UDB-GO Registries Integration

Analysis of alternatives

AIB-2025-GSG-03-03 Scenarios - Alternatives

27/02/2025

Aim of this document

- → Assessment of alternatives for the integration of GO Registries (gas) with the UDB.
- → The assessment of alternatives outlines the potential data flows required for the integration of the main processes involved in the energy tracking: issuance, transfer and cancellation.
- → **The analysis is limited to the point of view of the business processes**.
- → The IT to be developed under each of these alternatives, can only be addressed once the modification to the business process is defined. **Therefore IT is not taken into consideration in this analysis.**
- → **The costs associated to the different alternatives have not been assessed. A more detailed analysis of the flows involved will be required for a cost estimation.**
- → **This is not a position document, it does not express the position of AIB neither of AIB's members.**

The assessment includes:

1. **List of the assessed alternatives.**
2. **For each of the assessed alternatives:**
    1. **Simplified flowchart of the involved dataflows between UDB, GO Registry, EOs and other stakeholders involved.**
    2. **Analysis of pros and cons of the considered option**

Integration models

There is a wide range of grey between black and white

- Extreme situation: the certificate exists in one database only, either UDB or the GO Registry(ies). The 'other registry' plays a secondary role, and its activity is limited to register production and cancelation.
- The two extremes of this model are:
  - **OPTION 1 – RENEWABLE CLAIMS IN UDB ONLY**– The GO exists in the UDB only. GOs exist just as an attachment to the PoS. The GO Registry plays little or no role in the main processes.
  - **OPTION 2 – RENEWABLE CLAIMS IN GO REGISTRY WITH SUBMISSION OF TRANSACTIONS IN UDB**– the certificate exists in the GO Registry only, ensuring unicity of claims. Issuance and Cancellation is registered in the UDB. This is the alternative that would have been easily implemented under the scope of REDII.
- Something in between:
  - **OPTION 3 – OUR UNDERSTANDING FROM 29 JANUARY**
  - **OPTION 4 – Limited INTEGRATION – UNIQUE CLAIMS TO BE ENSURED AT TARGET ACCOUNTING**
- Based on Art. 31a point 5 – THE NATIONAL DATABASE

  - **THE GO REGISTRY AS THE NATIONAL DATABASE**

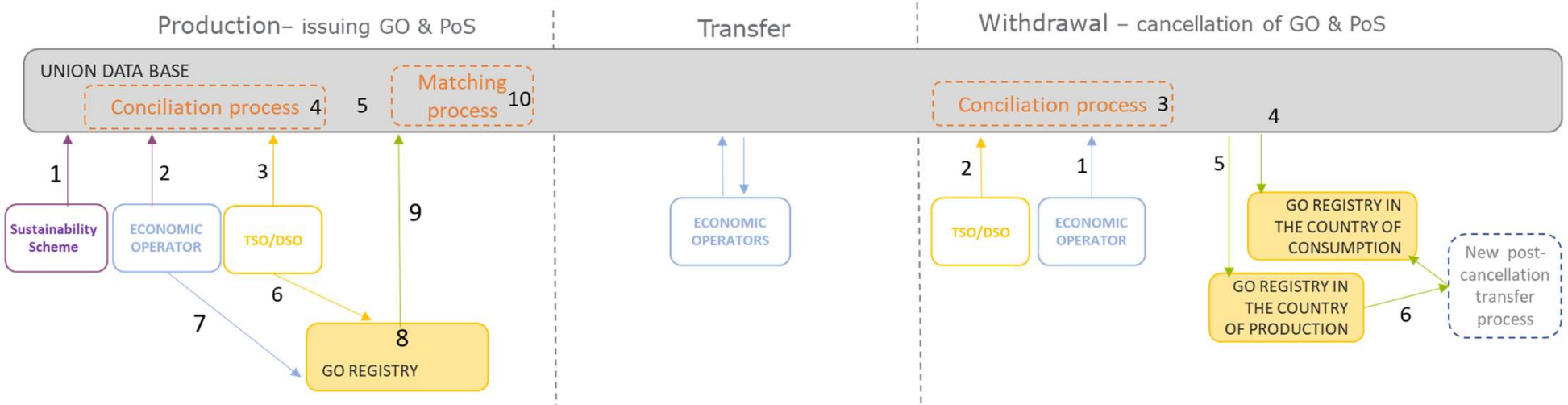
OPTION 1

Renewable claims in UDB only

The GO exists in the UDB only. GOs exist just as an attachment to the PoS. The GO Registry plays little or no role in the main processes.

Option 1 – Renewable claims in UDB only

→ Simplified flows



Injection Single MBS – issuing GO & PoS

1 – Certification of the Production device with a Sustainability Scheme
2 – EO requests issuance of PoS
3 – TSO/DSO sends measurements to GO Registry
4 – Conciliation process between data submitted by TSO/DSO and EO.
5 – Issuance of PoS
6 – TSO/DSO sends measurements to GO Registry
7 – EO requests issuance of GO
8 – GO Registry issues the GO and gets it blocked for the transfer to UDB
9 – GO registry transfers GO to UDB
10 – UDB runs matching process to identify to which PoS do the GOs belong
8 – UDB includes GO information in the PoS – the existence of the GO gets labelled in the PoS.

Transfers within the Single MBS

NATIONAL/INTERNATIONAL - dealt directly through the UDB

⚠ **As long as the gas remains within the same MBS no report to UDB needs to be done**

Clarification regarding the need of register changes of ownership in the UDB required.

Withdrawal – cancellation of GO & PoS

1 – EO owning the PoS requests cancellation to UDB
2 – TSO/DSO sends measurements to UDB
3 – Conciliation process between data provided by EO and data provided by TSO/DSO
4 – UDB cancels PoS
5 – UDB informs about cancellation of PoS to the GO Registry from the country where the consumption has been claimed and if it is a different one, to the GO Registry in the country where the production took place
6 – New post-cancellation transfer for correct labelling – If different countries post-cancellation import/export process so the GOs get properly identified as exported/imported for statistical purposes.

⚠ **How to ensure that the PoS claimed for consumption will be accepted in the consumption country and the requirements regarding network characteristics are met?**

Option 1 – Renewable claims in UDB only

→ Pros and Cons

- ☺ Minimizes IBs responsibilities and resources required.
- ☹ Is the easiest solution for IBs but it means dropping the responsibilities. Who is liable if the communications fail?
- ☹ Compatibility with Art. 19 under question. (Points 3, 4, 5, 6)
- ☹ Difficult interaction with EOs – a massive helpdesk covering all native languages is needed.
- ☹ The supervisory role assigned to MS is overtaken by EUCOM. Who is liable in case of fraud for lack of supervision?
- 😐 AIB HUB is no longer needed – the changes implemented for accommodation of gas GOs have been wasted (sunk costs).
- 😐 What happens with gas receiving Gos but no PoS and with gas receiving PoS but no GoS.
- ☹ UDB shall ensure that national Law is not undermined – need to implement and keep updated 27 different configurations. (E.g. reference to ESR & ETS)

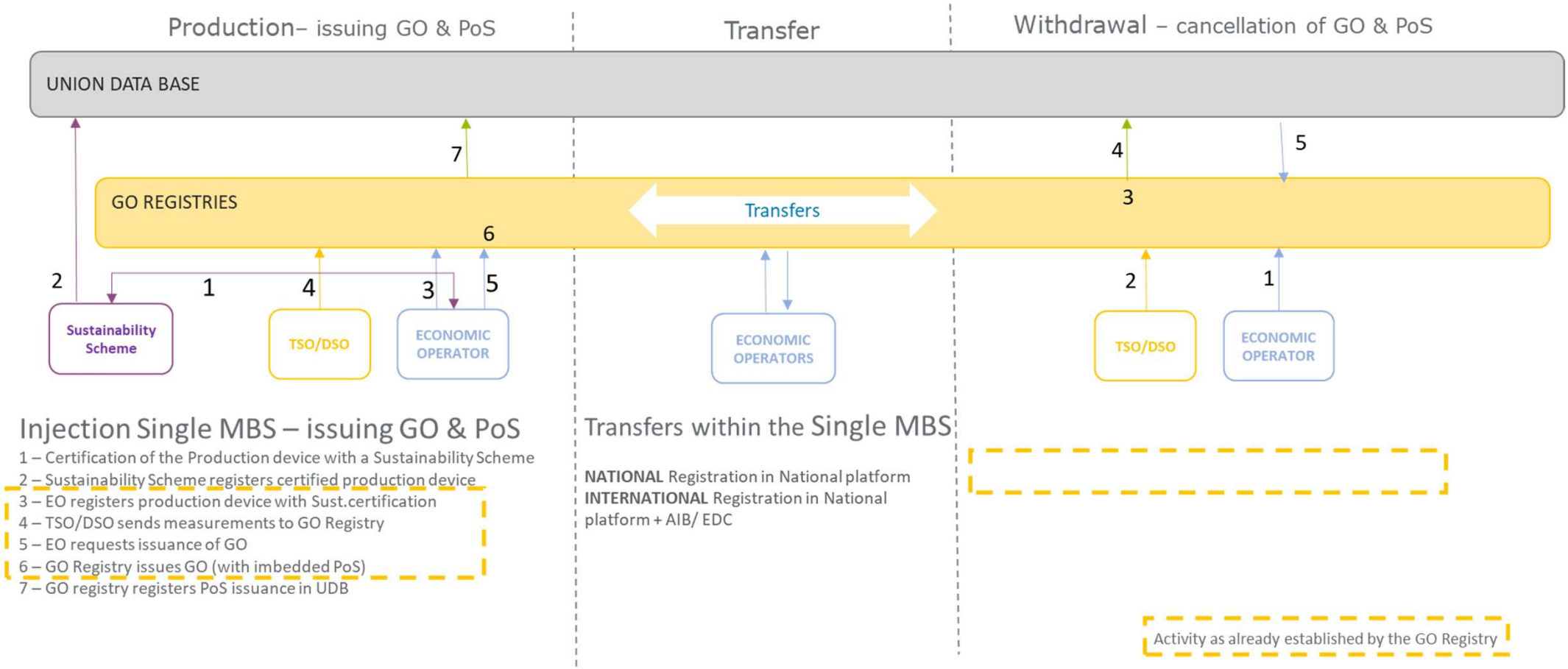
OPTION 2

Renewable claims in GO Registry only & Reporting of transactions to UDB

This model implies that all ownership of GO and PoS is tracked in a national database, the result is sent to the UDB after GO cancellation in relation to a consumption point.

Emission and sustainability info is recorded on the GO.

Option 2 – Renewable claims in GO Registry only & Reporting of transactions to UDB



Option 2 – Renewable claims in GO Registry only & Reporting of transactions to UDB

→ Pros and Cons

- ☺ Keeps the current way of working:
  - ☺ For the newly established national gas GO registries.
  - ☺ For the economic operators, minimizing reporting needs.
  - ☺ Interaction with producers at national level, in the local language, with – minimizes the size of the helpdesk
  - ☺ National specificities implemented in the regulation defining the rules that apply to the Registry. Changes in National specifications continuously updated in the Registry.
  - ☺ National supervisory role articulated through the auditing procedures established in the GO Registry.
  - ☺ The GO becomes the PoS for all sustainable production.
- 😐 Compatibility with Art. 31a (4) under question [reporting of injection/withdrawal but not transfers]
- ☹ IBs become responsible for the correct information in PoS.

OPTION 3

4th Comm. WG on UDB deployment - 29 JANUARY

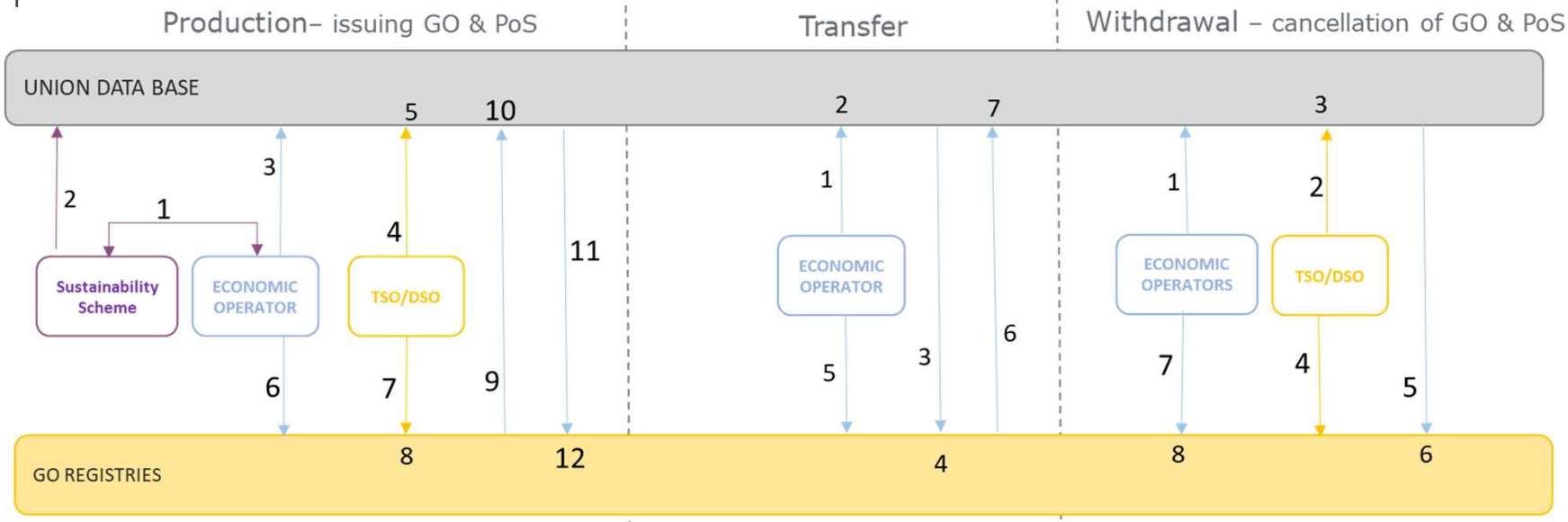
Our interpretation of the last two webinars. Do we understand it correctly?

The PoS resides in UDB, the GO resides in GO Registries. The certificates evolve synchronously in both registries for the whole life cycle of both certificates.

All transactions are reflected in both GO Registries and UDB.

Option 3 – Integration model presented on 29 January

→ Simplified dataflows



Injection Single MBS – issuing GO & PoS

1 – Certification of the Production device with a Sustainability Scheme
2 – Sustainability Scheme registers certified production device
3 – EO submits production data to UDB
4 – TSO/DSO sends measurements to UDB
5 – **UDB pre-issues PoS**
6 – EO registers Production device in GO Registry
7 – TSO/DSO sends measurements to GO Registry
8 – GO Registry pre-issues GOs
9 – GO Registry sends GOs info into UDB
10 – UDB links PoS with GOs – Issuance of PoS
11 – UDB sends PoS reference to GO Registry
12 – GO Registry includes PoS reference and issues GO

Transfers within the Single MBS

1 – EO registers transfer in UDB
2 – UDB informs GO registry of the transfer – and locks PoS for transfer
3 – UDB sends transfer to GO Registry
4 – GO registry unlocks GO for transfer
5 – EOs transfer the GOs
6 – GO registry confirms transfer to UDB
7 – UDB unlocks PoS for transfer

Withdrawal – cancellation of GO & PoS

1 – EO requests cancellation of PoS in UDB
2 – TSO/DSO sends measurements to UDB
3 – UDB cancels PoS
4 – TSO/DSO sends measurement to GO Registry (may be not needed)
5 – UDB sends cancellation of PoS to GO Registry
6 – GO Registry unlocks GO for cancellation
7 – EO requests cancellation of GO
8 – GO Registry cancels GO

Option 3 – Integration model presented on 29 January

→ Pros and Cons

- ☺ Compatible with Art. 19 and Art. 31a
- 😐 Compatible with the functioning of existing GO Registries, with a limited number of modifications.
- ☹ Very complex data flows between the GO Registry and the UDB. A deep analysis of the 'what if' situations needed.
- ☹ High risk of mismatching:
  - ☹ info sent to UDB by GO Registry not matching info sent by EO
  - ☹ Broken communication between UDB and GO Registries
- ☹ Difficult interaction with EOs – a massive helpdesk covering all native languages is needed. (The parallel existence of the National GO Registries does not prevent the need for the UDB helpdesk)
- ☺ The supervisory role assigned to MS is kept within the National GO Registries.

➢ International transfers both in UDB and through GO Registries. Adaptation required

OPTION 4

LIMITED INTEGRATION

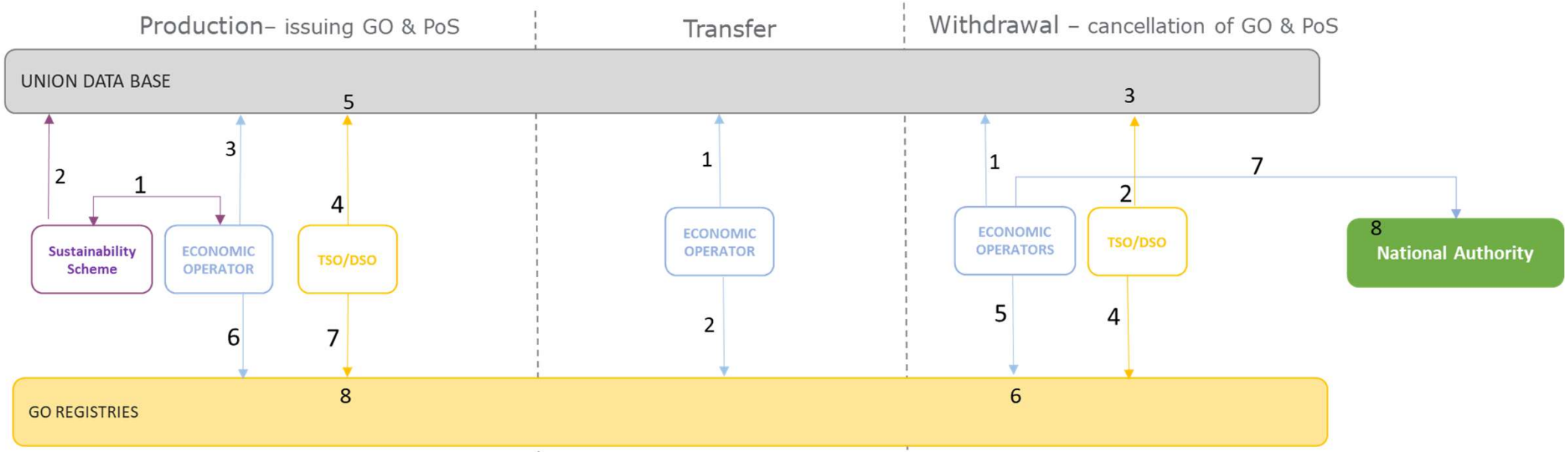
GOs and PoS handled independently.

The unique claims are ensured by the National Authority in charge of target accounting.

The National Authority to require that both PoS and GO are cancelled in order to validate a claim.

Opt. 4 – Limited INTEGRATION – Unique claims at target accounting

→ Simplified dataflows



Injection Single MBS – issuing GO & PoS

1 – Certification of the Production device with a Sustainability Scheme
2 – Sustainability Scheme registers certified production device
3 – EO submits production data to UDB
4 – TSO/DSO sends measurements to UDB
5 – **UDB issues PoS (not necessarily triggered by the reception of TSO/DSO data)**
6 – EO registers Production device in GO Registry
7 – TSO/DSO sends measurements to GO Registry
8 – GO Registry issues GOs

Transfers within the Single MBS

1 – EO registers transfer in UDB
2 – EO registers transfer in GO Registry (may be not needed)

Withdrawal – cancellation of GO & PoS

1 – EO requests cancellation of PoS in UDB
2 – TSO/DSO sends measurements to UDB
3 – UDB cancels PoS
4 – TSO/DSO sends measurement to GO Registry (may be not needed)
5 – EO requests cancellation of GO
6 – GO Registry cancels GO
7 – EO sends to National Authority both PoS and GO
8 – Target accounting by the National Authority: if the production facility receives GOs, the PoS is not accounted unless the corresponding GO has been cancelled for the same consumption

Opt. 4 – Limited INTEGRATION – Unique claims at target accounting.

→ Pros and Cons

- 😐 Compatibility with Article 31a to be explored (no transfer of GOs into UDB).
- 🙂 There are no changes in the current configuration for GOs.
- 🙂 IBs avoid assuming additional responsibilities.
- 🙂 Approach based on established and currently working systems. (Tested solution)
- 😐 The ability of the National authority to prove both GO and PoS are cancelled needs to be ensured.

➢ International transfers remains through GO Registries

NATIONAL DB (Art. 31a (5)) built on the GO Registry

Implementation of 31a point 5.

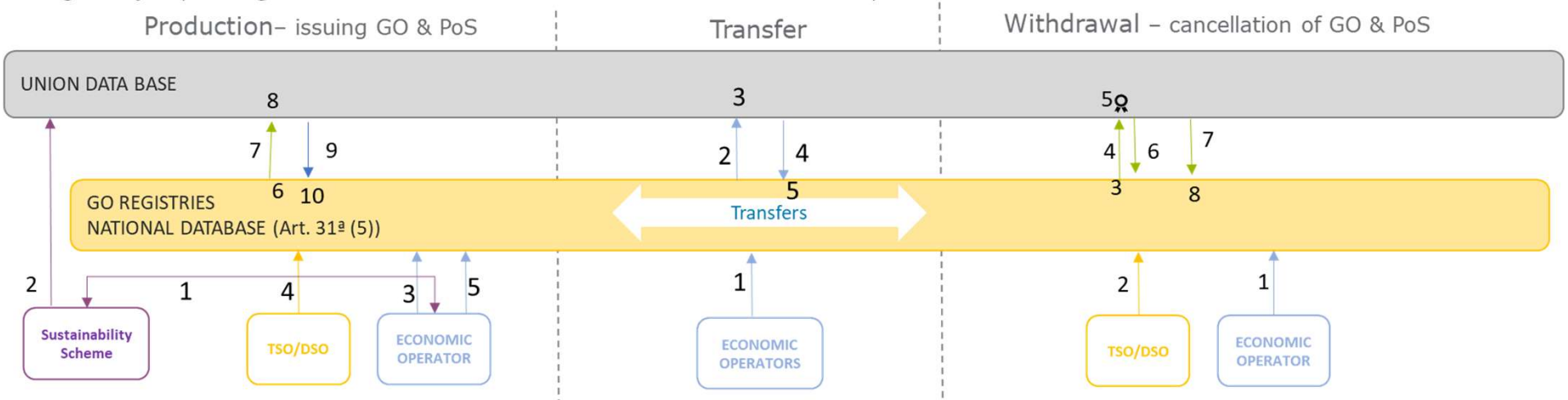
The GO Registry plays the role of the NDB.

The interaction between EOs and UDB takes place through the National Data Base.

NDB built on the GO Registries

→ Simplified dataflows

Details might vary depending on the concrete MS that choses the national database option



Injection Single MBS – issuing GO & PoS

1 – Certification of the Production device with a Sustainability Scheme
2 – Sustainability Scheme registers certified production device
3 – EO registers production device with GO (PoS)
4 – TSO/DSO sends measurements to GO Registry
5 – EO requests issuance of GO
6 – GO Registry pre-issues the GO*
7 – GO registry informs UDB
8 – UDB generates PoS and links it to GO, alternatively, PoS could be also generated by the national database and sent to UDB (will depend on MS specificities and bilateral discussions with UDB Team)
9 – UDB informs GO registry of the PoS identifier
10 – GO registry adds the PoS identifier to the GO as an attribute and releases the GO, so the producer can access and transfer it.

Transfers

1 – EOs request a transfer in GO Registry
2 – GO Registry informs transfer in UDB
3 – UDB registers the transfer of PoS
4 – UDB confirms transfer to GO Registry
5 – GO Registry completes transfer

Withdrawal – cancellation of GO & PoS

1 – EO owing the GO requests cancellation to GO registry
2 – TSO/DSO sends measurements to GO Registry
3 – GO registry initiates the cancelation of GO + PoS
4 – GO registry informs UDB about the cancellation
5 – UDB cancels the PoS
6 – UDB confirms cancellation of PoS to GO Registry
7 – UDB sends GO Registry cancellation of PoS without GO
8 – GO registry cancels the GO and produces the cancellation statements. This cancellation statement is valid both for disclosure** and target accounting purposes.

Activity as already established by the GO Registry

*This could be an issuance or pre-issuance -> the GO would not be available to the Account Holder until step #10 is completed
** Annex I Point 5 of Directive (UE) 2024/1788

NDB built on the GO Registries

→ Pros and Cons

- ☺ Compatible with Art. 19 and Art. 31a
- ☺ GOs and the disclosure process is kept in the hands of GO Registries
- ☺ Minimizes the number of interactions and reporting for EOs and for Infrastructure Operators.
- 😐 Quite complex communications between the GO Registries and the UDB, which shall be secured by the data flows definition.
- ☺ Interaction with EOs is kept at national level, minimizing the helpdesk needs of UDB and allowing the current personalized treatment of the Producers, in their national language.
- ☺ Compatible with the current GO auctioning processes (in some countries).
- ☺ The supervisory role assigned to MS is kept within the National GO Registries.
- ☺ No risk of mismatching.

➢ International transfers remains through GO Registries, while the information might be provided also to UDB. Will depend on the requirements – to be further specified.

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