AggregateEU – setting up the platform: The challenges*

2023-06-07
#FSRDebates

*Presentations as held publicly; Graphics and explanations reflect the status at the time of their creation and are exemplary.

PRISMA.

Agenda

✓ **Building a complex service fast**

  ✓ **Guiding Principle: Our North Star**

  ✓ **Iterative Agile Software Development**

✓ **Business Processes**

  ✓ **Tender process**

  ✓ **Matching**

  ✓ **Reporting and Transparency**

PRISMA.

We connect energy markets enabling the Green Transition

Building a guiding principle: our "North Star"

Our north star:

We want to contribute to the Security of Supply by building a solution that is bridging extraordinary emergency situations for winter 2023/2024, i.e. with a focus on LNG.

PRISMA.

We connect energy markets enabling the Green Transition

Adaptability and a priority on running processes drive the project approach

The high complexity and dynamic developments make it hard to determine the suitability of the design, already at the beginning.

Therefore**, we optimize for adaptability** by

1. **prioritizing early value delivery** over feature completeness;
2. **ensuring the necessary quality level** of the required functionality;
3. **seeking out feedback** on processes that might need to be adapted due to changing conditions or insights generated during the operation and usage of processes.
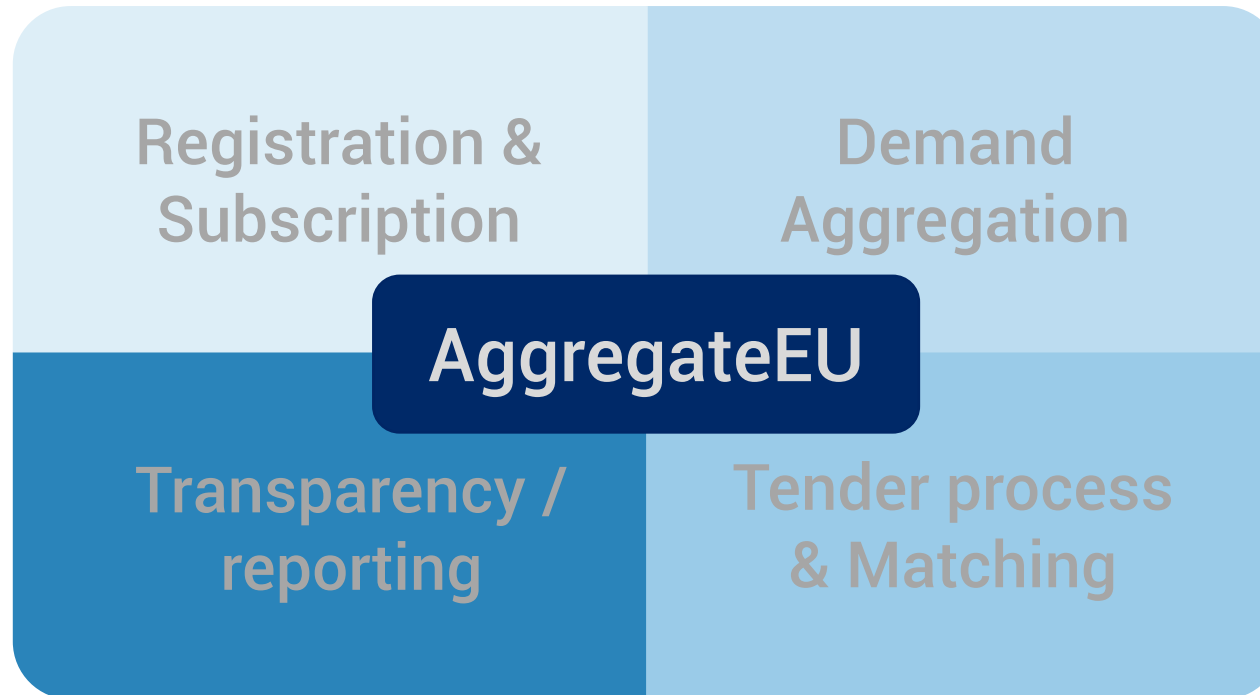
Iterative Agile Software Development

PRISMA.

We connect energy markets enabling the Green Transition

The new AggregateEU service is comprised of four components

Registration of the interested parties, including indication:

- if also "consortium leader"
- financial collateral

Contracts are concluded outside the platform will have to be reported to PRISMA and related information will be provided to DG ENER

Registration & Subscription	Demand Aggregation
AggregateEU	
Transparency / reporting	Tender process & Matching

Potential buyers can indicate:

- location,
- quantities, and
- period

Tender sheets will be created with aggregated demand per location and month.

Collect the offers of potential buyers and match the potential buyers and the potential sellers for contract negotiation

Agenda

✓ **Building a complex service fast**

    ✓ **Guiding Principle: Our North Star**

    ✓ **Iterative Agile Software Development**

✓ **Business Processes**

    ✓ **Tender process**

    ✓ **Matching**

    ✓ **Reporting and Transparency**

PRISMA.

We connect energy markets enabling the Green Transition

AggregateEU will also facilitate LNG products
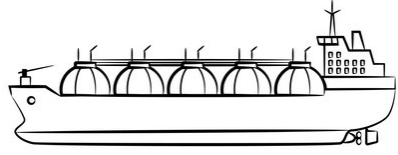
Virtual EU LNG

- **Location**: Virtual delivery points: *North-West Europe* and *South-East Europe*
- **Units of commodity**: Energy units
- **Period**: month
- **Duration**: 12, rolling
  - until March 2025 as of round 2
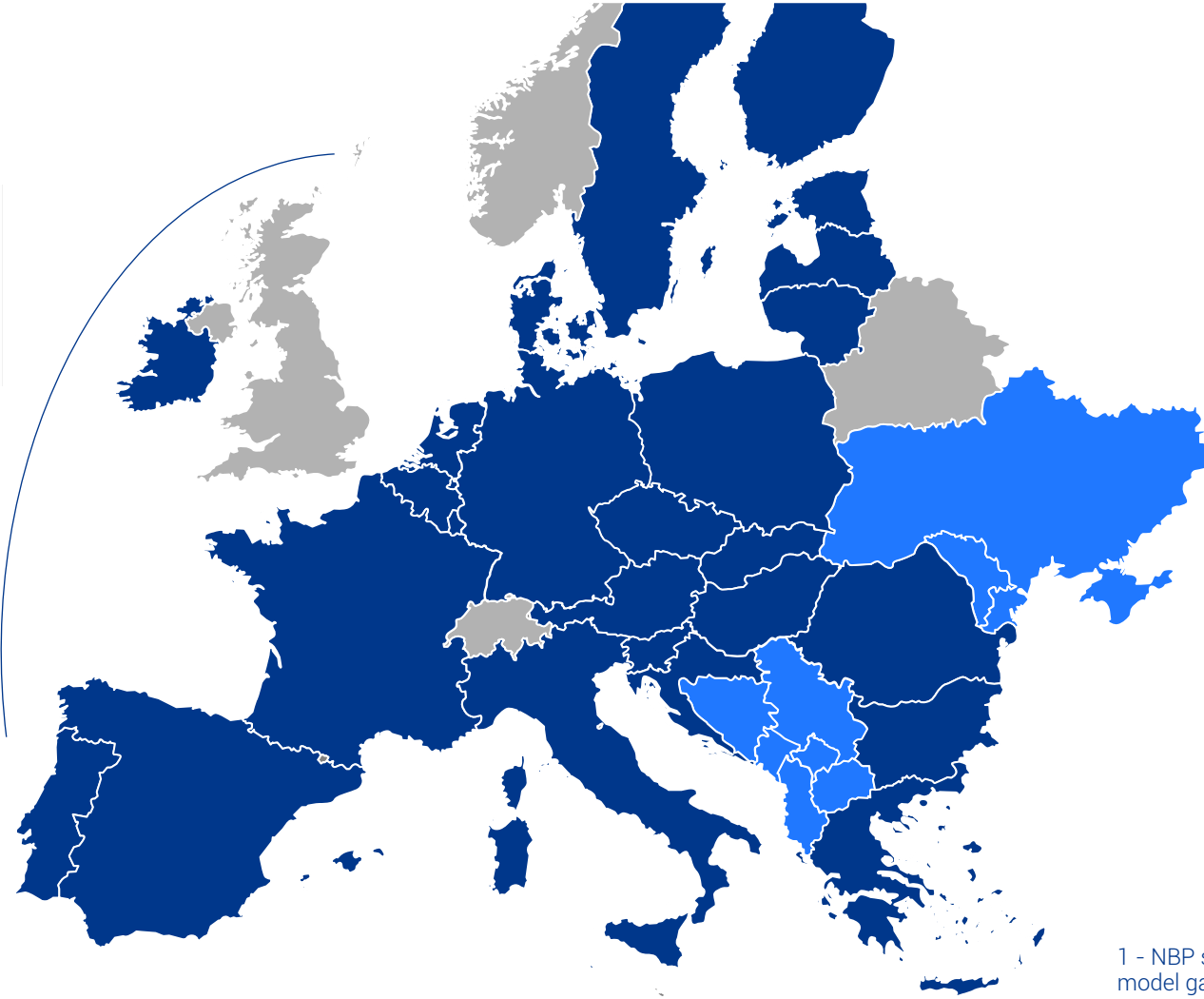
National Balancing Point(s)[1]

- **Location**: National Balancing Points
- **Units of commodity**: Energy units
- **Period**: month
- **Duration**: 12, rolling
  - until March 2025 as of round 2
- **Terms**: EFET general agreement recommended

1 - NBP stands for National Balancing Point. In the NBP model gas anywhere in the country within the national transmission system counts as NBP gas. This brings buyers and sellers together to simplify trade.

PRISMA.

We connect energy markets enabling the Green Transition

Bidding for a tender

Illustrative example of how the graphical interface could look like

A potential seller will have to indicate for each bid:

- the **quantity**, the seller is willing to sell. The minimum amount is **5 GWh at NBPs** and **300 GWh at Virtual EU LNG Points**

- the **price**, at which the seller would like to sell the gas

- (optional) the validity of the bid.

A potential seller can **edit** its bid until the bidding window is open.

A potential seller can submit **more bids** in the same tender process.

The price at the Virtual LNG Points will indicate **the absolute value, in € / GWh**, while the price at the Virtual Trading Points will express **the difference, also negative, in € / GWh with TTF**

Principles of the matching algorithm

- Every tender is independent

- No competition between potential buyers. AggregateEU shall not collect any information than may provide advantages to specific potential buyers

- Non-discriminatory towards potential buyers. Every potential buyer shall be treated equally and have the same quality of matching

- The algorithm shall minimize the costs of the potential buyers bidding in one tender

- The offer to sell of the sellers will be ranked from the lowest to the highest price

- In case of over-demand or over-supply, the pro-rata mechanism is used

- Rationalize the number of matched positions that might lead to concluded contracts.

PRISMA.

Illustrative example – TRF May '23

Buyers — 100, 400

Sellers — 300 @200, 400 @150

Results — 20 @200, 80 @200, 80 @150, 320 @150

Legend:
- Buyer A
- Buyer B
- Seller C
- Seller D
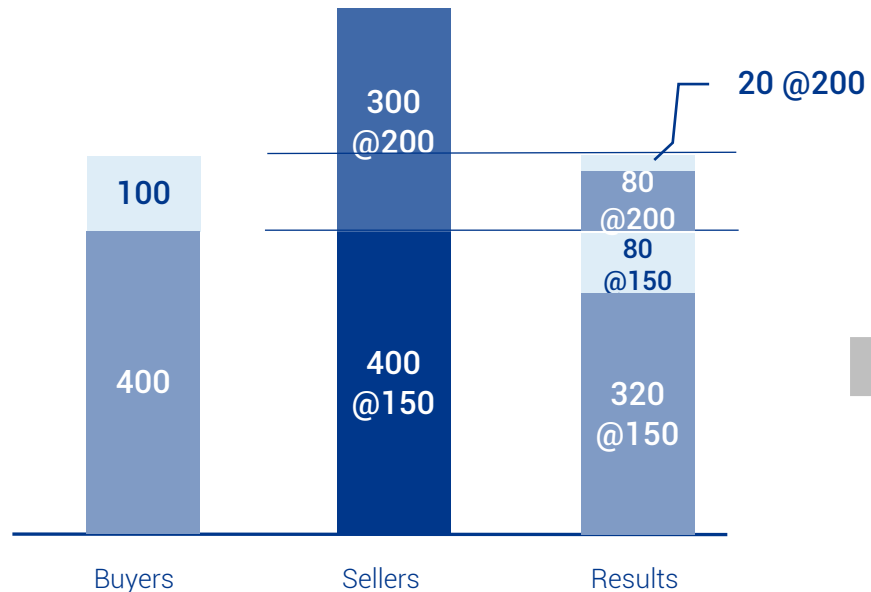
Over supply

Buyer A
- From **Seller D**: **320 @150**
- From **Seller C**: **80 @200**

Average Price: 160

Buyer B
- From **Seller D**: **80 @150**
- From **Seller C**: **20 @200**

Average Price: 160

Principles
- The cheapest seller has the priority to be allocated. This implies **lowest costs for the buyers**.
- Once the quantities of the cheapest seller is fully allocated the second in list is allocated
- The algorithm is allocating the demand using **pro-rata**
- Every buyer may **"pay" the same average price**
- All the demand of the buyers is included in the calculation, regardless of financial capability, and satisfied

We connect energy markets enabling the Green Transition

Illustrative example – TRF June '23

Buyers | Sellers | Results

- 200
- 400
- 300 @200
- 200 @150
- 100 @200
- 200 @200
- 133 @150
- 67 @150

Buyer A
Buyer B
Seller C
Seller D
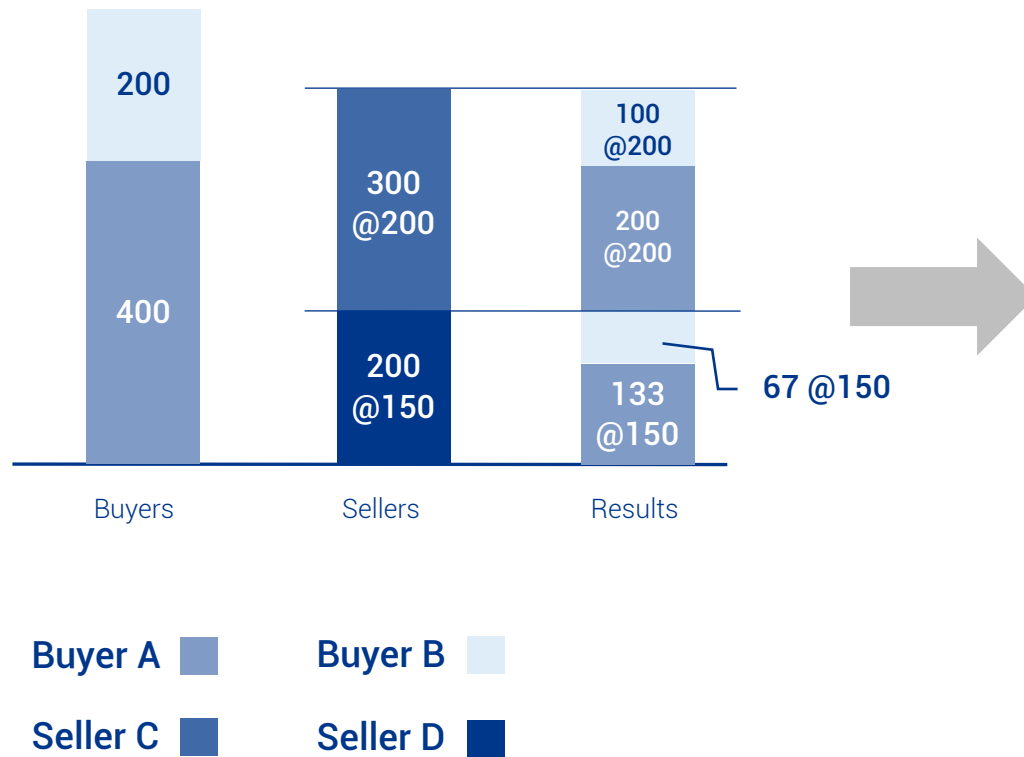
Over demand

Buyer A
- From **Seller D**: **133 @150**
- From **Seller C**: **200 @200**

Average Price: 180

Buyer B
- From **Seller D**: **67 @150**
- From **Seller C**: **100 @200**

Average Price: 180

Principles
- The cheapest seller has the priority to be allocated. This implies **lowest costs for the buyers**.
- Once the quantities of the cheapest seller is fully allocated the second in list is allocated
- The algorithm is allocating the demand using **pro-rata**
- Every buyer may **"pay" the same average price**
- Each buyer has the same percentage of unsatisfied demand

We connect energy markets enabling the Green Transition

Information on matching results to buyers

Virtual LNG

Illustrative example of how the graphical interface could look like

VTP/NBP

Illustrative example of how the graphical interface could look like

AggregateEU will provide the following information to potential buyers for each tender and each seller:

- **General information** to contact the seller
- **Quantities allocated to the seller(s)**
- **Prices for each matched quantity**
- **Validity of the price indication**

In case of Virtual LNG also the information about **the other successful companies** and **their preferred LNG terminal(s)**. This to allow possible cooperation in logistics.

Information on matching results to sellers

AggregateEU will provide the following information to potential Seller(s) for each tender and for each buyer:

- **General information** to contact the buyer(s),
- **Quantity allocated** to the buyer(s),
- **Financial securities** indicated by the buyer(s).

Illustrative example of how the graphical interface could look like

PRISMA.

We connect energy markets enabling the Green Transition

Contracting and Transparency

Enter Contract Details

Contract Details

Buyer *	*Type to Search* ▾
Seller *	*Type to Search* ▾
Gas Quantity *	*E.g. 1000* GWh
Time Frame *	*DD.MM:YYYY* 📅 *DD.MM:YYYY* 📅
Location *	*Type to Search* ▾
Quality	★ ★ ★ ★

Submit

Illustrative example of how the graphical interface could look like

Negotiation between potential Buyer(s) and Seller(s) is **done outside AggregateEU Platform**

Concluded contracts must be reported by the **Buyers** to DG ENER via AggregateEU. Contractual parties will have to report:

- **Counterparties**
- **Gas Quantity**
- **Time Frame**
- **Location**
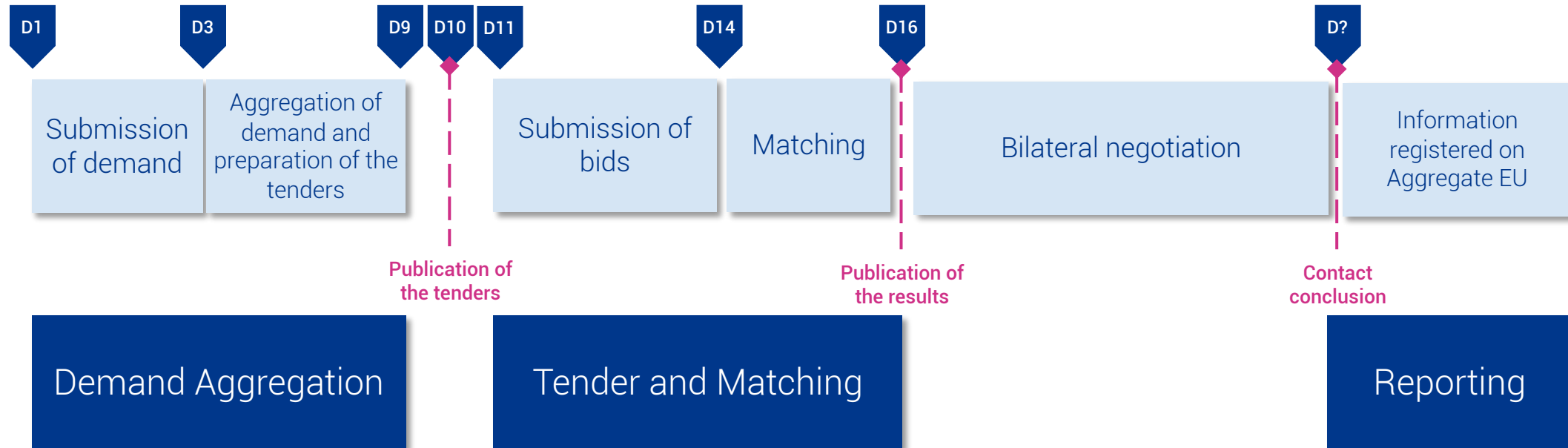- **Quality of the contract** (optional)

AggregateEU will provide this information to DG ENER. Other obligations, such as REMIT obligations, will have to be fulfilled directly by the contractual parties.

PRISMA.

We connect energy markets enabling the Green Transition

Timetable of a tendering round

The days (D) shall be counted as calendar days from Monday till Friday.

We connect energy markets enabling the Green Transition

Thank you