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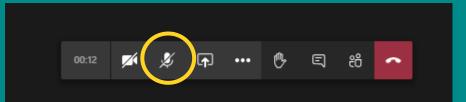
Intraday countertrade model design draft meeting

QUESTIONS AND COMMENTS GUIDELINE

- Energinet will briefly present the topic/question related to the design, and then open up for questions and comments
- You can comment and give input in the chat box
- If you have questions which requires an answer, please raise your hand and ask the question out loud
- Questions asked in the chat must be repeated verbally to ensure an answer

TECHNICAL GUIDELINES

- If you have a question or a comment, please use the "raise your hand" function in teams. We will make sure everyone gets speaking time
- Please turn off your camera whenever you are not speaking and please turn it on whenever you are speaking
- You can write comments in the chat box
- Please mute your microphone whenever you are not speaking



PURPOSE OF THE MEETING

The main purpose of the Intraday countertrade model design draft meeting is to get concrete input to the design of the intraday countertrade model

- The design draft can be changed before, under and after the design meeting
- Diverging input will be discussed internally by Energinets working group, and participants giving the input may be contacted for further elaboration
- The final design will be submitted for public consultation in May/June.



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Agenda



- Market dynamics & the model
- Discussions on design topics
 - Full transparency
 - Auction-like setup
 - Shortage of bids
 - Automated trading
 - Trading windows
 - Unmatched volumes
 - Netting
- Sum up and further process

MARKET DYNAMICS

TSOs has a higher willingness to pay than most market participants as they ultimately have to secure Pan-European grid stability.

The current volumes bid into the Nordic regulation market and intraday market will in most cases "cover" the need for countertrade.

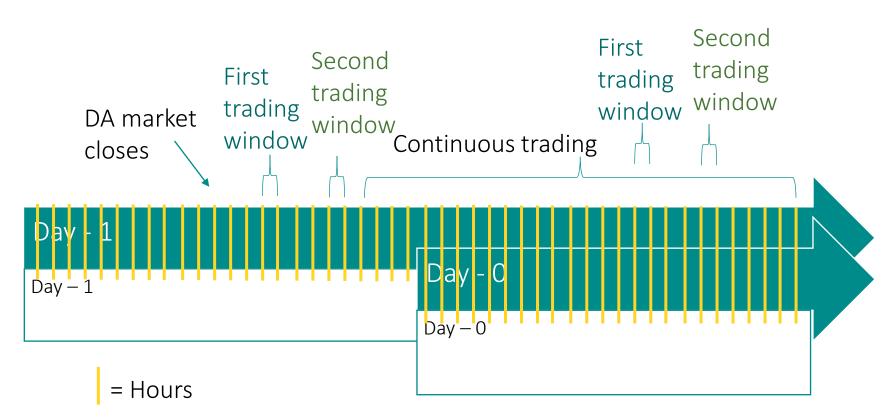
All market participants can participate in the future intraday countertrade model and liquidity in intraday will be increased.

"No one will leave money lying on the floor"



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THE MODEL



Design suggestions

- Publish: price, volumes and timings
- Two windows & continuous trading
- Bids will be submitted at the maximum price
- Auction-like setup
- Firm only once traded
- Gradual implementation
- Requester pays

TWO CATEGORIES OF COUNTERTRADE

	Structural need U	Inexpected need
CT needs arising later than 1/2	If TSOs e.g. due to -	Interconnector trips less than ½ hour
hour before ID (GCT)	their planning process	before ID GCT
(C <u>annot be handled with the ID</u>	requests CT later than -	Internal lines (relevant to cross border
countertrade model)	½ hour before ID GCT	capacity) trips less than ½ hour before
		ID GCT
Known after DA closure or at	Tennet -	Interconnector trips more than ½ hour
least ½ hour before ID GCT	Commitments	before ID GCT
(<u>can</u> be handled with the ID	- &	Internal lines (relevant to cross border
countertrade model)	70% rule	capacity) trips more than ½ hour before
		ID GCT
	-	Requesting TSO needs CT after the two
		windows are closed

QUESTIONS & COMMENTS



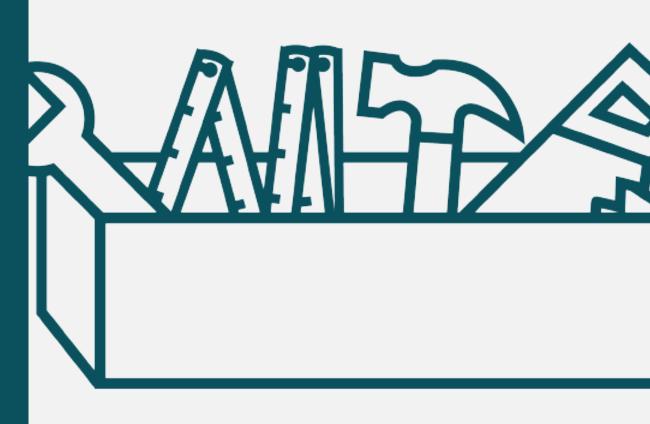


External input

Discussions on design topics

FULL TRANSPARENCY?

	Pro	Con
Full trans- parency	Market manipulation not possible to be done by Energinet. Higher market efficiency as 3 rd party can handle the trading.	It is market manipulation to enter with extreme prices. May lead to paying a higher price in ID Increased speculation.
Timing/ rules	Attracts liquidity in specific timeslots. Participants know when to be ready.	Gives less flexibility to wait for the best bids.
Volumes	Attracts liquidity. REMIT compliant.	Some market participants prefers less predictability
Price	Will anyways be revealed to market participants in case of shortage.	The attractive price bid visible in XBID may increase the price.



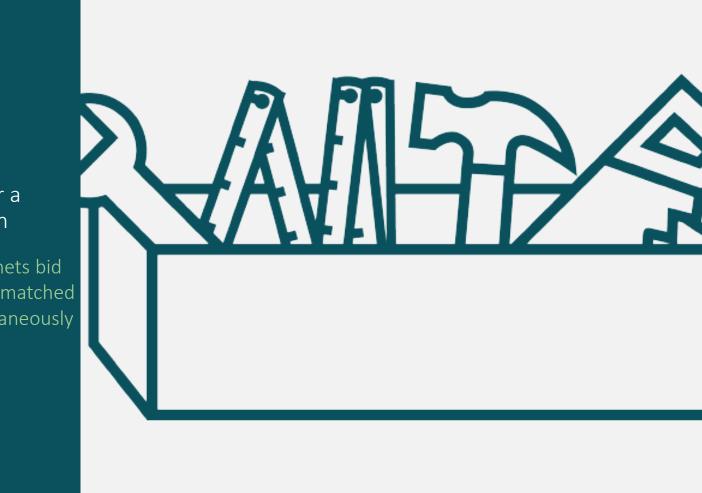
AUCTION-LIKE SETUP

Will it work like an auction?

Hourly bids (same size as CT requested) will be submitted at the attractive price at 15.00 or 18.00 (or a minute later to ensure cross border capacity has been released, and that bids have been stacked) Energinets bid

Energinets will match - these bids	Buy	Sell	will be r instanta
	800 MWh (60)	2000 MWh (-200)	
	100 MWh (40)	50 MWh (65)	
	400 MWh (10)	100 MWh (75)	
	700 MWh (-100)	60 MWh (80)	
	300 MWh (-150)		

Is this "auction-like" setup likely to work as an auction, when all bids are visible for everybody?



IN CASE OF A SHOR<mark>TAGE OF BIDS</mark>

*COMPETITION WILL GENERALLY SECURE A STACK OF BIDS AND COMPETITIVE PRICES

PUBLICATION OF PRICES

Bids better than the attractive price (e.g. -200 EUR/MWh) will be instantly matched.

The remaining volumes will be bid in at the attractive price, and all bids will then be matched at the attractive price.

Buy	Sell
	249 MWh (-200)
	300 MWh (-50)
	50 MWh (65)
	100 MWh (75)
	60 MWh (80)

HIDDEN PRICES

All bids better than the attractive price (e.g. -200 EUR/MWh) will be taken. Bids worse than the attractive price will not.

The remaining volumes will then be matched at the attractive price.

Sell
300 MWh (-50)
50 MWh (65)
100 MWh (75)
60 MWh (80)

AUTOMATED TRADING

Suggested to be done by third party

It requires full transparency and automated processes, to ensure that the third party can also participate on intraday and be REMIT compliant.

Automated processes will ensure a low cost for the service.

The publication of volumes, prices, timings & rules serve as inputs to the trading algorithm.

Discussion: What gives the lowest market impact?

- 1) Full transparency + automatized process
- 2) An active trading strategy
- 3) Other suggestions



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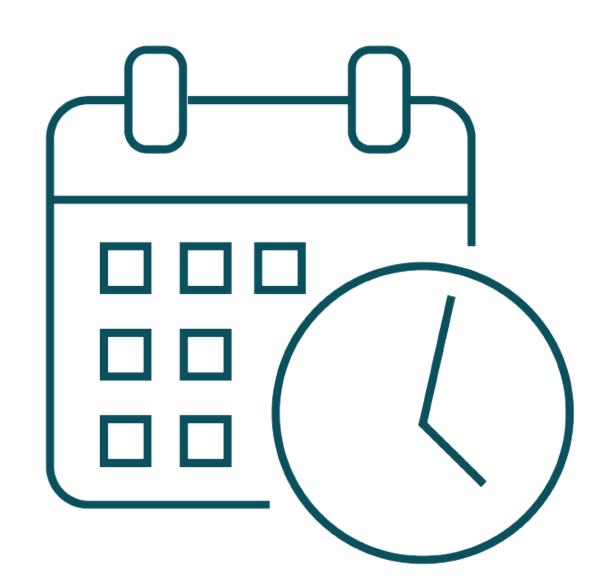
TRADING WINDOWS SUGGESTED

Structural countertrade needs are suggested to be traded in two windows:

Window 1: 15.00 – 15.30 Window 2: 18.00-18.30

Unexpected countertrade can be countertraded in the windows and continuously up until GCT.

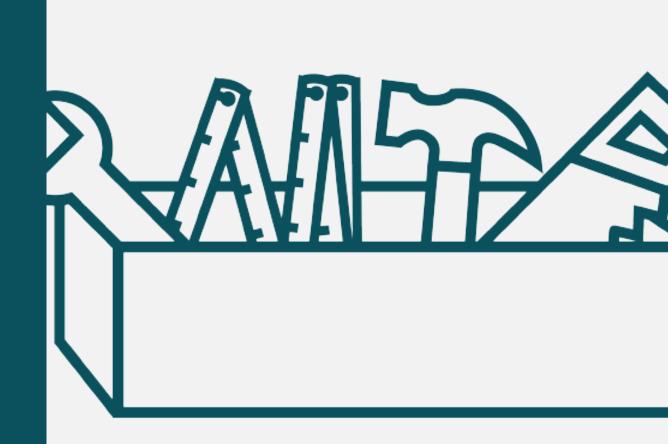
Any input to the timing & number of windows?



UNMATCHED VOLUMES CAN OCCUR

If bids are not matched in the windows nor while trading continuously then the volumes cannot be countertraded.

Can we do anything to avoid this?



NETTING IN XBID

Can we expect fully competitive prices and low profit margins when TSOs are joining?

Ex. 1.

If Energinet needs downward regulation and Statnett needs upward regulation, should they then both trade all volumes on XBID without netting the CT needs?

Ex. 2

If Energinet needs downward regulation in DK1 and upward regulation in DK2 should we then both buy and sell on XBID (using the attractive price) within the same hour without netting the needs?



WHAT HAS BEEN OVERLOOKED?

Any other topic you would like discuss in relation to the design?

Suggestions for improvements?

Blind spots and effects we have overlooked?



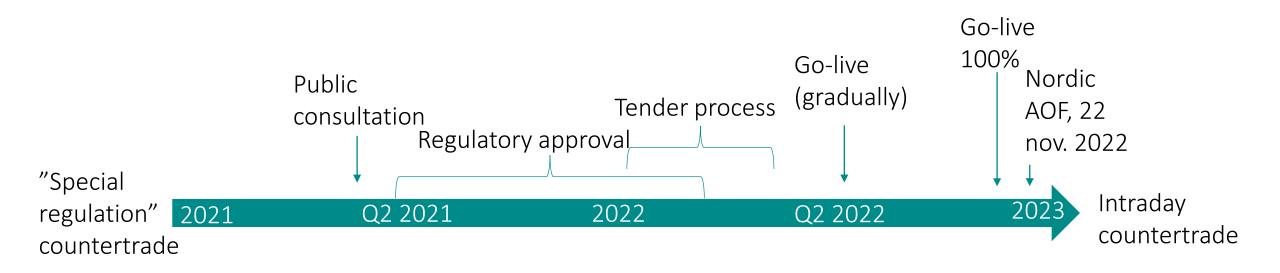
QUESTIONS & COMMENTS





SUM UP AND FURTHER PROCESS

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External input

Thank you for your participation

Contact information: Astrid Buhr Broge, <u>abg@energinet.dk</u>, +45 61244363