

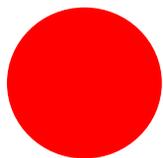


Commercial Division

MARKET WEBINAR

APRIL 16, 2021

AGENDA



**WEBINAR WILL BE
RECORDED**

- Inčukalns UGS injection capacity congestion management
- Amendments to Inčukalns UGS regulations
- Auction schedule 2021
- Injection season start
- <https://capacity.conexus.lv/> improvements
- Questionnaire about cooperation with Conexus Baltic Grid
- Q&A

Inčukalns UGS underground storage injection capacity congestion management

CONGESTION

NU – NETWORK USER

MIDC - MINIMUM (GUARANTEED) INJECTION DAILY CAPACITY

IPGK1YP, IPGK2YP – BUNDLED CAPACITY PRODUCTS

FCFS – FIRST COME FIRST SERVED

EXAMPLE ON FOLLOWING SLIDES

- Each NU is entitled to MIDC on each product for gas day D, based on following calculation:
 - $MIDC (product) = (NU \text{ unused product capacity} / (Total IPGK1YP \text{ unused capacity} + Total IPGK2YP \text{ unused capacity})) * \text{daily injection on } D;$
 - MIDC is calculated on D-1 15:00 EE(S)T. Corresponding nominations have to be received for each product before calculation;
 - Confirmed amount will be calculated as:
 - if product nomination is less or equal than MIDC– all nominated amount will be confirmed even in congestion situation.
 - if product nomination is higher than MIDC– all nominated amount in congestion situation will be confirmed either in full or partially between MIDC and nominated amount using pro-rata allocation between all NU nominations higher than their corresponding MIDC by proportion between these NU based on nominated product available amount proportion between these NUs.
 - After D-1 15:00 all nominations will be processed on FCFS basis only when there is available injection capacity.

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CAPACITY

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PRODUCTS

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EXAMPLE ON
FOLLOWING SLIDES

Inčukalns UGS underground storage injection capacity congestion management

- Unused capacity = available capacity – inventory level.
- Congestion management principle for injection is similar to withdrawal congestion management
- One significant difference – proportion for all NUs are changing during season based on each NU unused capacity proportion to total unused capacity
- Each NU can calculate available MIDC for each product based on own unused capacity for each bundled capacity product vs total bundled unused capacity.
Information about total booked capacity and inventory level available on <https://capacity.conexus.lv/?id=246>
- Information about inventory level on D-1 available after allocations on D-2

Inčukalns UGS congestion management – MIDC calculation

EXAMPLE

NU – NETWORK USER

MIDC - MINIMUM
(GUARANTEED)
INJECTION DAILY
CAPACITY

IPGK1YP, IPGK2YP –
BUNDLED CAPACITY
PRODUCTS

FCFS – FIRST COME
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Total unused available storage capacity values on D-1 15:00 (in kWh):

Two year bundled capacity product (IPGK2YP)	2 000 000 000
Bundled capacity product (IPGK1YP)	6 000 000 000
Daily injection capacity (kWh/d)	126 000 000

NUs with unused storage capacity:

NU	Product	Unused available Capacity	MIDC calculation
NU1	IPGK1YP	2 000 000 000	31 500 000
NU1	IPGK2YP	1 000 000 000	15 750 000
NU2	IPGK1YP	500 000 000	7 875 000
NU3	IPGK1YP	500 000 000	7 875 000
NU3	IPGK2YP	200 000 000	3 150 000

NU1 (IPGK1YP) MIDC calculation example –

$$\text{MIDC} = 126\,000\,000 * \frac{2\,000\,000\,000}{(6\,000\,000\,000 + 2\,000\,000\,000)} = \underline{\underline{31\,500\,000}}$$

Inčukalns UGS injection congestion management – nomination processing

EXAMPLE

Daily injection capacity (kWh/d)

126 000 000

NUs with used available storage capacity:

NU	Product	Unused	MIDC	Nominated	Confirmed
NU1	IPGK1YP	2 000 000 000	31 500 000	126 000 000	74 375 000
NU1	IPGK2YP	1 000 000 000	15 750 000	7 000 000	7 000 000
NU2	IPGK1YP	500 000 000	7 875 000	250 000 000	18 593 750
NU3	IPGK1YP	500 000 000	7 875 000	50 000 000	18 593 750
NU3	IPGK2YP	200 000 000	3 150 000	50 000 000	7 437 500

NU1 (IPGK1YP) confirmed value calculation example –

$$\text{Confirmed} = 31\,500\,000 + \frac{2\,000\,000\,000}{(2\,000\,000\,000 + 2 * 500\,000\,000 + 200\,000\,000)} *$$

$$* (126\,000\,000 - 31\,500\,000 - 15\,750\,000 - 2 * 7\,875\,000 - 3\,150\,000)$$

$$\text{Confirmed} = 31\,500\,000 + 0.625 * 68\,600\,000 = \underline{\underline{74\,375\,000}}$$

NU – NETWORK USER

MIDC - MINIMUM (GUARANTEED) INJECTION DAILY CAPACITY

IPGK1YP, IPGK2YP – BUNDLED CAPACITY PRODUCTS

FCFS – FIRST COME FIRST SERVED

Principles of reverse capacity allocation (interruptible) i.e. - Injection in withdrawal season and vice versa

PRINCIPLES

USE OF REVERSE CAPACITY

At any point:

$$\text{SUM (confirmed reverse nominations)} \leq \text{SUM (main direction nominations)}$$

EXAMPLE. Withdrawal season

NU	Time	Direction	Nominated	Confirmed
NU1	D-1 13:00	Withdrawal	75 000 000	75 000 000
NU2	D-1 13:10	Withdrawal	20 000 000	20 000 000
NU3	D-1 13:30	Injection	90 000 000	90 000 000
NU4	D-1 14:00	Injection	5 000 000	5 000 000
NU1	D 13:00	Withdrawal	50 000 000	50 000 000
NU4	D 13:00	Injection		0
NU3	D 13:00	Injection		70 000 000

REGULATION

AUCTION SCHEDULE AS IS

- Current Regulation effective as of Oct 2020
- Bundled capacity and two-year bundled capacity products
 - Announcement 10 working days before
 - 1st auction for the next cycle – no later than March 15 when tariffs are approved
 - 2nd auction for current cycle – before May 21
- Interruptible capacity product
 - 6 auctions 2x month from June 1

Public consultation Mar 25 – Apr 8

REGULATION

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TO BE *

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- Interruptible capacity product
 - 6 auctions 2x month from June 1

- Bundled capacity and two-year bundled capacity products
 - Announcement 5 working days before
 - 1st auction for the next cycle – before March 15 when tariffs are approved
 - **Several auctions for next cycle – before April 30 if available capacity is 5% or more from technical capacity forecast published on November 4**
 - Auction for current cycle – 6 working days after publication of technical capacity for current cycle
- Interruptible capacity product
 - 5 auctions from June 15

* Subject of Public consultation

REGULATION

AUCTION SCHEDULE AS IS

TO BE *

It is expected that the amendments will be implemented for the 2022/2023 storage cycle.

- Current Regulation effective as of Oct 2020
- Bundled capacity and two-year bundled capacity products
 - Announcement 10 working days before
 - 1st auction for the next cycle – no later than March 15 when tariffs are approved
 - 2nd auction for current cycle – before May 21
- Interruptible capacity product
 - 6 auctions 2x month from June 1

- ~~• Bundled capacity and two-year bundled capacity products
 - Announcement 5 working days before
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 - Several auctions for next cycle – before April 30 if available capacity is 5% or more from technical capacity forecast published on November 4
 - Auction for current cycle – 6 working days after publication of technical capacity for current cycle~~
- ~~• Interruptible capacity product
 - 5 auctions from June 15~~

SCHEDULE

INČUKALNS UGS 2021 / 2022 CYCLE AUCTIONS AND RELATED EVENTS

Nr.	Date	Event
1	21.04.2021	Bundled capacity product 2nd auction regulation publication
2	28.04.2021	Storage technical capacity publication for 2021 / 2022 cycle
3	01.05.2021	Stock transfer product amount publication
4	03.05.2021	Available capacity for 2021 / 2022 cycle publication considering stock transfer product amount
5	03.05.2021	Application deadline for 2nd bundled capacity product auction
6	06.05.2021	2nd bundled capacity product auction
7	07.05.2021	Result publication of 2nd bundled capacity product auction
8	11.05.2021	<i>Deadline for submission of tenders for Auction regarding the storage of active natural gas volume and provision of availability in the storage in 2021-2022</i>
9	17.05.2021	Interruptible capacity product 1st auction regulation publication *
10	01.06.2021	1st interruptible capacity product auction *
11	02.06.2021	Result publication of 1st interruptible capacity product auction *
12	02.06.2021	Interruptible capacity product 2nd auction regulation publication *
13	15.06.2021	2nd interruptible capacity product auction *
14	16.06.2021	Result publication of 2nd interruptible capacity product auction *
15	16.06.2021	Interruptible capacity product 3rd auction regulation publication *
16	01.07.2021	3rd interruptible capacity product auction *
17	02.07.2021	Result publication of 3rd interruptible capacity product auction *
18	02.07.2021	Interruptible capacity product 4th auction regulation publication *
19	15.07.2021	4th interruptible capacity product auction *
20	16.07.2021	Result publication of 4th interruptible capacity product auction *
21	16.07.2021	Interruptible capacity product 5th auction regulation publication *
22	29.07.2021	5th interruptible capacity product auction *
23	30.07.2021	Result publication of 5th interruptible capacity product auction *
24	30.07.2021	Interruptible capacity product 6th auction regulation publication *
25	12.08.2021	6th interruptible capacity product auction *
26	13.08.2021	Result publication of 6th interruptible capacity product auction *

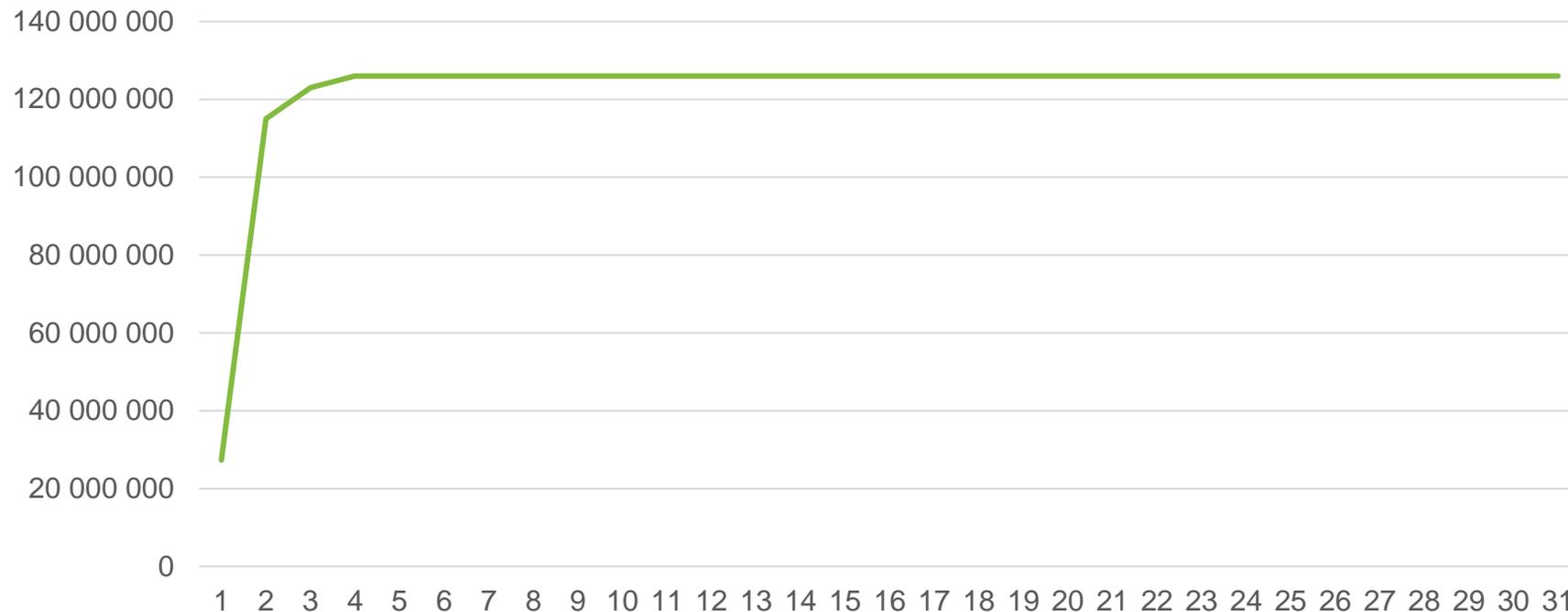
* Auction will take place and regulation will be published if there will be free capacity available

INJECTION

SEASON
START

JUN – OCT TO
BE UPDATED

MAY 2021 daily, kWh



Day ahead injection capacity at the beginning of the injection season might be reviewed if system user nominations will be insufficient for beginning of technological process.

Jun – Oct schedule to updated throughout the season according to situation

Inčukalns UGS

- select storage cycles - ▾

Select all
 2020/2021
 2021/2022

2020/2021 STORAGE CYCLE INČUKALNS		
Injection season	2020-05-01 - 2020-10-14	
Withdrawal season	2020-10-15 - 2021-05-01	kWh
Technical capacity		21 525 000 000
Booked products for 2020/2021 storage cycle		21 525 000 000
	<i>Incukalns UGS 1 year bundled product (IPGK1YP)</i>	16 293 699 999
	<i>Incukalns UGS 2 year bundled product (IPGK2YP)</i>	5 226 000 001
	<i>Incukalns UGS market product (IPGKMP)</i>	5 300 000
Current stock in 2020/2021 at the end of gas day 2021-04-15		5 063 755 904
Available capacity for booking		0
Unused capacity 2020/2021 from booked		16 461 244 096

2020/2021 STORAGE CYCLE INČUKALNS UGS CAPACITIES		
Injection season	2020-05-01 until 2020-10-14	on April 16, 2021
Withdrawal season	2020-10-15 until 2021-04-30	kWh
Technical capacity		21 525 000 000
Booked products for 2020/2021 storage cycle		21 525 000 000
	<i>Two year bundled capacity product (IPGK2YP)</i>	5 226 000 001
	<i>Bundled capacity product (IPGK1YP)</i>	16 293 699 999
	<i>Market product (IPGKMP)</i>	5 300 000
Current stock in 2019/2020		5 063 755 904
Available capacity for booking 2020/2021		0
Unused capacity 2020/2021 from booked		16 461 244 096

Nominations and Allocations

NOMINATIONS AND ALLOCATIONS

Balticconnector, Exit ▾

2021-01-03

2022-03-21

GENERATE

Status at 09.04.2021 15:25:08. Displayed: 09.04.2021 15:45:09.

 Chart  Table  CSV file



WEB

CAPACITY.CONEXUS.LV

More changes to come,

Please inform us
if something is not correct!

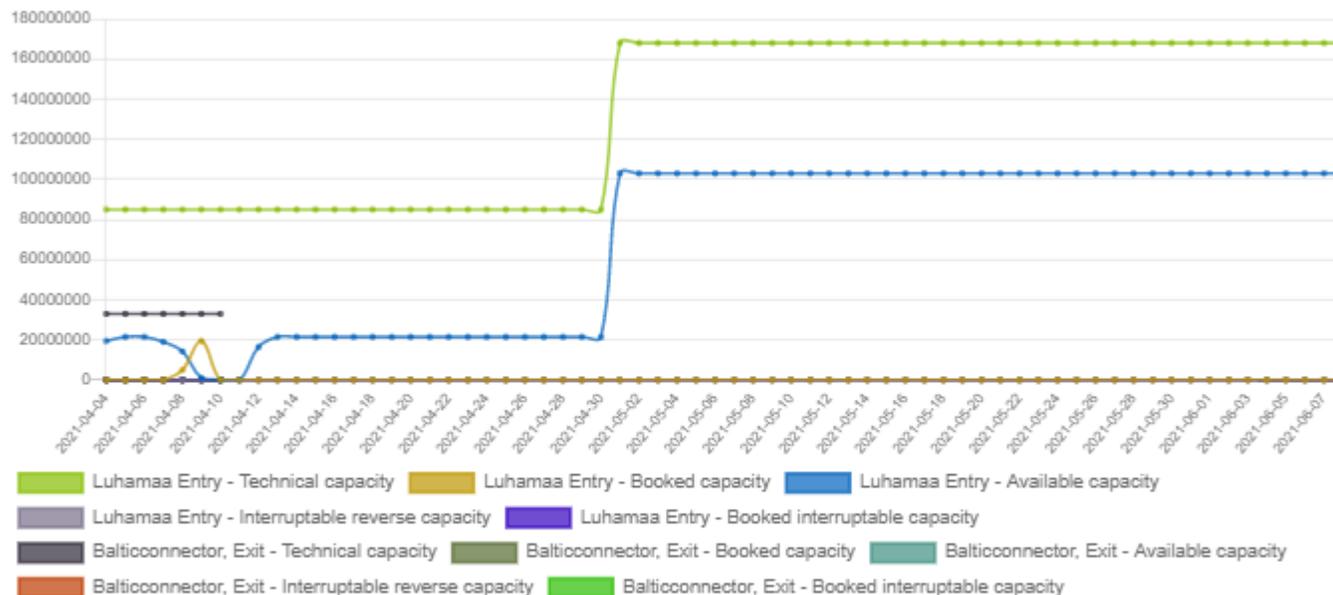
Capacity availability

CAPACITY AVAILABILITY

Luhamaa, Entry, Balticconnector, E...	Within-day capacity availability ▾
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<input style="background-color: #76b82a; color: white; padding: 10px 20px; border: none; font-weight: bold;" type="button" value="GENERATE"/>	

Status at 09.04.2021 15:25:08. Displayed: 09.04.2021 15:47:11

Chart
 Table
 CSV file



HOW WE WORK?

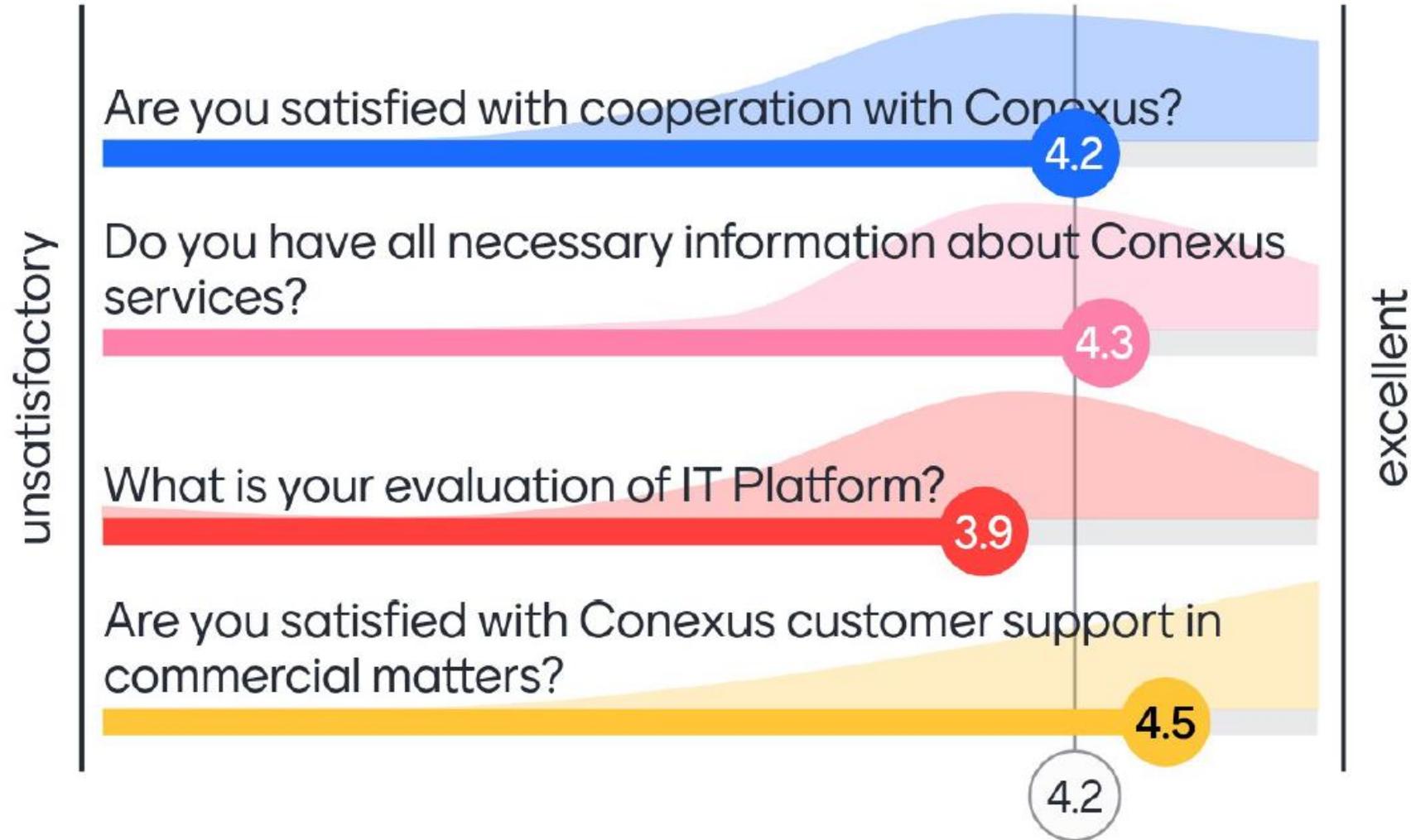
**SURVEY ABOUT
COOPERATION
WITH CONEXUS
BALTIC GRID**

Network user satisfactory survey

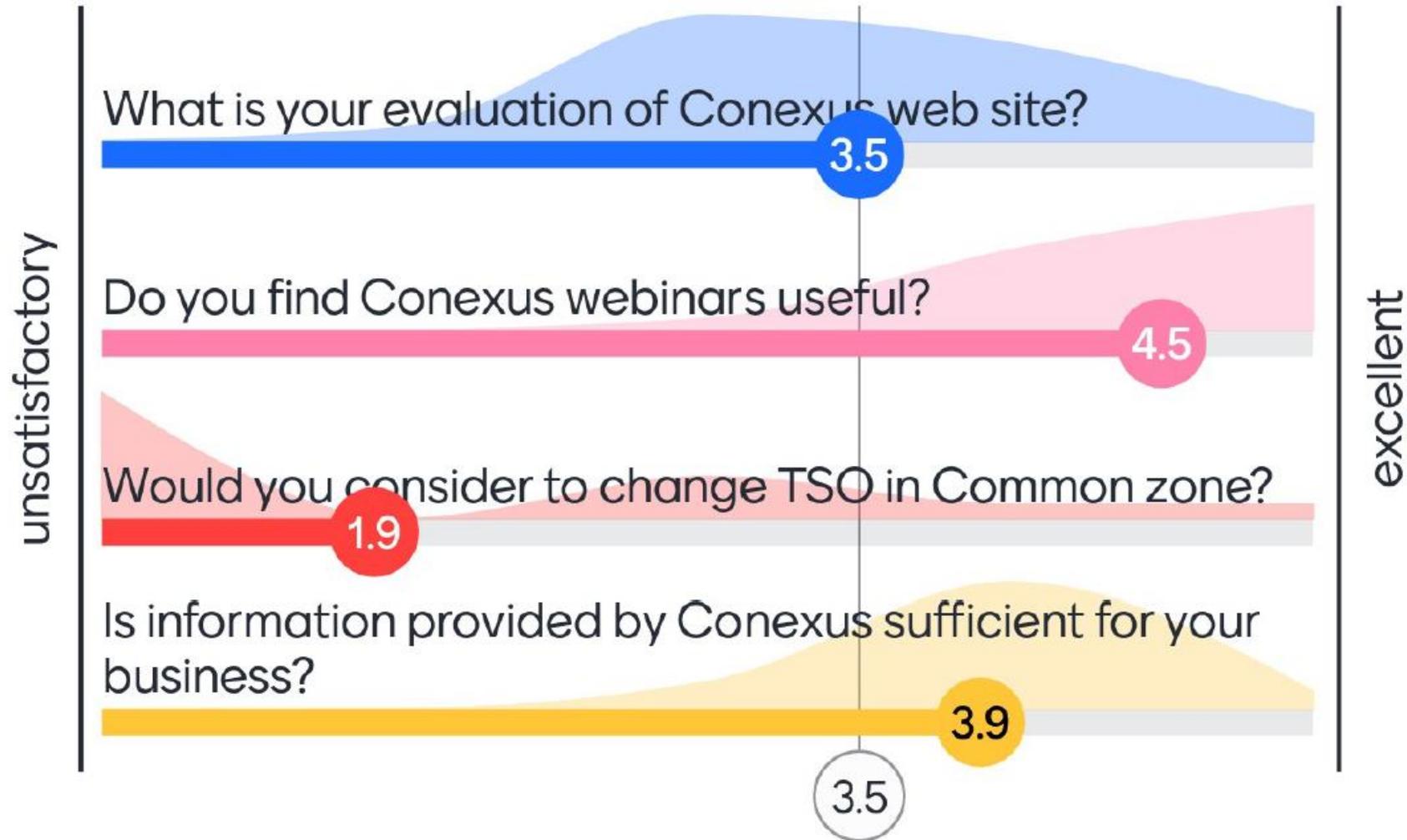
by Common Market Area division and Commercial division

Go to www.menti.com and use the code 6645 4950

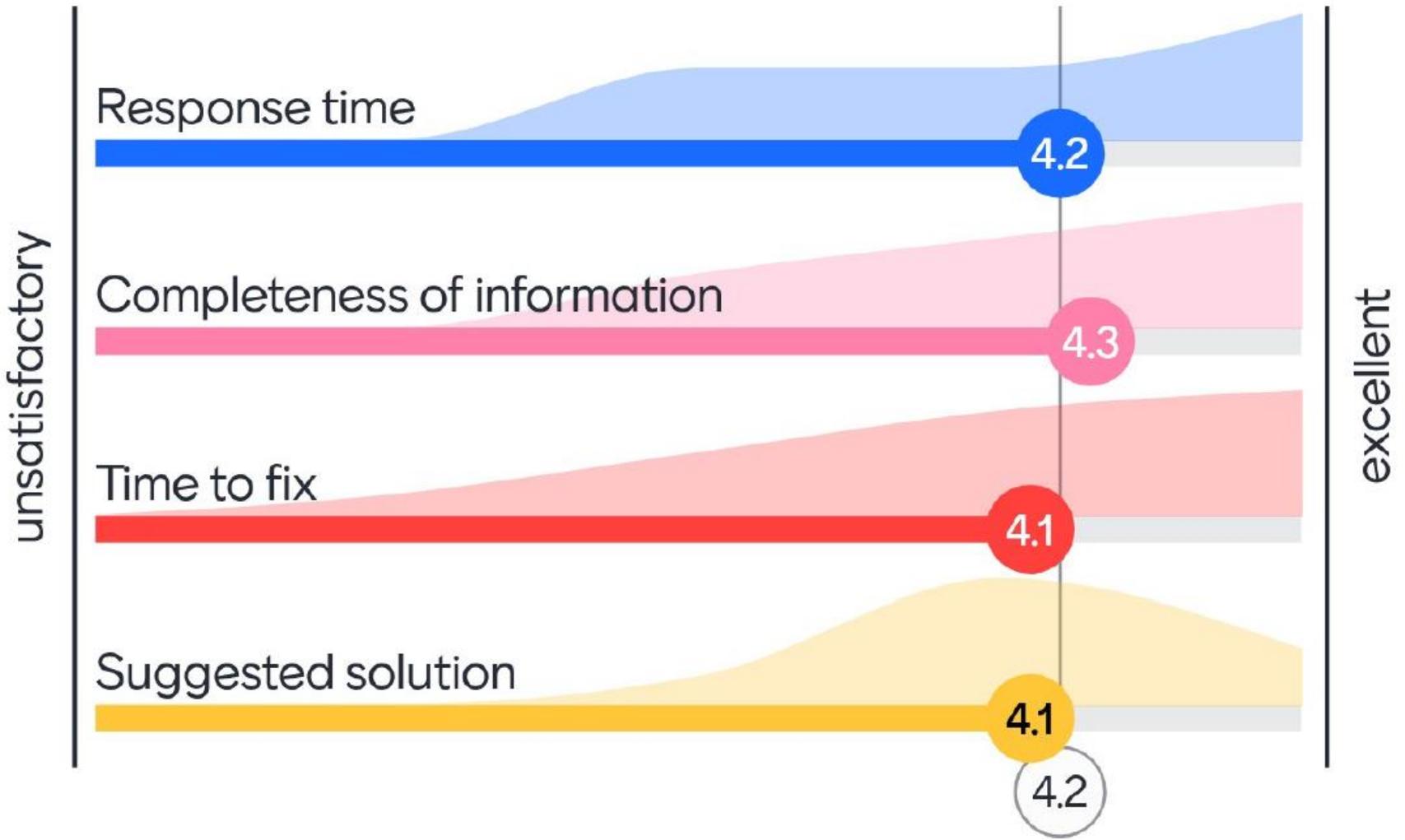
Please rate the following:



Please rate the following:



Please rate IT Platform issues related support



Your suggestions for further improvements?

Please, include booked IUGS capacity overview on the Platform

It is good to have such kind of market players' meetings. It would be nice to have all bookings, costs and invoices being available from Common Zone platform.

Should be visible time when nominations and renominations have been submitted.

I would like notification possibilities from platform to email.

Veidot jaunu mājas lapu, esošās problēma - grūti uztverama struktūra.

Pro rata entry capacity allocation (Luhamaa entry point)

Conexus offers too many changes in regulations. Too much uncertainty for end client. UGS costs and capacity allocation methods are unpredictable. Suggest to stop testing market participants.

It could be a possibility to set an alarm in form of e-mail in the platform nominations to let to know if the balance becomes bigger or smaller from certain threshold because of e.g. reverse flow interruptions by TSO

Remove SEND button from nominations,



**THANK YOU AND SEE YOU
NEXT TIME!**

capacity@conexus.lv

platform@conexus.lv

auction@conexus.lv

www.conexus.lv