

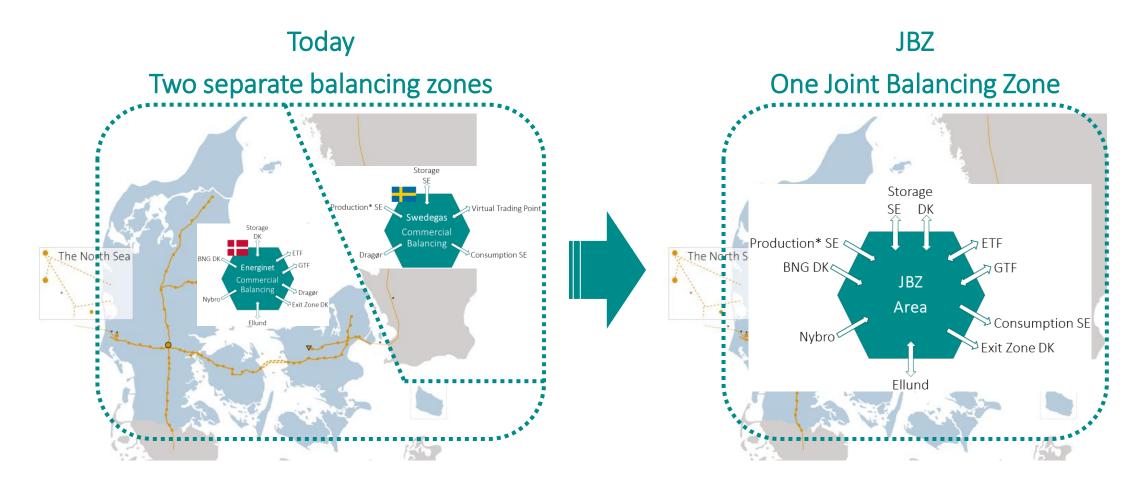
AGENDA

- Joint Balancing Zone
- Time table
- BAM governance
- Public consultation
- Changes to the Swedish balancing model
- JBZ Data Exchange
- Tariffs structure
- Investments & OPEX
- Communication
- Security of Supply





TWO BALANCING ZONES BECOMES ONE



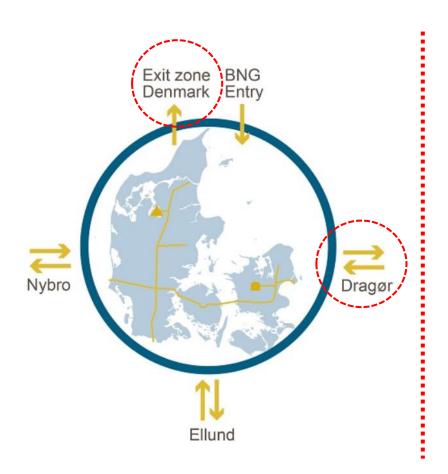


BACKGROUND

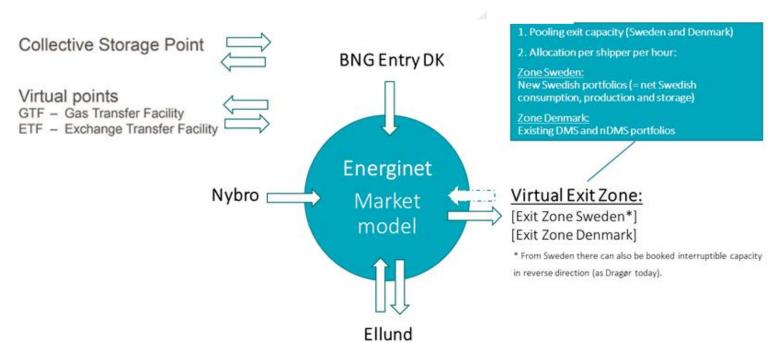
EU network code on balancing defines the standard

- Increased security of supply as the Dragör valve opens and the systems merge. (From flow control to pressure control.)
- More gas traders on the market means increased competition to end customers and more
 efficient administration. Today, we do the same things within Energinet and Swedegas in terms
 of balancing.
- Swedegas operates under a dispensation from the NC BAL ((EU) No 312/2014). A Joint Balancing Zone is a cost effective way to fulfil NC BAL
- Energinet has already implemented the NC BAL. Many of the changes that the Swedish market will experience, have already been implemented in Denmark. (Examples of this is the removal of the free balancing band...)
- In line with Gas Target Model and EU harmonization

CAPACITY MODEL



No change in tariff structure (capacity and volume)





INCREASED FLEXIBILITY FOR SHIPPER/BA'S

Current rules and flexibility of the Exit Zone Denmark will apply for VEZ

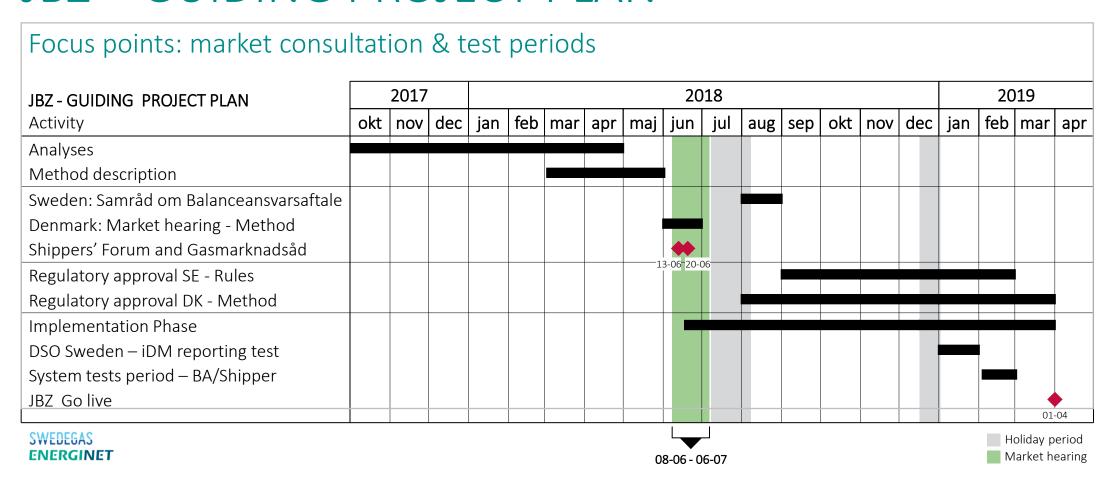
- 1) Deadlines for capacity booking for Swedish netconsumption will follow the current structure for the Danish Exit Zone
 - E.g. yearly capacity can be booked until 17:00 CET the day before the gas day
- 2) Size of capacity booking: The method currently applied in the Danish Exit Zone will also be applied for the Virtual Exit Zone including Swedish netcomsumption (Overrun Charge)
 - This means that a shipper that has a flow higher than his capacity will be charged from the missing capacity
 - The charge is for a daily capacities, which are 1.4 compared to a yearly capacity of 1.0



CHANGES TO THE JOINT BALANCING SYSTEM

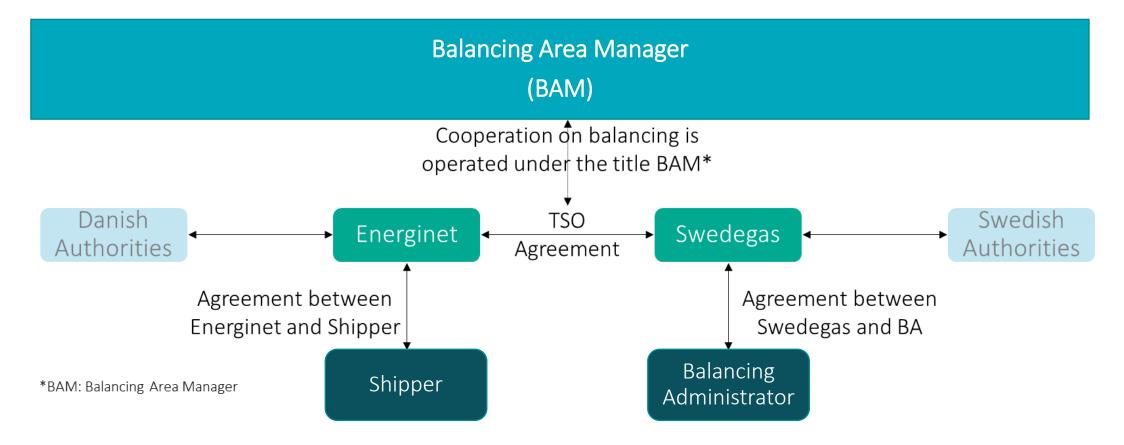
- The Shippers currently active in the **Danish** market will not experience any major change
 - The method used for calculating the **green zone** is not changed, but the parameters included in the calculation will also include the Swedish system
 - During normal condition, the green zone will increase as the linepack from Sweden is included
- The Balancing Administrators currently active in the Swedish market will experience some changes
 - The free balancing account that they currently have will cease due to EU regulation
 - The Shippers currently active in the Danish market have gone through the same process
 - Experience shows that the positive aspects of the new commercial balancing regime is:
 - Full transparency with the shippers balancing positions 5 times a day
 - Low cost (0.5% and 3% vs. 35%) for not being in balance

JBZ – GUIDING PROJECT PLAN



BAM GOVERNANCE

The Balancing Area Manager is not a separate legal entity BAM is staffed by personnel from Swedegas and Energinet



SWEDEGAS ENERGINET

DANISH PUBLIC CONSULTATION

Forwarded to market on 8th June 2018 Consultation until 6th July 2018

Next steps

- Specific topics will be forwarded for approval by DERA
- Consultation Sweden August 2018
- Implementation expected 1 April 2019

Topics for DERA approval

- New market model
- New balancing model
- Tariffs

ENERGINET Contents The submission obligation . The background for the Submission Submission of methods. 3.1 Market model 3.1.1 Change 1: Creation of a Virtual Exit Zone (VEZ) 3.1.2 Change 2: The current rules for Exit Zone Denmark will apply for the VEZ7 3.1.3 Change 3: Allocations ensure correct capacity bookings at shipper level 8 3.2 Balancing model..... 3.2.1 Change 4: Extending the balancing model. 3.2.2 Clarification 1: Direct balancing cost for the shippers/BA... 3.2.3 Clarification 2: Introduction of a Balancing Area Manager (BAM) 11 3.2.4 Clarification 3: Crisis level principles in the Joint Balancing Zone 12 3.3.1 Change 5: Tariffs and costs. 4. Consequences of the methods 4.1 Consequences from the changes in the market model 4.1.1 Impact on the Swedish market model... 4.1.2 Impact on Biomethane trade . 4.1.3 Impact on allocation in the VEZ under JBZ. 4.1.4 Practical information to shippers and BAs 4.1.5 Impact on tariffs in Denmark...... 4.1.6 Impacts on shippers - will some shippers benefit more than others? ... 19 4.2 Consequences from the changes in the balancing model .. 4.2.1 Impact on the Swedish balancing model... 4.2.2 Impact on the Danish balancing model .. 4.2.3 Impact on shippers 4.3 Consequences from changes in the tariffs and costs ... 5. Public hearing... 5.1.1 Traceability of biomethane 6. Time schedule **Appendices**: Appendix 1: Market Q&A - Appendix 2: Comments from public hearing Dok. 15/12743-38 Til arbeidsbrug/Restricted



CHANGES TO THE SWEDISH BALANCING MODEL

Martin Fahlvik, Swedegas

CHANGES TO THE SWEDISH BALANCING MODEL

There will be changes to the Swedish balancing model due to two reasons, firstly demands from the NC BAL and secondly due to the JB7.

The NC BAL impose the following changes to the current Swedish balancing model:

- Daily settlement of imbalances in the joint market where the current Swedish balancing account will be removed
- Balancing actions will be performed with short term standardised products

The Balance Administrators (BAs) in Sweden have today a balance account (a linepack flexibility service) and the BA is only cashed out for imbalance exceeding the upper or the lower limit of the balance account. This is not in line with the European network code on balancing and the balance account will therefore no longer exist. The balancing actions will be performed with short term standardised products as in Denmark today.

The JBZ will impose the following changes to the current Swedish balancing model:

- Reporting of iDMS consumption data from the DSO's will be increased from two to five times a day
- nDMS portfolios will receive a forecast before the gas day and five updated forecasts during the day.

iDMS is a subcategory of DMS. The remainder of the DMS customer is not included in the Net-work Code and hence Energinet will not receive data for these but will receive a forecast



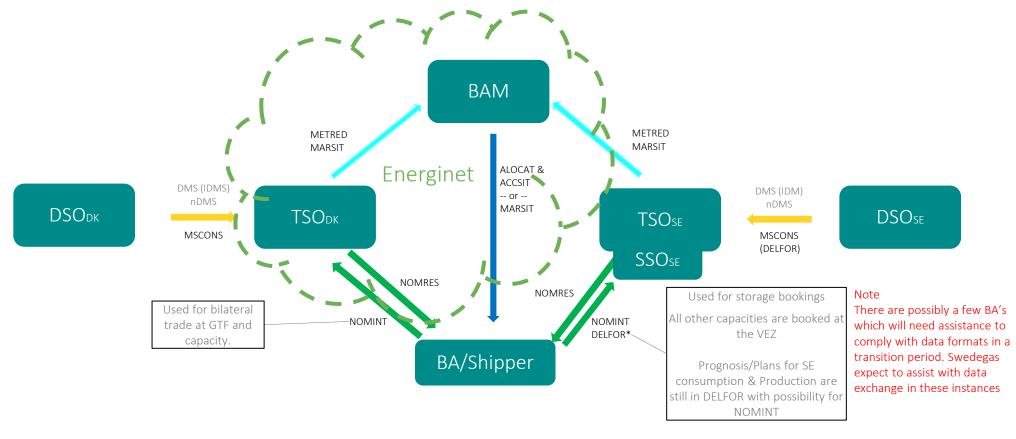


Martin Fahlvik, Swedegas

User Group - Joint Balancing Zone june 13 2018

SWEDEGAS ENERGINET

BAM DATA FLOW - COMMERCIAL BALANCING DRAFT





Data exchange JBZ with EDIG@S 5.1- updates

DRAFT

Before JBZ

BA ← → Swedegas	
DELFOR	MSCONS
Nominations(& confirmations)	Preliminary/final Allocations
Plans(forecast)	Imbalance(corrections)
Matching	Storage transactions/balance
Bilateral Trade	Balancing prices
Balancing Trade	Balance account position
Balance account limits	IDM 2 ggr

DSO ← → Swedegas	
DELFOR	MSCONS
Preliminary GCV	Final GCV
	Grid Exchange
	nDMS Profiles
	DMS
	Average monthly power
	IDM 2 times

With JBZ

BA ← → Energinet		
NOMINT & NOMRES		
Nominations (& confirmations)		
Bilateral Trade		

BA ← → BAM		
ACCSIT (Or MARSIT)	ALOCAT (Or MARSIT)	METRED(may change to MARSIT)
Balance account position	Preliminary/final Allocations	nDMS Forecast
	Imbalance(corrections)	IDM 5 times
	Storage transactions/balance	
	Balancing prices	

DSO ← → Swedegas		
DELFOR	MSCONS	
Preliminary GCV	Final GCV	
	Grid Exchange	
	nDMS Profiles	
	DMS	
	Average monthly power	
	IDM 5 times	

BA ←→ Swedegas	
DELFOR(or NOMINT)	MSCONS
SE Storage nominations (& confirmations)	Preliminary/final Allocations
Plans(forecast)	Imbalance(corrections)
Matching	Storage transactions/balance
Bilateral Trade	Balancing prices
Balancing Trade	Balance account position
Balance account limits	IDM 2 ggr



TARIFF STRUCTURE, INVESTMENTS & OPEX, COMMUNICATION

Christian Allan Rutherford, Energinet



DANISH EXIT TARIFFS

Capacity charge

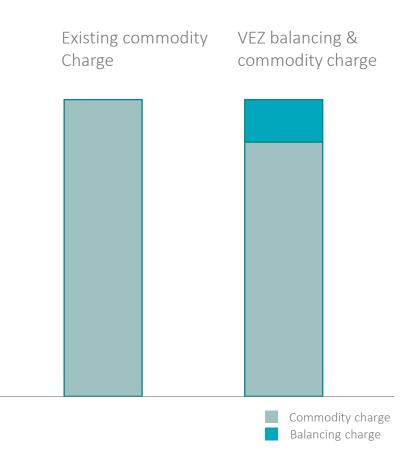
Current Dragør capacity charge replaced by VEZ capacity charge

Balancing charge

- A separate balancing charge is split from the commodity charge
- Covers the cost of operating the commercial balancing
- Cost level will not increase, but transparency will.

Trading of balancing gas

- Energinet keeps a separate account for balancing trading
- No profit or loss from this trade over time
- To ensure transparency Energinet will present the balance of the account on a regular basis.





INVESTMENTS & OPEX

Energinet does not foresee additional OPEX related to balancing in the Joint Balancing Zone compared to today

There will however be a one-off cost for the IT implementation project. The combined cost from both Swedegas and Energinet is budgeted to 3.6 mDKK.

This one-off cost will be divided between the two TSOs according to the proportion of annual gas consumption in their respective markets

COMMUNICATION

Two markets become one – Sweden an Denmark reach agreement on harmonisation

Press release from 17 May 2018:

"Energinet and Swedegas have decided to make the investments necessary to integrate the gas markets in Sweden and Denmark"

Two markets become one – Sweden and Denmark reach agreement on harmonisation

The Swedish and Danish gas transmission network companies Swedegas and Energinet have decided to make the investments necessary to integrate the gas markets in Sweden and Denmark. This initiative will reinforce security of supply and lead to more participants entering the gas market. It is also in line with the EU's endeavour to harmonise markets within the Union.

Working closely with other gas market bodies – end-users, suppliers, system operators and regulatory authorities in both Sweden and Denmark – the conditions for joint balancing and trade have been analysed in detail during the past year.

Market integration offers several benefits:

- Improved security of supply by merging the transmission systems and as a result becoming more robust and less sensitive to variations
- More gas traders on the market means increased competition, benefitting end-users
- More effective administration.

- "This development of the Swedish gas market is taking place with the end-user firmly in focus," said Johan Zettergren. Swedegas CEO. "Our ambition is to make it straightforward and attractive for industry, the transport sector and households to choose gas, including renewable alternatives."

The aim is for the joint balancing zone to be operational by April 2019. Discussions are taking place with market organisations to determine which adaptations and adjustments to IT systems and routines will be required as part of the preparatory process.

- "A joint balancing zone will make the Danish/Swedish gas market more interesting. We will now begin to develop the solution in collaboration with the market bodies concerned in order to optimise the value," said Jeppe Dans. Director, Gas System Operator, Energinet.

The project has its own website

https://en.energinet.dk/Gas/Shippers/Swedegas-Joint-Balancing-Zone

For further information, please contact Salla Horttanainen, Vice President, Communications, Swedegas, +46 70 622 76 06, or Jeppe Danø, Director, Gas System Operator, Energinet, +45 23 33 88 05.



DEDICATED WEBSITE

One place to find latest news and the complete published material on the topic



https://en.energinet.dk/Gas/Shippers/Swedegas-Joint-Balancing-Zone

https://www.swedegas.se/jbz





Geir Sjöholm, Swedegas

JBZ: PRINCIPLES FOR CRISES LEVELS

How the commercial balancing tools shall work in the JBZ, under the three crises levels Early Warning, Alert and Emergency



Crises level • The three crises levels Early Warning, Alert and Emergency are <u>declared individually</u> by the relevant <u>national authority</u> in Sweden and Denmark, just as today.



Toolbox available • When one of the crises levels are declared in either Sweden and/or Denmark, a new toolbox is available for the BAM, in order to impact the behavior of the Shippers/BA.



Decision on tool

• The BAM is operated by the two TSOs Swedegas and Energinet. The <u>BAM decides</u> alone on which commercial tools are most appropriate at any given time



JBZ: CLARIFICATION OF BAM AND TSO TASKS

Tasks of BAM and TSOs under crisis levels



QUESTIONS



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