market Capacity	MW	0,27
Transaction Period	Time	01/11/2025 00:00 to 01/11/2026 00:00
Capacity Remuneration	€/MW/year	18 000
Calibrated Strike Price of the Transaction	€/MWh	500
Strike Price indexation Auction year	Year	NA
Strike Price indexation Auction type		NA
Transaction Date	Time	28/12/2024 11:45

Information	Unit	Value
Secondary Market transaction external ID	NA	ZZZFFF123480
Buyer of an Obligation	NA	Cpty D ID
CMU of the Buyer of an Obligation	NA	CMU2 ID of Cpty D
Secondary Market Capacity	MW	0,27
Transaction Period	Time	01/11/2025 00:00 to 01/11/2026 00:00
Capacity Remuneration	€/MW/year	18 000
Calibrated Strike Price of the Transaction	€/MWh	500
Strike Price indexation Auction year	Year	NA
Strike Price indexation Auction type		NA
Last Published Derating Factor	No unit	0,91
Transaction Date	Time	28/12/2024 11:45

USE CASE STRUCTURE





6. Contract impact (2nd Transaction)

- If approved by ELIA, the details of both impacts on the Contracts are transferred towards the Contractual Counterparty and to the Seller and the Buyer individually.
- Based on the approved Secondary Market transaction notifications, the Contractual Counterparty:
 - Modifies the Contract of the Seller RollingEnergy, Transaction Contracted Capacity is diminished from 4,5MW to 4,23MW on the entire Delivery Period 2025
 - Add a Transaction to the Contract of the Buyer
 - A new Transaction is created on the entire Delivery Period 2025 with a Contracted Capacity of 0,27MW, a Strike Price of 500€/MWh, a Capacity Remuneration of 18k€/MW/y and a derating factor of 0,91.
 - Confirms to ELIA within the 5 working days, the good modification, otherwise deemed registered.
- The Secondary Market Remaining Eligible Volumes of both CMUs are automatically updated for new Secondary Market transactions approval checks.